

EPPL | *European Preferred Parts List*

Issue: 7

Issue Date: 2005-08-05

01 CAPACITORS / 01 CERAMIC

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|--------------|---|--------------------|---------|-----------------|---------|
| 1 | CH (Type II) | Ceramic dielectric, Fixed, high capacitance. Cap.Range Tol. Rated Volt. Temp.Characteristic (uF) (%) (V) (%) 0.33 to 0.56 10/20 200 ±20(Vt=0V),-50+30(Vt=Ur) 1.2 to 2.7 10/20 100 ±20(Vt=0V),-50+30(Vt=Ur) 1.8 to 3.3 10/20 50 ±20(Vt=0V),-50+30(Vt=Ur) Size (max. mm.): 10.16 x 11.70 x 5.00 Operating temperature range (°C.): -55 to +125 | ESCC 3001/030 | SMD | AVX Limited | |
| 2 | TCK18xS | Ceramic Dielectric, Fixed, Moulded Multi Layer, High Voltage, Type I Series Capacitance Tol. Rated Volt. Size (nF) (%) (V) (max mm) 182 8.2 10 1000 13.5x12.5x6.5 184 18 10 1000 18.5x16.5x6.5 185 27 10 1000 20.5x19.5x6.5 Temperature Coefficient (10-6/°C.): ± 30 Operating Temperature Range (°C.): -55 to +125 | TPR-01-005 | Radial | EUROFARAD | |
| 2 | TCK18xS | Ceramic Dielectric, Fixed, Moulded Multi Layer, High Voltage, Type I Series Capacitance Tol. Rated Volt. Size (nF) (%) (V) (max mm) 182 8.2 10 1000 13.5x12.5x6.5 184 18 10 1000 18.5x16.5x6.5 185 27 10 1000 20.5x19.5x6.5 Temperature Coefficient (10-6/°C.): ± 30 Operating Temperature Range (°C.): -55 to +125 | TPR-01-005 | Radial | EUROFARAD | |
| 2 | TCK28xS | Ceramic Dielectric, Fixed, Moulded Multi Layer, High Voltage, Type II Series Capacitance Tol. Rated Volt. Size (nF) (%) (V) (max mm) 280 1 10 3000 8.5x8.5x5 280 100 10 250 8.5x8.5x5 282 1000 10 250 13.5x12.5x6.5 Temperature Characteristic (%): ± 15 Operating Temperature Range (°C.): -55 to +125 | TPR-01-005 | Radial | EUROFARAD | |

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|---|--------------------|---------|-----------------|---------|
| 2 | TCK28xS | Ceramic Dielectric, Fixed, Moulded Multi Layer, High Voltage, Type II Series Capacitance Tol. Rated Volt. Size (nF) (%) (V) (max mm) 280 1 10 3000 8.5x8.5x5 280 100 10 250 8.5x8.5x5 282 1000 10 250 13.5x12.5x6.5 Temperature Characteristic (%): ± 15 Operating Temperature Range (°C.): -55 to +125 | TPR-01-005 | Radial | EUROFARAD | |
| 2 | TCN83E | High Capacitance, Type II Cap. Range Tol. Rated Volt. Size Height (max mm) (uF) (%) (V) (max mm) Case A Case B Case C Case D Case E 1.0 to 6.8 10 400 22.5 x 19.5 6.5 8.0 12.5 20.0 30.0 1.0 to 10 10 250 22.5 x 19.5 6.5 8.0 12.5 20.0 30.0 1.8 to 33 10 100 22.5 x 19.5 6.5 8.0 12.5 20.0 30.0 5.6 to 47 10 50 22.5 x 19.5 6.5 8.0 12.5 20.0 N/A Operating Temperature Range (°C.): -55 to +125 °C | ESCC 3001/027 | Radial | EUROFARAD | |
| 2 | TCN83E | High Capacitance, Type II Cap. Range Tol. Rated Volt. Size Height (max mm) (uF) (%) (V) (max mm) Case A Case B Case C Case D Case E 1.0 to 6.8 10 400 22.5 x 19.5 6.5 8.0 12.5 20.0 30.0 1.0 to 10 10 250 22.5 x 19.5 6.5 8.0 12.5 20.0 30.0 1.8 to 33 10 100 22.5 x 19.5 6.5 8.0 12.5 20.0 30.0 5.6 to 47 10 50 22.5 x 19.5 6.5 8.0 12.5 20.0 N/A Operating Temperature Range (°C.): -55 to +125 °C | ESCC 3001/027 | Radial | EUROFARAD | |

01 CAPACITORS | 02 CERAMIC CHIP

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|----------------|---|--------------------|---------|-----------------------|--|
| 1 | 0805 (Type I) | Ceramic Dielectric, Fixed Cap. Range Tol. Rated Volt. Temp. Coeff. (pF) (±%) (V) (±10E-6/°C) 10 to 470 1 100 30 Ag terminations Size (max mm) : 2.3 x 1.45 x 1.3 Operating temperature range (°C) : -55 to +125 | ESCC 3009/003 | Chip | AVX - DIVISION TPC | |
| 2 | 0805 (Type I) | Ceramic Dielectric, Fixed Cap. Range Tol. Rated Volt. Temp. Coeff. (pF) (±%) (V) (±10E-6/°C) 10 to 470 1 100 30 Variant 07 (Ag, Ni barrier, Tin-lead coating) Variant 08 (Ag, Ni barrier, Gold coating) Size (max mm) : 2.3 x 1.45 x 1.3 Operating temperature range (°C) : -55 to +125 | ESCC 3009/003 | Chip | EUROFARAD | |
| 2 | 0805 (Type II) | Ceramic Dielectric, Fixed Cap. Range Tol. Rated Volt. Temp. Charact. (pF) (±%) (V) (%) 1000/2200/4700 10 100 -30,+20 10000 10 50 -30,+20 Variant 07 (Ag, Ni barrier, Tin-lead coating) Variant 08 (Ag, Ni barrier, Gold coating) Size (max mm) : 2.3 x 1.45 x 1.3 Operating temperature range (°C) : -55 to +125 | ESCC 3009/008 | Chip | EUROFARAD | Variants 07 and 08 of spec. subject to DCR |
| 1 | 0805 (Type II) | Ceramic Dielectric, Fixed Cap. Range Tol. Rated Volt. Temp. Charact. (pF) (±%) (V) (%) 1000/2200/4700 10 100 -30,+20 10000 10 50 -30,+20 Ag terminations Size (max mm) : 2.3 x 1.45 x 1.3 Operating temperature range (°C) : -55 to +125 | ESCC 3009/008 | Chip | AVX - DIVISION TPC | |

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|----------------|---|--------------------|---------|-----------------------|---------|
| 2 | 1206 (Type I) | Ceramic Dielectric, Fixed Cap. Range Tol. Rated Volt. Temp. Coeff. (pF) (±%) (V) (±10E-6/°C) 680/1000 1 100 30 1500 1 50 30 Variant 07 (Ag, Ni barrier, Tin-lead coating) Variant 08 (Ag, Ni barrier, Gold coating) Size (max mm) : 4.1 x 2.4 x 2.3 Operating temperature range (°C) : -55 to +125 without derating | ESCC 3009/022 | Chip | EUROFARAD | |
| 1 | 1206 (Type I) | Ceramic Dielectric, Fixed Cap. Range Tol. Rated Volt. Temp. Coeff. (pF) (±%) (V) (±10E-6/°C) 680/1000 1 100 30 1500 1 50 30 Ag terminations Size (max mm) : 4.1 x 2.4 x 2.3 Operating temperature range (°C) : -55 to +125 without derating | ESCC 3009/022 | Chip | AVX - DIVISION TPC | |
| 2 | 1210 (Type II) | Ceramic Dielectric, Fixed Cap. Range Tol. Rated Volt. Temp. Charact. (pF) (±%) (V) (%) 22000 10 100 ±20(Vt=0V), -30/+20(Vt=Ur) 47000/100000 10 50 ±20(Vt=0V), -30/+20(Vt=Ur) Variant 07 (Ag, Ni barrier, Tin-lead coating) Variant 08 (Ag, Ni barrier, Gold coating) Size (max mm) : 4.1 x 3.3 x 2.3 Operating temperature range (°C) : -55 to +125 | ESCC 3009/009 | Chip | EUROFARAD | |
| 1 | 1210 (Type II) | Ceramic Dielectric, Fixed Cap. Range Tol. Rated Volt. Temp. Charact. (pF) (±%) (V) (%) 22000 10 100 ±20(Vt=0V), -30/+20(Vt=Ur) 47000/100000 10 50 ±20(Vt=0V), -30/+20(Vt=Ur) Ag terminations Size (max mm) : 4.1 x 3.3 x 2.3 Operating temperature range (°C) : -55 to +125 | ESCC 3009/009 | Chip | AVX - DIVISION TPC | |

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------------|---|--------------------|---------|--------------------------|---------|
| 1 | 1812 (Type I) | Ceramic Dielectric, Fixed Cap. Range Tol. Rated Volt. Temp. Coeff. (pF) (±%) (V) (±10E-6/°C) 2200/4700 1 100 30 6800/10000 1 50 30 Ag terminations Size (max mm) : 5.0 x 3.6 x 1.8 Operating temperature range (°C) : -55 to +125 | ESCC 3009/005 | Chip | AVX - DIVISION TPC | |
| 2 | 1812 (Type I) | Ceramic Dielectric, Fixed Cap. Range Tol. Rated Volt. Temp. Coeff. (pF) (±%) (V) (±10E-6/°C) 2200/4700 1 100 30 6800/10000 1 50 30 Variant 07 (Ag, Ni barrier, Tin-lead coating) Variant 08 (Ag, Ni barrier, Gold coating) Size (max mm) : 5.0 x 3.6 x 1.8 Operating temperature range (°C) : -55 to +125 | ESCC 3009/005 | Chip | EUROFARAD | |
| 2 | 32101801 Type I | Ceramic Dielectric, Multilayer, Fixed, Type I Case Size Capacitance Range. Rated Volt. Case Size Tolerance (pF) (V) (max mm) (%) 0805 10.0 - 1000 (E12 series) 50-100-200 2.3x1.55x1.3 1 1206 10.0 - 3300 (E12 series) 50-100-200 3.5x1.9x1.6 1 1210 10.0 - 6800 (E12 series) 50-100-200 3.5x2.8x1.8 1 1812 220 - 18000 (E12 series) 50-100-200 4.8x3.5x1.8 1 2220 470 - 33000 (E12 series) 50-100-200 6.1x5.4x1.8 1 (For the maximum capacitance value within each rated voltage and for each case size refer to Table 2A of Detail Specification) Temperature Coefficient (10-6/°C.): ± 30 Operating Temperature Range (°C.): -55 to +125 | CECC/32101-801 | Chip | SYFER TECHNOLOGY Ltd. | |

01 CAPACITORS | 03 TANTALUM SOLID

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------|--------------------|--|---------------------------------|--------------------|--------------------|---------------------------------|---------------|------|-----|-------------------------|-------------|------|----|-------------------------|--------------|------|----|-------------------------|-----------|------|----|-------------------------|------------------|------|----|-------------------------|-----------------|-------|-------------------------------|-------------------------|--------------|------|----|-------------------------|------------|------|----|-------------------------|----------|------|----|-------------------------|--------------|------|----|-------------------------|---------------|-------|-------------------------------|--|
| 1 | CSR09 | <p>Tantalum Solid Electrolyte</p> <table border="1"> <thead> <tr> <th>Capacitance Range (μF)</th> <th>Tol. (\pm%)</th> <th>Rated Volt. (V)</th> <th>Dimensions (max mm) (max mm)</th> </tr> </thead> <tbody> <tr> <td>0.047 to 0.18</td> <td>5/10</td> <td>75</td> <td>Size A1 7.14 x Dia 2.51</td> </tr> <tr> <td>0.22 to 1.2</td> <td>5/10</td> <td>75</td> <td>Size B1 10.3 x Dia 3.76</td> </tr> <tr> <td>0.22, 0.27</td> <td>5/10</td> <td>50</td> <td>Size A1 7.14 x Dia 2.51</td> </tr> <tr> <td>1.5, 1.8</td> <td>5/10</td> <td>50</td> <td>Size B1 10.3 x Dia 3.76</td> </tr> <tr> <td>0.33, 0.39, 0.47</td> <td>5/10</td> <td>35</td> <td>Size A1 7.14 x Dia 2.51</td> </tr> <tr> <td>2.2, 2.7</td> <td>5/10</td> <td>35</td> <td>Size B1 10.3 x Dia 3.76</td> </tr> <tr> <td>0.56 to 1.00</td> <td>5/10</td> <td>20</td> <td>Size A1 7.14 x Dia 2.51</td> </tr> <tr> <td>3.3 to 6.8</td> <td>5/10</td> <td>20</td> <td>Size B1 10.3 x Dia 3.76</td> </tr> <tr> <td>1.8, 2.0</td> <td>5/10</td> <td>10</td> <td>Size A1 7.14 x Dia 2.51</td> </tr> <tr> <td>10.0 to 15.0</td> <td>5/10</td> <td>10</td> <td>Size B1 10.3 x Dia 3.76</td> </tr> </tbody> </table> <p>Operating temperature range ($^{\circ}$C) : -55 to +125</p> | Capacitance Range (μ F) | Tol. (\pm %) | Rated Volt. (V) | Dimensions (max mm) (max mm) | 0.047 to 0.18 | 5/10 | 75 | Size A1 7.14 x Dia 2.51 | 0.22 to 1.2 | 5/10 | 75 | Size B1 10.3 x Dia 3.76 | 0.22, 0.27 | 5/10 | 50 | Size A1 7.14 x Dia 2.51 | 1.5, 1.8 | 5/10 | 50 | Size B1 10.3 x Dia 3.76 | 0.33, 0.39, 0.47 | 5/10 | 35 | Size A1 7.14 x Dia 2.51 | 2.2, 2.7 | 5/10 | 35 | Size B1 10.3 x Dia 3.76 | 0.56 to 1.00 | 5/10 | 20 | Size A1 7.14 x Dia 2.51 | 3.3 to 6.8 | 5/10 | 20 | Size B1 10.3 x Dia 3.76 | 1.8, 2.0 | 5/10 | 10 | Size A1 7.14 x Dia 2.51 | 10.0 to 15.0 | 5/10 | 10 | Size B1 10.3 x Dia 3.76 | MIL-C-39003/2 | Axial | KEMET ELECTRONICS Corp. | |
| Capacitance Range (μ F) | Tol. (\pm %) | Rated Volt. (V) | Dimensions (max mm) (max mm) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.047 to 0.18 | 5/10 | 75 | Size A1 7.14 x Dia 2.51 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.22 to 1.2 | 5/10 | 75 | Size B1 10.3 x Dia 3.76 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.22, 0.27 | 5/10 | 50 | Size A1 7.14 x Dia 2.51 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.5, 1.8 | 5/10 | 50 | Size B1 10.3 x Dia 3.76 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.33, 0.39, 0.47 | 5/10 | 35 | Size A1 7.14 x Dia 2.51 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.2, 2.7 | 5/10 | 35 | Size B1 10.3 x Dia 3.76 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.56 to 1.00 | 5/10 | 20 | Size A1 7.14 x Dia 2.51 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.3 to 6.8 | 5/10 | 20 | Size B1 10.3 x Dia 3.76 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.8, 2.0 | 5/10 | 10 | Size A1 7.14 x Dia 2.51 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10.0 to 15.0 | 5/10 | 10 | Size B1 10.3 x Dia 3.76 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | CSR13 | <p>Tantalum Solid Electrolyte</p> <table border="1"> <thead> <tr> <th>Capacitance Range (μF)</th> <th>Tol. (\pm%)</th> <th>Rated Volt. (V)</th> <th>Case Size</th> </tr> </thead> <tbody> <tr> <td>0.0047 to 6.8</td> <td>5,10</td> <td>100</td> <td>Case A, B, C</td> </tr> <tr> <td>0.1 to 15</td> <td>5,10</td> <td>75</td> <td>Case A, B, C, D</td> </tr> <tr> <td>0.0047 to 22</td> <td>5,10</td> <td>50</td> <td>Case A, B, C, D</td> </tr> <tr> <td>5.6 to 47</td> <td>5,10</td> <td>35</td> <td>Case B, C, D</td> </tr> <tr> <td>3.9 to 220</td> <td>5,10</td> <td>10</td> <td>case A, B, C, D</td> </tr> </tbody> </table> <p>Dimensions (max mm) : Case A : 10.72 x 3.84 DIA Case B : 15.49 x 5.11 DIA Case C : 20.88 x 7.75 DIA Case D : 23.42 x 9.33 DIA</p> <p>Operating temperature range ($^{\circ}$C) : -55 to +125</p> | Capacitance Range (μ F) | Tol. (\pm %) | Rated Volt. (V) | Case Size | 0.0047 to 6.8 | 5,10 | 100 | Case A, B, C | 0.1 to 15 | 5,10 | 75 | Case A, B, C, D | 0.0047 to 22 | 5,10 | 50 | Case A, B, C, D | 5.6 to 47 | 5,10 | 35 | Case B, C, D | 3.9 to 220 | 5,10 | 10 | case A, B, C, D | MIL-PRF-39003/1 | Axial | KEMET ELECTRONICS Corp. | | | | | | | | | | | | | | | | | | | | | |
| Capacitance Range (μ F) | Tol. (\pm %) | Rated Volt. (V) | Case Size | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.0047 to 6.8 | 5,10 | 100 | Case A, B, C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.1 to 15 | 5,10 | 75 | Case A, B, C, D | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.0047 to 22 | 5,10 | 50 | Case A, B, C, D | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5.6 to 47 | 5,10 | 35 | Case B, C, D | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.9 to 220 | 5,10 | 10 | case A, B, C, D | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks | | | | | | | | | | | | | | | | | | | | |
|---------------------------------|--------------------|---|---------------------------------|--------------------|--------------------|-----------|-----------|-------|----|-----------------|-----------|-------|----|-----------------|------------|-------|----|-----------------|------------|-------|----|-----------------|------------------|-------|-------------------------------|---|
| 1 | CSR23 | <p>Tantalum Solid Electrolyte</p> <table border="1"> <thead> <tr> <th>Capacitance Range (μF)</th> <th>Tol. (\pm%)</th> <th>Rated Volt. (V)</th> <th>Case Size</th> </tr> </thead> <tbody> <tr> <td>1.2 to 39</td> <td>10/20</td> <td>50</td> <td>Case A, B, C, D</td> </tr> <tr> <td>1.8 to 68</td> <td>10/20</td> <td>35</td> <td>Case A, B, C, D</td> </tr> <tr> <td>2.7 to 180</td> <td>10/20</td> <td>20</td> <td>Case A, B, C, D</td> </tr> <tr> <td>6.8 to 560</td> <td>10/20</td> <td>10</td> <td>Case A, B, C, D</td> </tr> </tbody> </table> <p>Dimensions (max mm) : Case A : 10.72 x 3.84 DIA Case B : 15.49 x 5.11 DIA Case C : 20.88 x 7.75 DIA Case D : 23.42 x 9.33 DIA</p> <p>Operating temperature range ($^{\circ}$C) : -55 to +125</p> | Capacitance Range (μ F) | Tol. (\pm %) | Rated Volt. (V) | Case Size | 1.2 to 39 | 10/20 | 50 | Case A, B, C, D | 1.8 to 68 | 10/20 | 35 | Case A, B, C, D | 2.7 to 180 | 10/20 | 20 | Case A, B, C, D | 6.8 to 560 | 10/20 | 10 | Case A, B, C, D | MIL-PRF-39003/3 | Axial | KEMET ELECTRONICS Corp. | |
| Capacitance Range (μ F) | Tol. (\pm %) | Rated Volt. (V) | Case Size | | | | | | | | | | | | | | | | | | | | | | | |
| 1.2 to 39 | 10/20 | 50 | Case A, B, C, D | | | | | | | | | | | | | | | | | | | | | | | |
| 1.8 to 68 | 10/20 | 35 | Case A, B, C, D | | | | | | | | | | | | | | | | | | | | | | | |
| 2.7 to 180 | 10/20 | 20 | Case A, B, C, D | | | | | | | | | | | | | | | | | | | | | | | |
| 6.8 to 560 | 10/20 | 10 | Case A, B, C, D | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | CSS33 | <p>Tantalum Solid Electrolyte</p> <table border="1"> <thead> <tr> <th>Capacitance Range (μF)</th> <th>Tol. (\pm%)</th> <th>Rated Volt. (V)</th> <th>Case Size</th> </tr> </thead> <tbody> <tr> <td>1.2 to 39</td> <td>10</td> <td>50</td> <td>Case A, B, C, D</td> </tr> <tr> <td>1.8 to 68</td> <td>10</td> <td>35</td> <td>Case B, C, D</td> </tr> <tr> <td>2.7 to 180</td> <td>10</td> <td>20</td> <td>Case A, B, C, D</td> </tr> <tr> <td>6.8 to 560</td> <td>10</td> <td>10</td> <td>Case A, B, C, D</td> </tr> </tbody> </table> <p>Dimensions (max mm) : Case A : 10.72 x 3.84 DIA Case B : 15.49 x 5.11 DIA Case C : 20.88 x 7.75 DIA Case D : 23.42 x 9.33 DIA</p> <p>Operating temperature range ($^{\circ}$C) : -55 to +125.</p> | Capacitance Range (μ F) | Tol. (\pm %) | Rated Volt. (V) | Case Size | 1.2 to 39 | 10 | 50 | Case A, B, C, D | 1.8 to 68 | 10 | 35 | Case B, C, D | 2.7 to 180 | 10 | 20 | Case A, B, C, D | 6.8 to 560 | 10 | 10 | Case A, B, C, D | MIL-PRF-39003/10 | Axial | KEMET ELECTRONICS Corp. | SEE QPL FOR FAILURE RATE C VALUES |
| Capacitance Range (μ F) | Tol. (\pm %) | Rated Volt. (V) | Case Size | | | | | | | | | | | | | | | | | | | | | | | |
| 1.2 to 39 | 10 | 50 | Case A, B, C, D | | | | | | | | | | | | | | | | | | | | | | | |
| 1.8 to 68 | 10 | 35 | Case B, C, D | | | | | | | | | | | | | | | | | | | | | | | |
| 2.7 to 180 | 10 | 20 | Case A, B, C, D | | | | | | | | | | | | | | | | | | | | | | | |
| 6.8 to 560 | 10 | 10 | Case A, B, C, D | | | | | | | | | | | | | | | | | | | | | | | |

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------|-----------|---|--------------------|---------|-----------------|----------------|----|----|----|---------------|----|----|----|----------------|----|----|----|----------------|----|----|----|----------------|----|----|----|----------------|----|----|----|----------------|-----|----|----|----------------|-----|----|----|----------------|-----|----|----|----------------|-----|----|----|----------------|-----|----|----|----------------|-----|----|----|----------------|-----|----|-----|----------------|-----|----|-----|----------------|---------------|-----|---------|---------------|---------------|-----|---------|---|
| 1 | CTC21 | <p>Tantalum Solid Electrolyte</p> <p>Capacitance range (µF) Tol. (± %) Rated Volt. (V) Dimensions (max mm)</p> <table border="1"> <tr><td>10</td><td>10</td><td>63</td><td>11.5 x 9.5 x 5</td></tr> <tr><td>22</td><td>10</td><td>63</td><td>11.5 x 13 x 6</td></tr> <tr><td>15</td><td>10</td><td>50</td><td>11.5 x 9.5 x 5</td></tr> <tr><td>22</td><td>10</td><td>40</td><td>11.5 x 9.5 x 5</td></tr> <tr><td>47</td><td>10</td><td>40</td><td>11.5 x 13 x 6</td></tr> <tr><td>33</td><td>10</td><td>25</td><td>11.5 x 9.5 x 5</td></tr> <tr><td>68</td><td>10</td><td>25</td><td>11.5 x 13 x 6</td></tr> <tr><td>47</td><td>10</td><td>20</td><td>11.5 x 9.5 x 5</td></tr> <tr><td>100</td><td>10</td><td>20</td><td>11.5 x 13 x 6</td></tr> <tr><td>68</td><td>10</td><td>16</td><td>11.5 x 9.5 x 5</td></tr> <tr><td>150</td><td>10</td><td>16</td><td>11.5 x 13 x 6</td></tr> <tr><td>100</td><td>10</td><td>10</td><td>11.5 x 9.5 x 5</td></tr> <tr><td>220</td><td>10</td><td>10</td><td>11.5 x 13 x 6</td></tr> <tr><td>150</td><td>10</td><td>6.3</td><td>11.5 x 9.5 x 5</td></tr> <tr><td>330</td><td>10</td><td>6.3</td><td>11.5 x 13 x 6</td></tr> </table> <p>Operating temperature range (°C) : -55 to +125</p> | 10 | 10 | 63 | 11.5 x 9.5 x 5 | 22 | 10 | 63 | 11.5 x 13 x 6 | 15 | 10 | 50 | 11.5 x 9.5 x 5 | 22 | 10 | 40 | 11.5 x 9.5 x 5 | 47 | 10 | 40 | 11.5 x 13 x 6 | 33 | 10 | 25 | 11.5 x 9.5 x 5 | 68 | 10 | 25 | 11.5 x 13 x 6 | 47 | 10 | 20 | 11.5 x 9.5 x 5 | 100 | 10 | 20 | 11.5 x 13 x 6 | 68 | 10 | 16 | 11.5 x 9.5 x 5 | 150 | 10 | 16 | 11.5 x 13 x 6 | 100 | 10 | 10 | 11.5 x 9.5 x 5 | 220 | 10 | 10 | 11.5 x 13 x 6 | 150 | 10 | 6.3 | 11.5 x 9.5 x 5 | 330 | 10 | 6.3 | 11.5 x 13 x 6 | ESCC 3012/002 | SMD | FIRADEC | | | | | |
| 10 | 10 | 63 | 11.5 x 9.5 x 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 22 | 10 | 63 | 11.5 x 13 x 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | 10 | 50 | 11.5 x 9.5 x 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 22 | 10 | 40 | 11.5 x 9.5 x 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 47 | 10 | 40 | 11.5 x 13 x 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 33 | 10 | 25 | 11.5 x 9.5 x 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 68 | 10 | 25 | 11.5 x 13 x 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 47 | 10 | 20 | 11.5 x 9.5 x 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 100 | 10 | 20 | 11.5 x 13 x 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 68 | 10 | 16 | 11.5 x 9.5 x 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 150 | 10 | 16 | 11.5 x 13 x 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 100 | 10 | 10 | 11.5 x 9.5 x 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 220 | 10 | 10 | 11.5 x 13 x 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 150 | 10 | 6.3 | 11.5 x 9.5 x 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 330 | 10 | 6.3 | 11.5 x 13 x 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | CTC21E | <p>Tantalum Solid Electrolyte</p> <p>Capacitance range (µF) Tol. (± %) Rated Volt. (V) Dimensions (max mm)</p> <table border="1"> <tr><td>15</td><td>10</td><td>63</td><td>11.5 x 9.5 x 5</td></tr> <tr><td>33</td><td>10</td><td>63</td><td>11.5 x 13 x 6</td></tr> <tr><td>22</td><td>10</td><td>50</td><td>11.5 x 9.5 x 5</td></tr> <tr><td>47</td><td>10</td><td>50</td><td>11.5 x 13 x 6</td></tr> <tr><td>33</td><td>10</td><td>40</td><td>11.5 x 9.5 x 5</td></tr> <tr><td>68</td><td>10</td><td>40</td><td>11.5 x 13 x 6</td></tr> <tr><td>47</td><td>10</td><td>25</td><td>11.5 x 9.5 x 5</td></tr> <tr><td>100</td><td>10</td><td>25</td><td>11.5 x 13 x 6</td></tr> <tr><td>100</td><td>10</td><td>20</td><td>11.5 x 9.5 x 5</td></tr> <tr><td>220</td><td>10</td><td>20</td><td>11.5 x 13 x 6</td></tr> <tr><td>150</td><td>10</td><td>16</td><td>11.5 x 9.5 x 5</td></tr> <tr><td>330</td><td>10</td><td>16</td><td>11.5 x 13 x 6</td></tr> <tr><td>220</td><td>10</td><td>10</td><td>11.5 x 9.5 x 5</td></tr> <tr><td>470</td><td>10</td><td>10</td><td>11.5 x 13 x 6</td></tr> <tr><td>330</td><td>10</td><td>6.3</td><td>11.5 x 9.5 x 5</td></tr> <tr><td>680</td><td>10</td><td>6.3</td><td>11.5 x 13 x 6</td></tr> </table> <p>Operating temperature range (°C) : -55 to +125</p> | 15 | 10 | 63 | 11.5 x 9.5 x 5 | 33 | 10 | 63 | 11.5 x 13 x 6 | 22 | 10 | 50 | 11.5 x 9.5 x 5 | 47 | 10 | 50 | 11.5 x 13 x 6 | 33 | 10 | 40 | 11.5 x 9.5 x 5 | 68 | 10 | 40 | 11.5 x 13 x 6 | 47 | 10 | 25 | 11.5 x 9.5 x 5 | 100 | 10 | 25 | 11.5 x 13 x 6 | 100 | 10 | 20 | 11.5 x 9.5 x 5 | 220 | 10 | 20 | 11.5 x 13 x 6 | 150 | 10 | 16 | 11.5 x 9.5 x 5 | 330 | 10 | 16 | 11.5 x 13 x 6 | 220 | 10 | 10 | 11.5 x 9.5 x 5 | 470 | 10 | 10 | 11.5 x 13 x 6 | 330 | 10 | 6.3 | 11.5 x 9.5 x 5 | 680 | 10 | 6.3 | 11.5 x 13 x 6 | ESCC 3012/003 | SMD | FIRADEC | Bigger anodes require further attention during parts mounting |
| 15 | 10 | 63 | 11.5 x 9.5 x 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 33 | 10 | 63 | 11.5 x 13 x 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 22 | 10 | 50 | 11.5 x 9.5 x 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 47 | 10 | 50 | 11.5 x 13 x 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 33 | 10 | 40 | 11.5 x 9.5 x 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 68 | 10 | 40 | 11.5 x 13 x 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 47 | 10 | 25 | 11.5 x 9.5 x 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 100 | 10 | 25 | 11.5 x 13 x 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 100 | 10 | 20 | 11.5 x 9.5 x 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 220 | 10 | 20 | 11.5 x 13 x 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 150 | 10 | 16 | 11.5 x 9.5 x 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 330 | 10 | 16 | 11.5 x 13 x 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 220 | 10 | 10 | 11.5 x 9.5 x 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 470 | 10 | 10 | 11.5 x 13 x 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 330 | 10 | 6.3 | 11.5 x 9.5 x 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 680 | 10 | 6.3 | 11.5 x 13 x 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------|---------------------|--|---------------------------------|---------------------|--------------------|-----------|-----|----|----|---|-----|----|----|---|-----|----|----|---|----|----|----|---|----|----|----|---|-----|----|----|---|-----|----|----|---|----|----|----|---|-----|----|----|---|-----|----|----|---|---------------|-----|---------|--|
| 1 | TAJ | <p>Tantalum Solid Electrolyte</p> <table border="1"> <thead> <tr> <th>Capacitance value (μF)</th> <th>Tol. ($\pm\%$)</th> <th>Rated Volt. (V)</th> <th>Case size</th> </tr> </thead> <tbody> <tr><td>1.0</td><td>10</td><td>50</td><td>C</td></tr> <tr><td>1.0</td><td>10</td><td>35</td><td>B</td></tr> <tr><td>2.2</td><td>10</td><td>35</td><td>C</td></tr> <tr><td>10</td><td>10</td><td>35</td><td>D</td></tr> <tr><td>22</td><td>10</td><td>35</td><td>E</td></tr> <tr><td>1.5</td><td>10</td><td>16</td><td>A</td></tr> <tr><td>4.7</td><td>10</td><td>16</td><td>B</td></tr> <tr><td>10</td><td>10</td><td>16</td><td>C</td></tr> <tr><td>100</td><td>10</td><td>16</td><td>E</td></tr> <tr><td>220</td><td>10</td><td>10</td><td>E</td></tr> </tbody> </table> <p>Size A (max mm) : 3.4 x 1.8 x 1.8 Size B (max mm) : 3.7 x 3.0 x 2.1 Size C (max mm) : 6.2 x 3.4 x 2.8 Size D (max mm) : 7.5 x 4.5 x 3.1 Size E (max mm) : 7.5 x 4.5 x 4.3 Gold plated termination. Operating temperature range ($^{\circ}$C) : -55 to +125</p> | Capacitance value (μ F) | Tol. ($\pm\%$) | Rated Volt. (V) | Case size | 1.0 | 10 | 50 | C | 1.0 | 10 | 35 | B | 2.2 | 10 | 35 | C | 10 | 10 | 35 | D | 22 | 10 | 35 | E | 1.5 | 10 | 16 | A | 4.7 | 10 | 16 | B | 10 | 10 | 16 | C | 100 | 10 | 16 | E | 220 | 10 | 10 | E | ESCC 3012/001 | SMD | AVX LTD | |
| Capacitance value (μ F) | Tol. ($\pm\%$) | Rated Volt. (V) | Case size | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.0 | 10 | 50 | C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.0 | 10 | 35 | B | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.2 | 10 | 35 | C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | 10 | 35 | D | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 22 | 10 | 35 | E | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.5 | 10 | 16 | A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.7 | 10 | 16 | B | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | 10 | 16 | C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 100 | 10 | 16 | E | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 220 | 10 | 10 | E | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Capacitance value (μ F) | Tol. ($\pm\%$) | Rated Volt. (V) | Case size | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.0 | 10 | 50 | C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.0 | 10 | 35 | B | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.2 | 10 | 35 | C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | 10 | 35 | D | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 22 | 10 | 35 | E | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.5 | 10 | 16 | A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.7 | 10 | 16 | B | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | 10 | 16 | C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 100 | 10 | 16 | E | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 220 | 10 | 10 | E | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

01 CAPACITORS | 04 TANTALUM NON-SOLID

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------|-----------|---|-----------------------|----------|-----------------|-----------------|-----------|-------|-----|------------|------------|-------|----|------------|----------|-------|----|------------|----------|-------|----|------------|------------|-------|----|------------|---------------|-------|-----------------|--|
| 1 | CLR79 | <p>Tantalum Non-Solid Electrolyte</p> <table border="1"> <thead> <tr> <th>Capacitance Range(μF)</th> <th>Tol.(±%)</th> <th>Rated Volt.(V)</th> <th>Available sizes</th> </tr> </thead> <tbody> <tr> <td>2.7 to 82</td> <td>10/20</td> <td>125</td> <td>A, B, C, D</td> </tr> <tr> <td>3.5 to 250</td> <td>10/20</td> <td>75</td> <td>A, B, C, D</td> </tr> <tr> <td>5 to 430</td> <td>10/20</td> <td>50</td> <td>A, B, C, D</td> </tr> <tr> <td>8 to 560</td> <td>10/20</td> <td>30</td> <td>A, B, C, D</td> </tr> <tr> <td>20 to 1800</td> <td>10/20</td> <td>10</td> <td>A, B, C, D</td> </tr> </tbody> </table> <p>Size A, Var. 02 (max mm) : 12.43 x Dia 5.6 Size B, Var. 03 (max mm) : 17.2 x Dia 7.6 Size C, var. 04 (max mm) : 20.4 x Dia 10.0 Size D, var. 05 (max mm) : 27.9 x Dia 10.0</p> <p>Operating temperature range (°C) : -55 to +125</p> | Capacitance Range(μF) | Tol.(±%) | Rated Volt.(V) | Available sizes | 2.7 to 82 | 10/20 | 125 | A, B, C, D | 3.5 to 250 | 10/20 | 75 | A, B, C, D | 5 to 430 | 10/20 | 50 | A, B, C, D | 8 to 560 | 10/20 | 30 | A, B, C, D | 20 to 1800 | 10/20 | 10 | A, B, C, D | ESCC 3003/005 | Axial | ARCOTRONICS LTD | |
| Capacitance Range(μF) | Tol.(±%) | Rated Volt.(V) | Available sizes | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.7 to 82 | 10/20 | 125 | A, B, C, D | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.5 to 250 | 10/20 | 75 | A, B, C, D | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 to 430 | 10/20 | 50 | A, B, C, D | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 to 560 | 10/20 | 30 | A, B, C, D | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20 to 1800 | 10/20 | 10 | A, B, C, D | | | | | | | | | | | | | | | | | | | | | | | | | | | |

01 CAPACITORS | 05 PLASTIC METALLIZED

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|-------------------------|---|--------------------|--------------|-----------------|---------|------------|------------|------------|-----|-------------|-------|--------------|---------|-------------|-------|--------------|---------------|-------------|-----|-------|--------------|-----------------|---------|-------------------------------|-------|--------------|---------------|---------|----|-------|--------------|---------------|---------|----|-------|--------------|------------------------------|-------------------------|-----------|--------------|-----------|--------------|-----------------|-------|-------------------------------|--|
| 1 | CHS01 to CHS03 | Plastic Film Dielectric <table border="0"> <tr> <td>Cap. Range</td> <td>Tol.</td> <td>Rated Volt.</td> <td>Type</td> </tr> <tr> <td>(μF)</td> <td>(\pm %)</td> <td>(V)</td> <td></td> </tr> <tr> <td>0.001 to 10</td> <td>2</td> <td>100</td> <td>CHS03</td> </tr> <tr> <td>0.001 to 10</td> <td>2</td> <td>50</td> <td>CHS02</td> </tr> <tr> <td>0.001 to 10</td> <td>2</td> <td>30</td> <td>CHS01</td> </tr> </table> Dimensions depending on capacitance value. Operating temperature range ($^{\circ}$ C): -55 to +100 | Cap. Range | Tol. | Rated Volt. | Type | (μ F) | (\pm %) | (V) | | 0.001 to 10 | 2 | 100 | CHS03 | 0.001 to 10 | 2 | 50 | CHS02 | 0.001 to 10 | 2 | 30 | CHS01 | MIL-PRF-87217/1 | Axial | COMPONENT RESEARCH COMPANY | | | | | | | | | | | | | | | | | | | | | | |
| Cap. Range | Tol. | Rated Volt. | Type | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| (μ F) | (\pm %) | (V) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.001 to 10 | 2 | 100 | CHS03 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.001 to 10 | 2 | 50 | CHS02 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.001 to 10 | 2 | 30 | CHS01 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | CRH01 to CRH05 | Plastic Film Dielectric <table border="0"> <tr> <td>Cap. Range</td> <td>Tol.</td> <td>Rated Volt.</td> <td>Type</td> <td>Dimensions</td> </tr> <tr> <td>(μF)</td> <td>(\pm %)</td> <td>(V)</td> <td></td> <td>(mm.)</td> </tr> <tr> <td>0.001 to 2.0</td> <td>0.5 / 1</td> <td>400</td> <td>CRH05</td> <td>61.09 x 25.9</td> </tr> <tr> <td>0.001 to 3.90</td> <td>0.5 / 1</td> <td>200</td> <td>CRH04</td> <td>61.09 x 25.9</td> </tr> <tr> <td>0.001 to 10.0</td> <td>0.5 / 1</td> <td>100</td> <td>CRH03</td> <td>61.09 x 25.9</td> </tr> <tr> <td>0.001 to 10.0</td> <td>0.5 / 1</td> <td>50</td> <td>CRH02</td> <td>48.39 x 17.5</td> </tr> <tr> <td>0.001 to 22.0</td> <td>0.5 / 1</td> <td>30</td> <td>CRH01</td> <td>48.39 x 17.5</td> </tr> </table> Temperature Coefficient: <table border="0"> <tr> <td>Temperature ($^{\circ}$C.)</td> <td>Capacitance changes (%)</td> </tr> <tr> <td>25 to 125</td> <td>-1.0 to +1.2</td> </tr> <tr> <td>25 to -55</td> <td>-2.5 to -0.5</td> </tr> </table> Operating temperature range ($^{\circ}$ C): -65 to +125. | Cap. Range | Tol. | Rated Volt. | Type | Dimensions | (μ F) | (\pm %) | (V) | | (mm.) | 0.001 to 2.0 | 0.5 / 1 | 400 | CRH05 | 61.09 x 25.9 | 0.001 to 3.90 | 0.5 / 1 | 200 | CRH04 | 61.09 x 25.9 | 0.001 to 10.0 | 0.5 / 1 | 100 | CRH03 | 61.09 x 25.9 | 0.001 to 10.0 | 0.5 / 1 | 50 | CRH02 | 48.39 x 17.5 | 0.001 to 22.0 | 0.5 / 1 | 30 | CRH01 | 48.39 x 17.5 | Temperature ($^{\circ}$ C.) | Capacitance changes (%) | 25 to 125 | -1.0 to +1.2 | 25 to -55 | -2.5 to -0.5 | MIL-PRF-83421/1 | Axial | COMPONENT RESEARCH COMPANY | For high impedance low energy circuit, use CHS01 to CHS03 as per MIL-C-87217/1 from C.R.C. |
| Cap. Range | Tol. | Rated Volt. | Type | Dimensions | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| (μ F) | (\pm %) | (V) | | (mm.) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.001 to 2.0 | 0.5 / 1 | 400 | CRH05 | 61.09 x 25.9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.001 to 3.90 | 0.5 / 1 | 200 | CRH04 | 61.09 x 25.9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.001 to 10.0 | 0.5 / 1 | 100 | CRH03 | 61.09 x 25.9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.001 to 10.0 | 0.5 / 1 | 50 | CRH02 | 48.39 x 17.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.001 to 22.0 | 0.5 / 1 | 30 | CRH01 | 48.39 x 17.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Temperature ($^{\circ}$ C.) | Capacitance changes (%) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 25 to 125 | -1.0 to +1.2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 25 to -55 | -2.5 to -0.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|---|--------------------|---------|-----------------|---------|
| 1 | HT86PS | Plastic Film Dielectric, High Voltage. Cap. Range(nF) Tol.(±%) Rated Volt.(V) 0.68 to 15 10 20000 1.5 to 33 10 15000 3.3 to 68 10 12500 1.0 to 100 10 10000 2.2 to 220 10 7500 6.8 to 470 10 5000 15 to 1000 10 3500 15 to 1500 10 2500 33 to 2200 10 1500 Temperature Coefficient: Temperature (°C.) Capacitance change (%) +22 to -55 -3.0 min +22 to +125 +10 max Size (max mm):36x11x5 to 106x51x15 depending on Voltage/Capacitance Value Operating Temperature Range (°C) : -55 to +125 | ESCC 3006/022 | Axial | EUROFARAD | |
| 1 | KM94S | Self-healing metalised film dielectric Capacitance Value (nF) Rated Voltage (V) Tolerance Available sizes 4.64 - 1000 50 5 % 01, 02, 03 1.0 - 470 100 5 % 01, 02, 03 Size 01 (max mm) : 8.0 x 7.5 x 4.5 Size 02 (max mm) : 8.0 x 8.5 x 7.5 Size 03 (max mm) : 10.7 x 10.7 x 7.5 | ESCC 3006/023 | SMD | EUROFARAD | |
| 1 | PM90SR2 | Self-healing metalised film dielectric Cap. Range Tol. Rated Volt. (µF) (±%) (V) 0.22 to 5.6 10 630 0.39 to 15 10 400 1.0 to 39 10 250 3.3 to 100 10 100 8.2 to 150 10 50 Size (max mm): 31.5 x 33 x 32.5 (Variant 09 to 16) depending on Voltage/capacitance value Temperature Coefficient: Temperature Capacitance change (max) (°C.) (%) +22 to -55 -10 +22 to +100 +8.0 Operating temperature range (°C.): -55 to +100. | ESCC 3006/020 | SMD | EUROFARAD | |

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|--|--------------------|---------|-----------------|---------|
| 1 | PM94S | Self-healing metalised film dielectric Capacitance Value (uF) Rated Voltage (V) Tolerance Available sizes 0.56 - 12 100 10 % 01, 02, 03, 04 0.22 - 4.7 250 10 % 01, 02, 03, 04 0.1 - 1.8 400 10 % 01, 02, 03, 04 Size 01 (max mm) : 10.7 x 10.7 x B (6, 8, 10, 12, 14, 15 mm depending on cap. value) Size 02 (max mm) : 15.5 x 11.5 x B (6, 8, 10, 12, 14, 15 mm depending on cap. value) Size 03 (max mm) : 16.5 x 15.5 x B (6, 8, 10, 12, 14, 15 mm depending on cap. value) Size 04 (max mm) : 18.5 x 17.0 x B (6, 8, 10, 12, 14, 15 mm depending on cap. value) | ESCC 3006/024 | SMD | EUROFARAD | |

02 CONNECTORS / 01 CIRCULAR

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks | | | | | | | | | | | | | | | | |
|---------------|------------------|---|--------------------|------------|-----------------|------------|----|------|----|------|----|------|----|------|---------------|--------------|---------|-----|---------------|--------------|---------|--|
| 1 | 38999 Series I | <p>Circular, Bayonet Coupling, Removable Crimp Contacts, scoop-proof, based on MIL-C-38999 Series I.</p> <p>Range: 6, 13, 22, 37, 55, 66, 79, 100, 128 contacts size #22. 3, 6, 10, 19, 26, 32, 41, 53, 61 contacts size #20.</p> <p>Other arrangements with contact sizes: 16, 12, 8.</p> <p>For contact sizes refer to ESCC 3401/058.</p> <p>Receptacle and plug shell sizes:09,11,13,15,17,19,21,23,25.</p> <table border="0"> <thead> <tr> <th>Contact sizes</th> <th>Rating (A)</th> <th>Contact sizes</th> <th>Rating (A)</th> </tr> </thead> <tbody> <tr> <td>08</td> <td>46.0</td> <td>12</td> <td>23.0</td> </tr> <tr> <td>16</td> <td>13.0</td> <td>20</td> <td>7.5</td> </tr> <tr> <td>22</td> <td>5.0</td> <td></td> <td></td> </tr> </tbody> </table> <p>Operating Temperature Range (°C): -65 to +200</p> | Contact sizes | Rating (A) | Contact sizes | Rating (A) | 08 | 46.0 | 12 | 23.0 | 16 | 13.0 | 20 | 7.5 | 22 | 5.0 | | | ESCC 3401/052 | AS PER SPEC. | SOURIAU | |
| Contact sizes | Rating (A) | Contact sizes | Rating (A) | | | | | | | | | | | | | | | | | | | |
| 08 | 46.0 | 12 | 23.0 | | | | | | | | | | | | | | | | | | | |
| 16 | 13.0 | 20 | 7.5 | | | | | | | | | | | | | | | | | | | |
| 22 | 5.0 | | | | | | | | | | | | | | | | | | | | | |
| 1 | 38999 Series II | <p>Circular, Bayonet Coupling, Low Profile, Removable Crimp Contacts, Based on MIL-C-38999 Series II.</p> <p>Range: 6, 13, 22, 37, 55, 66, 79, 100, 128 contacts size #22. 3, 6, 10, 18, 26, 32, 41, 55, 61 contacts size #20.</p> <p>Other arrangements with contact sizes: 20, 16, 12.</p> <p>For contact sizes refer to ESCC 3401/045.</p> <p>Receptacle and plug shell sizes:08,10,12,14,16,18,20,22,24.</p> <table border="0"> <thead> <tr> <th>Contact sizes</th> <th>Rating (A)</th> <th>Contact sizes</th> <th>Rating (A)</th> </tr> </thead> <tbody> <tr> <td>12</td> <td>23.0</td> <td>16</td> <td>13.0</td> </tr> <tr> <td>20</td> <td>7.5</td> <td>22</td> <td>5.0</td> </tr> </tbody> </table> <p>Operating Temperature Range (°C): -65 to +200</p> | Contact sizes | Rating (A) | Contact sizes | Rating (A) | 12 | 23.0 | 16 | 13.0 | 20 | 7.5 | 22 | 5.0 | ESCC 3401/044 | AS PER SPEC. | SOURIAU | | | | | |
| Contact sizes | Rating (A) | Contact sizes | Rating (A) | | | | | | | | | | | | | | | | | | | |
| 12 | 23.0 | 16 | 13.0 | | | | | | | | | | | | | | | | | | | |
| 20 | 7.5 | 22 | 5.0 | | | | | | | | | | | | | | | | | | | |
| 1 | 38999 Series III | <p>Circular, Triple-start, Self Locking Coupling, Scoop-proof, Removable Crimp Contacts, based on MIL-C-38999 Series III</p> <p>Range: 6, 13, 22, 37, 55, 66, 79, 100, 128 contacts #22 3, 6, 10, 19, 26, 32, 41, 53, 61 contacts #20</p> <p>Other arrangements with contact sizes: 20, 16, 12, 8, 4.</p> <p>For contact sizes refer to ESCC 3401/058, /066, /070.</p> <table border="0"> <thead> <tr> <th>Contact sizes</th> <th>Rating (A)</th> <th>Contact sizes</th> <th>Rating (A)</th> </tr> </thead> <tbody> <tr> <td>4</td> <td>80.0</td> <td>8</td> <td>46.0</td> </tr> <tr> <td>12</td> <td>23.0</td> <td>16</td> <td>13.0</td> </tr> <tr> <td>20</td> <td>7.5</td> <td>22</td> <td>5.0</td> </tr> </tbody> </table> <p>Operating Temperature Range (°C): -65 to +200</p> | Contact sizes | Rating (A) | Contact sizes | Rating (A) | 4 | 80.0 | 8 | 46.0 | 12 | 23.0 | 16 | 13.0 | 20 | 7.5 | 22 | 5.0 | ESCC 3401/056 | AS PER SPEC. | SOURIAU | |
| Contact sizes | Rating (A) | Contact sizes | Rating (A) | | | | | | | | | | | | | | | | | | | |
| 4 | 80.0 | 8 | 46.0 | | | | | | | | | | | | | | | | | | | |
| 12 | 23.0 | 16 | 13.0 | | | | | | | | | | | | | | | | | | | |
| 20 | 7.5 | 22 | 5.0 | | | | | | | | | | | | | | | | | | | |

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks | | | | | | | | |
|--------------|--|---|--------------------|------------|-----------------|------------|----|-----|----|-----|---------------|--------------|---------|--|
| 1 | 38999 SeriesIII Hermetic receptacle | <p>Circular, Hermetic Receptacle, Scoop-proof, non-removable solder contacts, based on MIL-C-38999 Series III.</p> <p>Range: 6, 13, 22, 37, 55, 66, 79, 100, 128 contacts size#22 3, 6, 10, 19, 26, 32, 41, 53, 61 contacts size#20</p> <table border="0"> <tr> <td>Contact size</td> <td>Rating (A)</td> <td>Contact size</td> <td>Rating (A)</td> </tr> <tr> <td>20</td> <td>7.5</td> <td>22</td> <td>5.0</td> </tr> </table> <p>Operating Temperature Range (°C): -65 to +200</p> | Contact size | Rating (A) | Contact size | Rating (A) | 20 | 7.5 | 22 | 5.0 | ESCC 3401/057 | AS PER SPEC. | SOURIAU | |
| Contact size | Rating (A) | Contact size | Rating (A) | | | | | | | | | | | |
| 20 | 7.5 | 22 | 5.0 | | | | | | | | | | | |

02 CONNECTORS / 02 RECTANGULAR

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks | | | | | | | | | | | | |
|--------------|---------------------------------|---|--------------------|--------------|-----------------|--|----|-----------------|----|------------------|---------------|------------------|-----------------------|-----|---------------|--------------|-----------------------|--|
| 1 | D*M (Solder, PCB and Wire Wrap) | <p>Rectangular, non removable solder bucket, PCB and wire-wrap contacts and removable coaxial and power contacts.</p> <p>Range: 9, 15, 25, 37 and 50 contacts size# 20 15, 26, 44, 62 and 78 contacts size# 22</p> <p>Coaxial Contact Arrangements: contact variants 01 to 20. Power Contact Arrangements: contact variants 01 to 12.</p> <p>Gold-plated non-magnetic shells</p> <table border="0"> <tr> <td>Contact size</td> <td>Rating (A)</td> <td>Contact size</td> <td>Rating (A)</td> </tr> <tr> <td>20</td> <td>7.5</td> <td>22</td> <td>3.0</td> </tr> </table> <p>Operating Temperature Range (°C): -55 to +125</p> | Contact size | Rating (A) | Contact size | Rating (A) | 20 | 7.5 | 22 | 3.0 | ESCC 3401/001 | AS PER SPEC. | ITT CANNON SOURIAU | | | | | |
| Contact size | Rating (A) | Contact size | Rating (A) | | | | | | | | | | | | | | | |
| 20 | 7.5 | 22 | 3.0 | | | | | | | | | | | | | | | |
| 1 | D*MA (Crimp) | <p>Rectangular, removable crimp contact.</p> <p>Range: 9, 15, 25, 37, 50 contacts size# 20 15, 26, 44, 62, 78 contacts size# 22</p> <p>For contact sizes refer to ESCC 3401/005; for the corresponding saver and for its own contacts refer to ESCC 3401/021 and ESCC 3401/020 respectively.</p> <p>Gold-plated non-magnetic shells</p> <table border="0"> <tr> <td>Contact size</td> <td>Rating (A)</td> <td>Contact size</td> <td>Rating (A)</td> </tr> <tr> <td>20</td> <td>7.5(AWG 20to24)</td> <td>20</td> <td>3.0(AWG 26and28)</td> </tr> <tr> <td>20</td> <td>7.5(AWG 18and20)</td> <td>22</td> <td>5.0</td> </tr> </table> <p>Operating Temperature Range (°C): -55 to +125</p> | Contact size | Rating (A) | Contact size | Rating (A) | 20 | 7.5(AWG 20to24) | 20 | 3.0(AWG 26and28) | 20 | 7.5(AWG 18and20) | 22 | 5.0 | ESCC 3401/002 | AS PER SPEC. | ITT CANNON SOURIAU | |
| Contact size | Rating (A) | Contact size | Rating (A) | | | | | | | | | | | | | | | |
| 20 | 7.5(AWG 20to24) | 20 | 3.0(AWG 26and28) | | | | | | | | | | | | | | | |
| 20 | 7.5(AWG 18and20) | 22 | 5.0 | | | | | | | | | | | | | | | |
| 1 | MDM | <p>Rectangular, non removable wired contacts</p> <p>Range: 9, 15, 21, 25, 31, 37, 51 contacts size.</p> <p>Terminations: Wire sizes AWG 26 and 28 and AWG 25 uninsulated solid gold-plated wire</p> <p>Rating (A): 2.5 with AWG 26 and uninsulated wire 1.5 with AWG 28</p> <p>Nickel Plated Shells</p> <p>For the corresponding saver refer to ESCC 3401/041.</p> <p>Operating Temperature Range (°C): -55 to +125</p> | ESCC 3401/029 | AS PER SPEC. | ITT CANNON | Supplied with uninsulated or already fitted wires; length of wires shall be specified by the orderer | | | | | | | | | | | | |
| 1 | MTB | <p>Single in line, microminiature.</p> <p>Shell size: 5 through 81 contacts single in line</p> <p>Terminations: Wire sizes AWG 26 and 28 and AWG 25 uninsulated solid gold-plated wire</p> <p>Rating (A): 2.5 with AWG 26 and uninsulated wire 1.5 with AWG 28</p> <p>Operating Temperature Range (°C): -55 to +125</p> | ESCC 3401/031 | AS PER SPEC. | ITT CANNON | Supplied with uninsulated or already fitted wires; length of wires shall be specified by the orderer | | | | | | | | | | | | |

02 CONNECTORS | 03 PRINTED CIRCUIT BOARD

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|--|--------------------|--------------|-------------------------------|---------|
| 1 | HE801/HPD | For PCB, removable contacts, crimp, wire-wrap, solder type, saver type. Range: 2 rows: 17, 29, 41, 53, 65, 72, 84, 96, 120 contacts 3 rows: 62, 80, 98, 160 contacts Contact Type: 3401/017 Crimp-type. 3401/018 Wire-wrap type. 3401/019 Solder/Saver type(wire sizes 22 to 26). Rating (A): 5.0 (1 contact,AWG 22) 1.5 (>31 contacts,AWG 22) Operating Temperature Range (°C): -55 to +125 | ESCC 3401/016 | AS PER SPEC. | HYPERTAC S.A. HYPERTAC LTD | |
| 1 | KMC | For PCB, non removable solder and wire wrap contacts and connector saver. Range: 3 rows 26, 44, 62, 80, 98, 144 contacts Contact Type: Solder and Wire-wrap for AWG 28 wires and PCB Rating (A): 2.0 (1 to 3 used contacts), 0.9 (4 to 26 used contacts) and 0.5 (over 27 used contacts) Operating Temperature Range (°C): -55 to +125 | ESCC 3401/039 | AS PER SPEC. | HYPERTAC S.A. | |
| 1 | MHD | For PCB, non removable solder through board and surface mount contacts and connector saver. Range: 4 rows 52, 100, 152, 200, 252, 300, 352 and 400 contacts Contact Type: Solder through board and surface mount for PCB Rating (A): 2.0 (1 to 3 used contacts), 0.9 (4 to 26 used contacts) and 0.5 (over 27 used contacts) Operating Temperature Range (°C): -55 to +125 | ESCC 3401/065 | AS PER SPEC. | HYPERTAC S.A. | |

02 CONNECTORS | 05 RF COAXIAL

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|---|---|-----------------|-----------------|---------|
| 1 | SMA | RF coaxial, 50 ohms. 3402/001 male contacts (plug), 3402/002 female contacts (receptacle), 3402/003 adapters. Crimp or solder contacts for flexible and semi-rigid cables, contacts for micro-strip. Types covered by similarity : hermetically sealed receptacle; Amagnetic stainless steel; Operating temperature range as per det. Spec. | ESCC 3402/001 ESCC 3402/002 ESCC 3402/003 | AS PER SPEC. | RADIALL | |

02 CONNECTORS | 08 RF FILTER

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|---|--------------------|--------------|-----------------|---------|
| 2 | D*J | Filtered, rectangular, non-removable solder bucket contacts, filtering. Range: 9, 15, 25, 37, 50 contacts size# 20 Filter Arrangements as per ESCC No 3405/001 Contacts for Medium and High Frequency Grounded and non-filtered Contacts Rated Current: 5 Adc Gold Plated Shells Operating Temperature Range (°C): -55 to +125 | ESCC 3405/001 | AS PER SPEC. | SOURIAU | |

03 PIEZO-ELECTRIC DEVICES | 01 CRYSTAL RESONATOR

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|---|--------------------|---------|-----------------|----------------|
| 1 | 47 | Crystal units in SMD 47 case Frequency Range: 5.0-160 MHz Operating temperature range: -55 to +125 °C | ESCC 3501/015 | LCC 40 | TEMEX S.A. | ESCC 3501 flow |
| 1 | T1507 | Crystal units in metal holder Frequency Range: 2.5 - 20 MHz Operating temperature range depending on type variant | ESCC 3501/019 | TO8 CAN | C-MAC FRANCE | |
| 1 | T1507 | Crystal units in metal holder Frequency Range: 2.5 - 20 MHz Operating temperature range depending on type variant | ESCC 3501/019 | TO8 CAN | C-MAC FRANCE | |
| 1 | T807 | Crystal units in metal holder Frequency Range: 4 - 140 MHz Operating temperature range depending on type variant | ESCC 3501/018 | TO5 CAN | C-MAC FRANCE | |
| 1 | T807 | Crystal units in metal holder Frequency Range: 4 - 140 MHz Operating temperature range depending on type variant | ESCC 3501/018 | TO5 CAN | C-MAC FRANCE | |

04 DIODES | 01 SWITCHING

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|------------|--|--------------------|---------|----------------------|---------|
| 1 | 1N3595-1 | Silicon, Switching DC forward voltage (max V): 1.0 @ DC forward current (pk A): 0.20 DC reverse current (max nA): 1,0 @ DC reverse voltage (V): 125 Reverse Recovery Time= 3.0 uS; IFSM= 4.0 A; Io= 150mA (Tl<=75°C.). Operating Temperature range (°C.): -65 to +175 | ESCC 5101/028 | DO-35 | MICROSEMI IRELAND | |
| 1 | 1N3595US-1 | Silicon, Switching DC forward voltage (max V): 1.0 @ DC forward current (pk A): 0.20 DC reverse current (max nA): 1,0 @ DC reverse voltage (V): 125 Reverse Recovery Time= 3.0 uS; IFSM= 4.0 A; Io= 150mA (Tl<=75°C.). Operating Temperature range (°C.): -65 to +175 | ESCC 5101/028 | MELF | MICROSEMI IRELAND | |
| 1 | 1N6640 | Silicon, Switching DC forward voltage (max V): 1,0 @ DC forward current (pk A): 0.20 DC reverse current (max nA): 100 @ DC reverse voltage (V): 50 Reverse Recovery Time= 4.0 nS; IFSM= 2.5 A; Io= 300 mA (Tl<=75°C.). Operating Temperature range (°C.): -65 to +175. | ESCC 5101/027 | DO-35 | MICROSEMI IRELAND | |
| 1 | 1N6640US | Silicon, Switching DC forward voltage (max V): 1,0 @ DC forward current (pk A): 0.20 DC reverse current (max nA): 100 @ DC reverse voltage (V): 50 Reverse Recovery Time= 4.0 nS; IFSM= 2.5 A; Io= 300 mA (Tl<=75°C.). Operating Temperature range (°C.): -65 to +175. | ESCC 5101/027 | MELF | MICROSEMI IRELAND | |
| 1 | 1N6642 | Silicon, Switching DC forward voltage (max V): 0,8 @ DC forward current (pk A): 0,01 DC reverse current (max nA): 25 @ DC reverse voltage (V): 20 Reverse Recovery Time= 5.0 nS; IFSM= 2.5 A; IO= 300 mA (Tl<=75°C.) Operating Temperature range (°C.): -65 to +175. | ESCC 5101/026 | DO-35 | MICROSEMI IRELAND | |
| 1 | 1N6642US | Silicon, Switching DC forward voltage (max V): 0,8 @ DC forward current (pk A): 0,01 DC reverse current (max nA): 25 @ DC reverse voltage (V): 20 Reverse Recovery Time= 5.0 nS; IFSM= 2.5 A; IO= 300 mA (Tl<=75°C.) Operating Temperature range (°C.): -65 to +175. | ESCC 5101/026 | MELF | MICROSEMI IRELAND | |

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|---|-------------------------|--------------|-----------------|---------|
| 1 | 1S2593A | Silicon, Switching DC forward voltage (max V): 2.5 @ DC forward current (pk A): 1.0 DC reverse current (max μ A): 10 @ DC reverse voltage (V): 1000 Switching time (max ns) : 0.4 Package (max mm) : Dia 5.8 Package type as per Detail Specification | NASDA QTS 19500/1030 | Axial | HITACHI LTD | |
| 1 | 1SS296 | Silicon, Switching DC forward voltage (max V): 1.0 @ DC forward current (pk A): 0.1 DC reverse current (max μ A): 0.75 @ DC reverse voltage (V): 60 Switching time (max ns) : 7.0 Package (max mm) : 3.1 x 2.5 x 2.0 Package type as per Detail Specification | NASDA QTS 19500/1033 | Per spec. | NEC CORPORATION | |

04 DIODES | 02 RECTIFIER

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|---|--|--------------------|---------|------------------------------------|---|
| 2 | 1N5416 thru 1N5418, 1N5420 | Silicon, Power Rectifier, Fast Recovery. DC forward voltage (max V): 1.5 @ DC forward current (pk A): 9.0 DC reverse current (max μ A): 1.0 @ DC reverse voltage (V):100,200,400,600. Switching time (ns): 150 (400 for 1N5420); IFSM=80 A (pk); Io=3.0 A (t=55°C.) Operating Temperature range (°C.): -65 to +175. | MIL-S-19500/411 | AXIAL | Sensitron Semiconductor Inc. | Sensitron spec. 7700-4091 for JANS-equivalent screening flow |
| 1 | 1N5416, 1N5417, 1N5418, 1N5420 | Silicon, Power Rectifier, Fast Recovery. DC forward voltage (max V): 1.5 @ DC forward current (pk A): 9.0 DC reverse current (max μ A): 1.0 @ DC reverse voltage (V):100,200,400,600. Switching time (ns): 150 (400 for 1N5420); IFSM=80 A (pk); Io=2.0 A (t=55°C.) Operating Temperature range (°C.): -65 to +175. | MIL-S-19500/411 | A248 | MICROSEMI | |
| 2 | 1N5416US thru 1N5418US, 1N5420US | Silicon, Power Rectifier, Fast Recovery. DC forward voltage (max V): 1.5 @ DC forward current (pk A): 9.0 DC reverse current (max μ A): 1.0 @ DC reverse voltage (V):100,200,400,600. Switching time (ns): 150 (400 for 1N5420US); IFSM=80 A (pk); Io=3.0 A (t=55°C.) Operating Temperature range (°C.): -65 to +175. | MIL-S-19500/411 | MELF | Sensitron Semiconductor Inc. | Sensitron spec. 7700-4091 for JANS-equivalent screening flow |
| 1 | 1N5550, 1N5552, 1N5554 | Silicon, Power Rectifier, General Purpose. DC forward voltage(max V):1.2(1.3 for 1N5554) @DC forward current(pk A):9.0 DC reverse current(max μ A):1.0 @ DC reverse voltage (V): 200, 600, 1000 Switching time (ns): 2000; IFSM= 100 A (pk); Io= 3.0 A (t=55°C.) Operating Temperature range (°C.): -65 to +175. | MIL-S-19500/420 | A1 | MICROSEMI | |
| 1 | 1N5614, 1N5616, 1N5618 | Silicon, Power Rectifier DC forward voltage (max V): 1.3 @ DC forward current (pk A): 3.0* DC reverse current (max μ A): 0.5 @ DC reverse voltage (V): 200, 400, 600 Switching time (ns): 2000; IFSM= 30 A (pk); Io= 1 A (t=55°C.) Operating Temperature range (°C.): -65 to +175. * pulsed | MIL-S-19500/427 | A248 | MICROSEMI | |
| 1 | 1N5615, 1N5617(A/UN),1N5619, 1N5623 | Silicon, Power Rectifier, Fast Recovery. DC forward voltage (max V): 1.6 @ DC forward current (pk A): 3.0* DC reverse current (max μ A): 1.0 @ DC reverse voltage (V): 200, 600, 1000 Switching time (ns): 150, 250, 500 respectively IFSM= 25 A (pk); Io= 1 A (t=55°C.) Operating Temperature Range (°C.): -65 to +175. * pulsed | MIL-S-19500/429 | A248 | MICROSEMI | |

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|---|--------------------|---------|------------------------------|--|
| 2 | 1N5806 | Silicon, Power Rectifier, Fast Recovery. DC forward voltage (max V): 0.875 @ DC forward current (pk A): 1.0 DC reverse current (max μ A): 1.0 @ DC reverse voltage (V):150. Switching time (ns): 25; IFSM=35 A (pk); Io=1.0 A (t=55°C.) Operating Temperature range (°C.): -65 to +175. | MIL-S-19500/477 | AXIAL | Sensitron Semiconductor Inc. | Sensitron spec. 7700-4091 for JANS-equivalent screening flow |
| 2 | 1N5806US | Silicon, Power Rectifier, Fast Recovery. DC forward voltage (max V): 0.875 @ DC forward current (pk A): 1.0 DC reverse current (max μ A): 1.0 @ DC reverse voltage (V):150. Switching time (ns): 25; IFSM=35 A (pk); Io=1.0 A (t=55°C.) Operating Temperature range (°C.): -65 to +175. | MIL-S-19500/477 | MELF | Sensitron Semiconductor Inc. | Sensitron spec. 7700-4091 for JANS-equivalent screening flow |
| 1 | 1N5806US | Silicon, Fast Recovery, Power Rectifier. DC forward voltage (max V):0.975,0.925 @DC forward current (pk A):2.5,6.0* DC reverse current (max μ A): 1.0, 5.0 @DC reverse voltage (V): 150 Switching time (ns): 25, 30 respectively IFSM= 35, 125 A (pk); Io= 1.0, 3.0 respectively. Operating Temperature Range (°C.): -65 to +175. * pulsed | MIL-S-19500/477 | D-5A | MICROSEMI | |
| 2 | 1N5811 | Silicon, Power Rectifier, Fast Recovery. DC forward voltage (max V): 0.975 @ DC forward current (pk A): 2.5 DC reverse current (max μ A): 5.0 @ DC reverse voltage (V):150. Switching time (ns): 30; IFSM=125 A (pk); Io=3.0 A (t=55°C.) Operating Temperature range (°C.): -65 to +175. | MIL-S-19500/477 | AXIAL | Sensitron Semiconductor Inc. | Sensitron spec. 7700-4091 for JANS-equivalent screening flow |
| 2 | 1N5811US | Silicon, Power Rectifier, Fast Recovery. DC forward voltage (max V): 0.975 @ DC forward current (pk A): 2.5 DC reverse current (max μ A): 5.0 @ DC reverse voltage (V):150. Switching time (ns): 30; IFSM=125 A (pk); Io=3.0 A (t=55°C.) Operating Temperature range (°C.): -65 to +175. | MIL-S-19500/477 | MELF | Sensitron Semiconductor Inc. | Sensitron spec. 7700-4091 for JANS-equivalent screening flow |
| 1 | 1N5811US | Silicon, Fast Recovery, Power Rectifier. DC forward voltage (max V):0.975,0.925 @DC forward current (pk A):2.5,6.0* DC reverse current (max μ A): 1.0, 5.0 @DC reverse voltage (V): 150 Switching time (ns): 25, 30 respectively IFSM= 35, 125 A (pk); Io= 1.0, 3.0 respectively. Operating Temperature Range (°C.): -65 to +175. * pulsed | MIL-S-19500/477 | D-5B | MICROSEMI | |

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|------------|---|--------------------|---------|------------------------------|--|
| 2 | 1N6660 | Silicon, Schottky, Power Rectifier, Dual, Common cathode center tap. DC forward voltage (max V): 1.0 @max. forward current 30 A* (pk) DC reverse current (max mA): 1.0 @max. reverse voltage 45 V IFSM= 300 A (pk); Io= 15 A (t=100°C.) (Values are applicable to each individual diode). Operating Temperature Range (°C.): -65 to +150 *pulsed | MIL-S-19500/608 | TO254AA | Sensitron Semiconductor Inc. | |
| 1 | BYV52-200 | Single, Ultra Fast Power Rectifier, 200 V, 30 A Operating Temperature range : -55 to +150 °C Storage Temperature Range : -55 to +150 °C Dimensions (mm, max.) : 20.07 x 13.59 x 6.3 | ESCC 5103/030 | TO254 | STMicroelectronics | |
| 1 | BYV54-200 | Single, Ultra Fast Power Rectifier, 200 V, 60 A Operating Temperature range : -55 to +150 °C Storage Temperature Range : -55 to +150 °C Dimensions (mm, max.) : 20.07 x 13.59 x 6.3 | STR02-BYV54-200 | TO254 | STMicroelectronics | MANUFACTURER'S SPECIFICATION COMPLIANT WITH ECSS-Q-60A PARA. 3.4.1 |
| 1 | BYW81-200 | Dual, Ultra Fast Power Rectifier 200 V, 2x15 A Operating Temperature range : -55 to +150 °C Storage Temperature Range : -55 to +150 °C Available in Common Anode, Common Cathode and Doubler configuration Dimensions (mm, max.) : 20.07 x 13.59 x 6.3 | ESCC 5103/029 | TO254 | STMicroelectronics | |
| 1 | STPS20H100 | Dual, Power Schottky, 100 V, 2x20 A Operating Temperature Range : -55 to +175 °C Storage Temperature Range : -55 to +175 °C Available in Common Anode, Common Cathode and Doubler configuration Dimensions (mm, max.) : 20.07 x 13.59 x 6.3 | ESCC 5106/016 | TO254 | STMicroelectronics | |
| 1 | STPS20H100 | Dual, Power Schottky, 100 V, 2x20 A Operating Temperature Range : -55 to +175 °C Storage Temperature Range : -55 to +175 °C Available in Common Anode, Common Cathode and Doubler configuration Dimensions (mm, max.) : 20.07 x 13.59 x 6.3 | ESCC 5106/016 | TO254 | STMicroelectronics | |

04 DIODES / 03 VOLTAGE REGULATOR

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-------------------------------|--|--------------------|----------|------------------------|---------|
| 1 | 1N4099UR-1 thru 1N4135UR-1 | Silicon, Voltage regulator, Low noise. DC forward voltage (max V): 1.1 @max. forward current : 200 mA Regulator voltage (nom V): 6.8 to 100 @Iz=250 uA dc Voltage tolerance: ± 5% Power (W): 0.5 at Tec= 125°C. Operating Temperature Range (°C.): -65 to +175 | MIL-S-19500/435 | DO-213AA | MICROSEMI CDI | |
| 1 | 1N4464 thru 1N4496 | Silicon, Voltage Regulator. DC forward voltage (max V): 1.5 @max. forward current : 1 A Nominal Zener volt. (V): 9.1 - 200 @ Nom. Iz (mA): 28.0 - 1.2 Zener tolerance (V): 0.35 - 10.0 Power (W): 1.5 Operating Temperature Range (°C.): -55 to +175 | MIL-S-19500/406 | A1 | MICROSEMI | |
| 1 | 1N4954 thru 1N4992 | Silicon, Voltage Regulator. DC forward voltage (max V): 1.5 @max. forward current : 1 A Nominal Zener volt. (V): 6.8 - 270 @ Nom. Iz (mA): 175.0 - 5.0 Voltage Regulation (V): 0.7 - 25.0 Power (W): 5.0 at Tl= +65°C. Operating Temperature Range (°C.): -55 to +175 | MIL-PRF-19500/356 | A248 | MICROSEMI | |
| 1 | 1N6309 thru 1N6319 | Silicon, Zener, Voltage regulator, Solid glass noncavity constr. DC forward voltage(max V):1.4 @max If = 1 A* dc Nom. Vz (V): 2.4 to 6.2 @ Nom. Iz (mA): 20 Zener tolerance: ± 5% Power (W): 0.5 at Tl=+75°C. Operating Temperature Range (°C.): -65 to +175 *pulsed | MIL-S-19500/533 | DO-35 | MICROSEMI CDI | |
| 2 | 1N6309 thru 1N6319 | Silicon, Zener, Voltage regulator, Solid glass noncavity constr. DC forward voltage(max V):1.4 @max If = 1 A* dc Nom. Vz (V): 2.4 to 6.2 @ Nom. Iz (mA): 20 Zener tolerance: ± 5% Power (W): 0.5 at Tl=+75°C. Operating Temperature Range (°C.): -65 to +175 *pulsed | MIL-S-19500/533 | DO-35 | MICROSEMI MICROSEMI | |
| 1 | 1N6309US thru 1N6319US | Silicon, Zener, Voltage regulator, Solid glass noncavity constr. DC forward voltage(max V):1.4 @max If = 1 A* dc Nom. Vz (V): 2.4 to 6.2 @ Nom. Iz (mA): 20 Zener tolerance: ± 5% Power (W): 0.5 at Tec=+125°C. Operating Temperature Range (°C.): -65 to +175 *pulsed | MIL-S-19500/533 | SMD | MICROSEMI CDI | |

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|---------------------------|---|--------------------|---------|-----------------|---------|
| 2 | 1N6309US thru 1N6319US | Silicon, Zener, Voltage regulator, Solid glass noncavity constr. DC forward voltage(max V):1.4 @max If = 1 A* dc Nom. Vz (V): 2.4 to 6.2 @ Nom. Iz (mA): 20 Zener tolerance: ± 5% Power (W): 0.5 at Tec=+125°C. Operating Temperature Range (°C.): -65 to +175 *pulsed | MIL-S-19500/533 | SMD | MICROSEMI | |
| 1 | 1N6320 thru 1N6336 | Silicon, Zener, Voltage Regulator, Solid glass noncavity constr. DC forward voltage (max V): 1.4 @max. forward current : 1 A* dc Nominal Zener volt. (V): 6.8 - 33.0 @ Nom. Iz (mA): 20.0 - 3.8 Zener tolerance: ± 5% Power (W): 0.5 at Tl= +75°C. Operating Temperature Range (°C.): -65 to +175 *pulsed | MIL-S-19500/533 | DO-204 | MICROSEMI | |
| 1 | 1N6320US thru 1N6336US | Silicon, Zener, Voltage Regulator, Solid glass noncavity constr. DC forward voltage (max V): 1.4 @max. forward current : 1 A* dc Nominal Zener volt. (V): 6.8 - 33.0 @ Nom. Iz (mA): 20.0 - 3.8 Zener tolerance: ± 5% Power (W): 0.5 at Tl= +75°C. Operating Temperature Range (°C.): -65 to +175 *pulsed | MIL-S-19500/533 | MELF | MICROSEMI | |

04 DIODES | 04 VOLTAGE REFERENCE/ZENER

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-------------------------------|---|--------------------|----------|-----------------|---------|
| 1 | 1N4568AUR-1 | Silicon, Low level, Voltage-reference. Nominal Zener Voltage (V): 6.4 @max. forward current (mA): 0.5±0.01 to 4.0±0.01 Zener tolerance: ±5% Power (W): 0.475 at Ta=+25°C. Operating Temperature Range (°C.): -65 to +175 | MIL-S-19500/452 | DO-213AA | MICROSEMI CDI | |
| 1 | 1N4614UR-1 thru 1N4627UR-1 | Silicon, Low-noise Voltage regulator. DC forward voltage (max V): 1.1 @max. forward current 200 mA dc Regulator voltage (max V): 1.8 to 6.2 @Iz= 250 uA Voltage tolerance: ±5% Power (W): 0.5 at Tec=+125°C. Operating Temperature Range (°C.): -65 to +175 | MIL-S-19500/435 | DO-213AA | MICROSEMI CDI | |

04 DIODES / 05 RF/MICROWAVE SCHOTTKY (Si)

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|------------|--|--------------------|----------------|----------------------------|---------|
| 1 | 1N5819UR-1 | Silicon, Hermetic, Schottky barrier. DC forward voltage (max V): 0.8 @max. forward current 3.1 A (pulsed) IFSM= 24 A(pk); Io= 1.0 A at Tec= +55°C. Operating Temperature Range (°C.): -65 to +125 | MIL-S-19500/586 | DO-213AB | MICROSEMI CDI | |
| 1 | 1N5822US | Silicon, Rectifier, Schottky barrier. DC forward voltage (max V): 0.7 @max. forward current 9.4 A* (pk) IFSM= 80 A(pk); Io= 3.0 A at Tec=+55°C. Operating Temperature Range (°C.): -65 to +150 *pulsed | MIL-S-19500/620 | D-5B | MICROSEMI CDI | |
| 1 | BAS 70 | Microwave, Silicon, Schottky, General purpose. DC reverse volt. (min V): -70 @Ir= 10 uA Reverse current (max nA): 100 @Vr= -56 V Forward voltage (max V): 1.0 @If= 15 mA IFSM= 85 mA (pk) Total Capacitance CT (pF): 1.2 / 2.0 (BAS 70-094 single diode) 0.08 (BAS 70-B bridge) Package (max mm): BAS 70-094 DIA 1.45 x 1.35 x 1.95 (T1 package) BAS 70-B 3.60 x 3.60 x 1.60 (HPAC-140 package) Operating Temperature Range (°C.): -55 to +150 | ESCC 5512/020 | HPAC-140 or T1 | INFINEON TECHNOLOGIES A.G. | |

04 DIODES | 08 TRANSIENT SUPPRESSION

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|----------------------|--|--------------------|-----------------------------|-----------------|---------|
| 2 | 1N5629A thru 1N5665A | Silicon, transient voltage suppressor. DC reverse current (max uA):1000 to 5 @Vr =5.8 to 171 Vbr (min/max V): 6.45/7.14 to 190/210 @Ibr=10 to 1 Power (W): 1.0 Operating Temperature Range (°C.): -55 to +175 | MIL-S-19500/500 | DO-13 | MICROSEMI | |
| 1 | 1N6106A | Silicon, Bipolar transient voltage suppressor. Nominal Zener volt. (V): 9.0 @ Nom. Iz (mA): 175-40 Regulation voltage (V): ±5% (only for suffix 'A') Power(W):2.0 at Ta=+25°C. Peak Power (W): 500 for 1 ms Operating Temperature Range (°C.): -55 to +175 | MIL-S-19500/516 | A298 | MICROSEMI | |
| 2 | 1N6124A | Silicon, bipolar transient voltage suppressor. Reverse current leakage (max uA): 1 @Vr=27.4 to 152 Breakdown voltage (min V):53 @Ibr(mA)=30 to 5 Power (W): 2.0 Peak Power (W): 500 for 1 ms Operating Temperature Range (°C.): -55 to +175 | MIL-S-19500/516 | E (MSCUA Outline) | MICROSEMI | |

04 DIODES / 13 RF/MICROWAVE VARACTOR (Si)

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|---------------------------------------|---|--------------------|-----------------|-----------------------------|---------|
| 1 | DH 252, DH 256, DH 267, DH 292, DH294 | Microwave, Silicon, Multiplier varactor. Min. Breakdown voltage (V):-45,-40,-30,-20,-15 @ Ir= 10 uA max. Reverse Current (nA): 20 @ Vr= -10V Max. Forward Voltage (V): 0.9 @ If= 10 mA Max. Total Capacitance (pF): 0.5 to 7.2 Min. Carrier Lifetime (ns): 6 to 125 @ If= 10 mA and Ir=6.0 mA Max. Snap-off Time (ps): 60 to 400 @ If= 10 mA and Vf= 10 V Max. R.F. Power Dissipation (W): 0.5 to 1.25 Operating Temperature Range (°C.): -55 to +150 | ESCC 5512/016 | AS PER SPEC. | CHELTON TELECOM & MICROWAVE | |
| 1 | DH 252, DH 256, DH 267, DH 292, DH294 | Microwave, Silicon, Multiplier varactor. Min. Breakdown voltage (V):-45,-40,-30,-20,-15 @ Ir= 10 uA max. Reverse Current (nA): 20 @ Vr= -10V Max. Forward Voltage (V): 0.9 @ If= 10 mA Max. Total Capacitance (pF): 0.5 to 7.2 Min. Carrier Lifetime (ns): 6 to 125 @ If= 10 mA and Ir=6.0 mA Max. Snap-off Time (ps): 60 to 400 @ If= 10 mA and Vf= 10 V Max. R.F. Power Dissipation (W): 0.5 to 1.25 Operating Temperature Range (°C.): -55 to +150 | ESCC 5512/016 | AS PER SPEC. | CHELTON TELECOM & MICROWAVE | |
| 1 | DH76010 thru DH760150 | Microwave, Silicon, Tuning varactor, Hyper Abrupt Max. Reverse current (µA) : 10 @ Vr = -20 V. Max Forward voltage (V) : 1 @ If = 10 mA Max Total Capacitance (pF) : 0,9 - 18,30 @ Vr = -4 V, 1 MHz Min. Quality Factor : 100 - 4 @ Vr = -4 V, 1 GHz Operating Temperature Range (°C) : -55 to +150 | ESCC 5512/023 | M208, F27D, F30 | CHELTON TELECOM & MICROWAVE | |
| 1 | DH76010 thru DH760150 | Microwave, Silicon, Tuning varactor, Hyper Abrupt Max. Reverse current (µA) : 10 @ Vr = -20 V. Max Forward voltage (V) : 1 @ If = 10 mA Max Total Capacitance (pF) : 0,9 - 18,30 @ Vr = -4 V, 1 MHz Min. Quality Factor : 100 - 4 @ Vr = -4 V, 1 GHz Operating Temperature Range (°C) : -55 to +150 | ESCC 5512/023 | M208, F27D, F30 | CHELTON TELECOM & MICROWAVE | |

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|------------------|--|--------------------|--------------|------------------|---------|
| 1 | ML4310 to ML4319 | Microwave, Silicon, Tuning varactor Reverse current (max uA): 10 @Vr=-25V Forward voltage (max V): 1.0 @If= 100 mA Total Capacitance (max pF): 0.55 - 5.4 Quality Factor (min Q): 2750 - 1500 Operating Temperature Range (°C.): -65 to +150 | ESCC 5512/003 | AS PER SPEC. | TYCO ELECTRONICS | |
| 1 | ML4331 to ML4335 | Microwave, Silicon, Tuning varactor Reverse current (max uA): 10 @Vr=-40V Forward voltage (max V): 1.0 @If= 100 mA Total Capacitance (max pF): 0.79 - 2.60 Quality Factor (min Q): 2000 - 1350 Operating Temperature Range (°C.): -65 to +150 | ESCC 5512/004 | AS PER SPEC. | TYCO ELECTRONICS | |
| 1 | ML4336 to ML4343 | Microwave, Silicon, Tuning varactor Reverse current (max uA): 10 @Vr=-40V Forward voltage (max V): 1.0 @If= 100 mA Total Capacitance (max pF): 3.05 - 11.40 Quality Factor (min Q): 1350 - 800 Operating Temperature Range (°C.): -65 to +150 | ESCC 5512/005 | AS PER SPEC. | TYCO ELECTRONICS | |
| 1 | ML4355 to ML4365 | Microwave, Silicon, Tuning varactor Reverse current (max uA): 10 @Vr=-60V Forward voltage (max V): 1.0 @If= 100 mA Total Capacitance (max pF): 2.45 - 17.10 Quality Factor (min Q): 850 - 500 Operating Temperature Range (°C.): -65 to +150 | ESCC 5512/007 | AS PER SPEC. | TYCO ELECTRONICS | |

04 DIODES | 16 RF/MICROWAVE PIN

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|----------------------|---|--------------------|--|----------------------------------|---------|
| 1 | BXY42-MESA | Microwave, Silicon, PIN. Reverse current (max uA): 10 @Vr=-50V Forward voltage (max V): 1.1 @If= 100 mA Total Capacitance (max pF): 0.24 RF power (W): 0.35 (Var.-01), 0.60 (Var.-02). Minor. carrier life time (min ns): 35 @If= 10 mA Package (max mm): DIA 1.45 x 1.95 x 1.35 variant 01 DIA 1.45 x 1.35 variant 02 Operating Temperature Range (°C.): -55 to +175 | ESCC 5513/017 | T, T1 | INFINEON TECHNOLOGIES A.G. | |
| 1 | BXY43/44 | Microwave, Silicon, PIN. Reverse current (max nA): 100 @Vr=-150V (Var.-01 to -04) @Vr=-200V (Var.-05 to -08) Forward voltage (max V): 1.0 (Var.-01 to -04) @If= 100mA 1.05 (Var.-05 to -08) @If= 100mA Total Capacitance Range (pF): 0/0.35 - 0.40/0.85 Power Dissipation (W): 0.5 Operating Temperature Range (°C.): -55 to +150 | ESCC 5513/030 | T, T1, Teller, Pill, FlatPac k | INFINEON TECHNOLOGIES A.G. | |
| 1 | DH50151 thru DH50157 | RF/MW PIN, Ultra Fast Switching, VR=-150 V. Variants 01 to 49 of detail spec. | ESCC 5513/031 | M208, F27D | CHELTON TELECOM & MICROWAVE | |
| 1 | DH50151 thru DH50157 | RF/MW PIN, Ultra Fast Switching, VR=-150 V. Variants 01 to 49 of detail spec. | ESCC 5513/031 | M208, F27D | CHELTON TELECOM & MICROWAVE | |
| 1 | DH50201 thru DH50209 | RF/MW PIN, Ultra Fast Switching, VR=-200 V. Variants 01 to 63 of detail spec. | ESCC 5513/033 | M208, F27D | CHELTON TELECOM & MICROWAVE | |
| 1 | DH50201 thru DH50209 | RF/MW PIN, Ultra Fast Switching, VR=-200 V. Variants 01 to 63 of detail spec. | ESCC 5513/033 | M208, F27D | CHELTON TELECOM & MICROWAVE | |
| 1 | DH50251 thru DH50256 | RF/MW PIN, Ultra Fast Switching, VR=-250 V. Variants 01 to 36 of detail spec. | ESCC 5513/034 | M208, F27D | CHELTON TELECOM & MICROWAVE | |
| 1 | DH50251 thru DH50256 | RF/MW PIN, Ultra Fast Switching, VR=-250 V. Variants 01 to 36 of detail spec. | ESCC 5513/034 | M208, F27D | CHELTON TELECOM & MICROWAVE | |

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|--------------------------|--|--------------------|--------------|------------------|---------|
| 1 | ML4610, 4617, 4618, 4619 | Microwave, Silicon, PIN, Fast switching. Reverse current (max uA): 10 @Vr=-15V (Var.-01 to -25) @Vr=-100V (Var.-26 to -99) Forward voltage (max V): 1.0 @If= 100mA Total Capacitance Range (max pF): 0.2 - 1.20 Minority Carrier Lifetime (max ns): 35 @If= 10mA (Var.-01 to -25) 400 @If= 10mA (Var.-26 to -99) R.F. Power Dissipation (W): 0.2 to 3.1 Operating Temperature Range (°C.): -65 to +150 | ESCC 5513/009 | AS PER SPEC. | TYCO ELECTRONICS | |
| 1 | ML4622 to ML4624 | Microwave, Silicon, PIN, Fast switching. Reverse current (max uA): 10 @Vr=-150V Forward voltage (max V): 1.3 @If= 100mA Total Capacitance Range (max pF): 0.3 - 1.20 Minority Carrier Lifetime (max ns): 700 @If= 4.5 mA R.F. Power Dissipation (W): 0.2 to 3.5 Operating Temperature Range (°C.): -65 to +125 (Variant -24, -48 and -62) -65 to +150 | ESCC 5513/014 | AS PER SPEC. | TYCO ELECTRONICS | |
| 1 | ML4627 to ML4629 | Microwave, Silicon, PIN, Fast switching. Reverse current (max uA): 10 @Vr=-200V Forward voltage (max V): 1.3 @If= 100mA Total Capacitance Range (max pF): 0.2 - 1.20 Minority Carrier Lifetime (max ns): 1200 @If= 4.5 mA R.F. Power Dissipation (W): 0.2 to 4.1 Operating Temperature Range (°C.): -65 to +125 (Variant -24, -48 and -62) -65 to +150 | ESCC 5513/015 | AS PER SPEC. | TYCO ELECTRONICS | |

05 FILTERS | 01 FEEDTHROUGH

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|---|--|---------|-----------------|---------|
| 1 | SFC 030 | C Filter - Electromagnetic interference suppression, hermetically sealed. Capacitance Rated Rated DC Insertion Loss Range (pF) Voltage (V) Current (A) (dB) @ 1GHz 470 to 22000 25 to 250 1.0 to 5.0 34 to 68 Size (max mm): DIA 4.10 x 16.90 Operating Temperature Range (°C): -55 to + 125 | ESCC 3008/020 | Axial | EUROFARAD | |
| 1 | SFC 60 | C Filter - Electromagnetic interference suppression, hermetically (SCC 3008/026) and non-hermetically (SCC 3008/033) sealed. Capacitance Rated Rated DC Insertion Loss Range (pF) Voltage (V) Current (A) (dB) @ 1GHz 680 to 220000 25 to 200 10 37 to 70 Size (max mm): DIA 6 x 20 (hermetically sealed) Size (max mm): DIA 6 x 32 (non-hermetically sealed) Operating Temperature Range (°C): -55 to + 125 | ESCC 3008/026 - 3008/033 | Axial | EUROFARAD | |
| 1 | SFCMS 35 | Capacitor Filter, Electromagnetic Interference Suppression PI, C, L and T configurations Operating temperature range: -55 to +125 °C | ESCC 3008/034 (C), 3008/035 (T), 3008/036 (L), 3008/037 (PI) | SMD | EUROFARAD | |
| 1 | SFCMS 35 | Capacitor Filter, Electromagnetic Interference Suppression PI, C, L and T configurations Operating temperature range: -55 to +125 °C | ESCC 3008/034 (C), 3008/035 (T), 3008/036 (L), 3008/037 (PI) | SMD | EUROFARAD | |
| 1 | SFL 100 | L Filter - Electromagnetic interference suppression, hermetically sealed Capacitance Rated Rated DC Insertion Loss Range (uF) Voltage (V) Current (A) (dB) @ 1GHz 0.0176 to 1.6 40 to 300 5, 10, 15 57 to 70 Size (max mm) : DIA 9.90 x 27.30 Operating Temperature Range (°C): -55 to + 125 | ESCC 3008/029 | Axial | EUROFARAD | |

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks | | | | | | | | | | | | |
|---------------|-------------|--|--------------------|---------|-----------------|----------------|------------|-------------|-------------|-------------|---------------|-------------|------------|--------------------|--------------------------------|-------|-----------|--|
| 1 | SFP 035 | <p>Pi Filter - Electromagnetic interference suppression, non hermetically sealed.</p> <table border="0"> <tr> <td>Capacitance</td> <td>Rated</td> <td>Rated DC</td> <td>Insertion loss</td> </tr> <tr> <td>Range (pF)</td> <td>Voltage (V)</td> <td>Current (A)</td> <td>(dB) @ 1GHz</td> </tr> <tr> <td>3520 to 35200</td> <td>35 to 200</td> <td>10</td> <td>50/55 to 70/70 (*)</td> </tr> </table> <p>(*) With no current applied / With current applied Size (max mm): DIA 4.1 x 25 Operating Temperature Range (°C): -55 to + 125</p> | Capacitance | Rated | Rated DC | Insertion loss | Range (pF) | Voltage (V) | Current (A) | (dB) @ 1GHz | 3520 to 35200 | 35 to 200 | 10 | 50/55 to 70/70 (*) | ESCC 3008/025 | Axial | EUROFARAD | |
| Capacitance | Rated | Rated DC | Insertion loss | | | | | | | | | | | | | | | |
| Range (pF) | Voltage (V) | Current (A) | (dB) @ 1GHz | | | | | | | | | | | | | | | |
| 3520 to 35200 | 35 to 200 | 10 | 50/55 to 70/70 (*) | | | | | | | | | | | | | | | |
| 1 | SFP 040 | <p>Pi Filter - Electromagnetic interference suppression, non hermetically sealed.</p> <table border="0"> <tr> <td>Capacitance</td> <td>Rated</td> <td>Rated DC</td> <td>Insertion loss</td> </tr> <tr> <td>Range(pF)</td> <td>Voltage (V)</td> <td>Current (A)</td> <td>(dB) @ 1GHz</td> </tr> <tr> <td>750 to 44800</td> <td>100,200,250</td> <td>10 (DC/LF)</td> <td>40/35 to 75/75 (*)</td> </tr> </table> <p>(*) With no current applied / With current applied Size (max mm): DIA 5 x 31 Operating Temperature Range (°C): -55 to + 125</p> | Capacitance | Rated | Rated DC | Insertion loss | Range(pF) | Voltage (V) | Current (A) | (dB) @ 1GHz | 750 to 44800 | 100,200,250 | 10 (DC/LF) | 40/35 to 75/75 (*) | ESCC 3008/014 | Axial | EUROFARAD | |
| Capacitance | Rated | Rated DC | Insertion loss | | | | | | | | | | | | | | | |
| Range(pF) | Voltage (V) | Current (A) | (dB) @ 1GHz | | | | | | | | | | | | | | | |
| 750 to 44800 | 100,200,250 | 10 (DC/LF) | 40/35 to 75/75 (*) | | | | | | | | | | | | | | | |
| 1 | SFP 060 | <p>Pi Filter - Electromagnetic interference suppression, hermetically sealed.</p> <table border="0"> <tr> <td>Capacitance</td> <td>Rated</td> <td>Rated DC</td> <td>Insertion loss</td> </tr> <tr> <td>Range (pF)</td> <td>Voltage (V)</td> <td>Current (A)</td> <td>(dB) @ 1GHz</td> </tr> <tr> <td>2400 to 89600</td> <td>35 to 500</td> <td>10</td> <td>65 to 75</td> </tr> </table> <p>Size (max mm): DIA 7.1 x 26.5 Operating Temperature Range (°C): -55 to + 125</p> | Capacitance | Rated | Rated DC | Insertion loss | Range (pF) | Voltage (V) | Current (A) | (dB) @ 1GHz | 2400 to 89600 | 35 to 500 | 10 | 65 to 75 | ESCC 3008/021 ESCC 3008/030 | Axial | EUROFARAD | |
| Capacitance | Rated | Rated DC | Insertion loss | | | | | | | | | | | | | | | |
| Range (pF) | Voltage (V) | Current (A) | (dB) @ 1GHz | | | | | | | | | | | | | | | |
| 2400 to 89600 | 35 to 500 | 10 | 65 to 75 | | | | | | | | | | | | | | | |

07 INDUCTORS | 03 CHIP

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|------------|--|--------------------|---------|-----------------|---------|
| 1 | MSCI 10000 | RF, Moulded, Surface mount. Inductance Range (uH) Tol. (%) Rated DC Current (mA) Q min 0.010 to 10 10 750 to 87 60 to 42 Dielectric withstanding voltage (Vrms): 200 Size (max mm): 2.67 x 2.80 x 2.16 Operating Temperature Range (°C.): -55 to +125. | ESCC 3201/008 | SMD | MICROSPIRE | |
| 1 | MSCI 12000 | RF, Moulded, Surface mount. Inductance Range (uH) Tol. (%) Rated DC Current (mA) Q min 12 to 1000 10 110 to 15 37 to 12 Dielectric withstanding voltage (Vrms): 200 Size (max mm): 2.67 x 2.80 x 2.54 Operating Temperature Range (°C.): -55 to +125. | ESCC 3201/008 | SMD | MICROSPIRE | |
| 1 | MSCI 20000 | RF, Moulded, Surface mount. Inductance Range (uH) Tol. (%) Rated DC Current (mA) Q min 0.010 to 1000 10 1000 to 25 75 to 30 Dielectric withstanding voltage (Vrms): 200 Size (max mm): 3.38 x 4.14 x 3.30 Operating Temperature Range (°C.): -55 to +125. | ESCC 3201/008 | SMD | MICROSPIRE | |

07 INDUCTORS | 99 MISCELLANEOUS

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|--|--------------------|---------|-----------------|---------|
| 1 | SESI 15 | Power, Moulded, Surface mount. Inductance Range (uH) Tol. (%) Rated DC Current (mA) 1.5 to 330 10 14 to 0.74 Dielectric withstanding voltage (Vrms): 500 Size (max mm): 16.0 x 16.5 x 7.5 Operating Temperature Range (°C.): -55 to +125. | ESCC 3201/009 | SMD | MICROSPIRE | |
| 1 | SESI 9.1 | Power, Moulded, Surface mount. Inductance Range (uH) Tol. (%) Rated DC Current (mA) 1 to 1000 10 6.0 to 0.2 Dielectric withstanding voltage (Vrms): 500 Size (max mm): 10.7 x 10.6 x 5.8 Operating Temperature Range (°C.): -55 to +125. | ESCC 3201/009 | SMD | MICROSPIRE | |

08 MICROCIRCUITS | 10 MICROPROCESS/MICROCONTROL /PERIPHER

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|--|--------------------|--------------------------------------|-----------------|--|
| 1 | 80C32 | Microcontroller, 8-Bit, CMOS | SMD/5962-00518 | DIL-LCC | ATMEL | Also available with ESCC 9521/002 |
| 1 | AT7908E | CAN Controller Programmable MCU 8-bit general-purpose interface Operating temperature range -55 to +125 °C | SMD/5962-03A06 | MLCC 44 | ATMEL | ESCC specification under issueing |
| 1 | TSC21020F | 32 bit floating point DSP | ESCC 9512/002 | QUAD FLAT- PACK 256 pins | ATMEL | Also available with SMD/5962-99539 |
| 1 | TSC21020F | 32 bit floating point DSP | ESCC 9512/002 | QUAD FLAT- PACK 256 pins | ATMEL | Also available with SMD/5962-99539 |
| 1 | TSC695F | Single chip, 32 bit, SPARC Microprocessor Process SCMOS3/2RTP Operating temperature range : -55 / +125 °C | SMD-5962-00540 | QFP 256 | ATMEL | Also available i.a.w. ESCC 9512/003, (not ESA QPL) |
| 1 | TSC695F | Single chip, 32 bit, SPARC Microprocessor Process SCMOS3/2RTP Operating temperature range : -55 / +125 °C | SMD-5962-00540 | QFP 256 | ATMEL | Also available i.a.w. ESCC 9512/003, (not ESA QPL) |
| 1 | TSC695FL | Single chip, 32 bit, SPARC Microprocessor Specified at 3.3 V with 12 MIPs Process SCMOS3/2RTP Operating temperature range : -55 / +125 °C | SMD/5962-03246 | MQFP256 | ATMEL | |
| 1 | TSC695FL | Single chip, 32 bit, SPARC Microprocessor Specified at 3.3 V with 12 MIPs Process SCMOS3/2RTP Operating temperature range : -55 / +125 °C | SMD/5962-03246 | MQFP256 | ATMEL | |

08 MICROCIRCUITS | 20 MEMORY SRAM

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------------|---|--------------------|---------|-----------------|--|
| 1 | AT60142F | 3.3 V 512Kx8 SRAM High speed, rad-hard version Operating temperature range : -55 / +125 °C | SMD/5962-02508 | FP36 | ATMEL | SEE behaviour should be verified where necessary |
| 1 | AT60142F | 3.3 V 512Kx8 SRAM High speed, rad-hard version Operating temperature range : -55 / +125 °C | SMD/5962-02508 | FP36 | ATMEL | SEE behaviour should be verified where necessary |
| 1 | AT60142FT | 5 V tolerant 512Kx8 SRAM High speed, rad-hard version Operating temperature range : -55 / +125 °C | SMD/5962-05208 | FP36 | ATMEL | SEE behaviour should be verified where necessary |
| 1 | AT60142FT | 5 V tolerant 512Kx8 SRAM High speed, rad-hard version Operating temperature range : -55 / +125 °C | SMD/5962-05208 | FP36 | ATMEL | SEE behaviour should be verified where necessary |
| 1 | SMDJ-65608EV-30 | 128Kx8 SRAM Variant 06 of ESCC 9301/047 | ESCC 9301/047 | FP-32 | ATMEL | Also available with SMD/5962-89598 |
| 1 | SMDP-65609E | 3.3 V 128Kx8 SRAM Operating temperature range : -55 / +125 °C | SMD/5962-02501 | FP 32 | ATMEL | ESCC Detail Specification under issueing |

08 MICROCIRCUITS | 22 MEMORY PROM

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|--|--------------------|---------|-----------------|---------|
| 1 | HS6664RH | CMOS, Programmable Read Only Memory, Radiation Hardness 65.536 (8192 x 8) Bits with Three State Outputs | SMD/5962-95626 | DIL, FP | INTERSIL | |

08 MICROCIRCUITS | 29 MEMORY OTHERS

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|--------------|--|--------------------|----------------------------------|-----------------|------------------------------------|
| 1 | 67204H | 4Kx9 FIFO Operating temperature range: -55 to +125 °C | ESCC 9301/049 | FP-28 | ATMEL | Also available with SMD/5962-89568 |
| 1 | 672061H | 16Kx9 FIFO + Programmable HFF Operating temperature range: -55 to +125 °C | ESCC 9301/048 | FP-28 | ATMEL | Also available with SMD/5962-93177 |
| 1 | 67206H | 16Kx9 FIFO + Programmable HFF Operating temperature range: -55 to +125 °C | ESCC 9301/048 | FP-28 | ATMEL | Also available with SMD/5962-93177 |
| 1 | SMK2-67025EV | 8Kx16 DPRAM Variant 01 of SCC034 Detail Specification | ESCC 9301/050 | QUAD FLAT- PACK 84 pins | ATMEL | Also available with SMD/5962-91617 |

08 MICROCIRCUITS | 30 PROGRAMMABLE LOGIC

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|------------|--|--------------------|-------------|-----------------|---|
| 1 | AT40KEL040 | 40k Gates SEU hardened reprogrammable FPGA DSP Optimized Core Cell and Distributed FreeRam, Enhanced Performance Improvement and Bi-directional I/Os (3.3 V) Operating temperature range: -55 to +125 °C | SMD/5962-03250 | MQFP 160 | ATMEL | ESCC specification 9301/051 under release |
| 1 | AT40KEL040 | 40k Gates SEU hardened reprogrammable FPGA DSP Optimized Core Cell and Distributed FreeRam, Enhanced Performance Improvement and Bi-directional I/Os (3.3 V) Operating temperature range: -55 to +125 °C | SMD/5962-03250 | MQFP 160 | ATMEL | ESCC specification 9301/051 under release |

08 MICROCIRCUITS | 40 ASIC TECHNOLOGIES DIGITAL

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|---------------------|---|--|--------------------|-----------------|---|
| 2 | MAT53/ASP22 | MIL-STD-1553B Bus Controller, Remote Terminal Coupler, Bus Monitor ASIC CMOS MCR 35K Gate Array technology Operational Rated Temperature -55 to +125 °C | MA-9000-AOM ERC32.MCM.SP.12. V.MMS iss02 rev00 14/10/02 | Metalli c FP-64 | ATMEL | |
| 1 | MG2RT sea of gates | Sea of gates with up to 360k available gates MQ type flat package up to 352 pins Matrices : MG2091E MG2265E MG2480E Operating temperature range : -55 to +125 °C Storage temperature range : -65 to +150 °C | SMD/5962-00B02 | MQFP | ATMEL | ASIC-SCC-TEMP. template to be used for the detail specifications to be written for the ASIC's |
| 1 | MG2RT sea of gates | Sea of gates with up to 360k available gates MQ type flat package up to 352 pins Matrices : MG2091E MG2265E MG2480E Operating temperature range : -55 to +125 °C Storage temperature range : -65 to +150 °C | SMD/5962-00B02 | MQFP | ATMEL | ASIC-SCC-TEMP. template to be used for the detail specifications to be written for the ASIC's |
| 1 | MG2RTP sea of gates | Sea of gates with up to 270k available gates with 300Krad TID tolerance MQ type flat package up to 352 pins Matrices : MG2044P MG2142P Operating temperature range : -55 to +125 °C Storage temperature range : -65 to +150 °C | SMD/5962-00B03; SMD/5962-03B01 | MQFP | ATMEL | ASIC-SCC-TEMP. template to be used for the detail specifications to be written for the ASIC's |
| 1 | MG2RTP sea of gates | Sea of gates with up to 270k available gates with 300Krad TID tolerance MQ type flat package up to 352 pins Matrices : MG2044P MG2142P Operating temperature range : -55 to +125 °C Storage temperature range : -65 to +150 °C | SMD/5962-00B03; SMD/5962-03B01 | MQFP | ATMEL | ASIC-SCC-TEMP. template to be used for the detail specifications to be written for the ASIC's |

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|---|--------------------|---------|-----------------|---------|
| 1 | MH1RT | Sea of gates with up to 1600K available gates with embedded blocks option Available matrices : MH1099E (520K used gates) MH1156E (760K used gates) MH1242E (1190K used gates) MH1332E (1640K used gates) Operating temperature range : -55 / +125 °C Storage temperature range : -65 / +150 °C | SMD-5962-01B01 | MQFP | ATMEL | |
| 1 | MH1RT | Sea of gates with up to 1600K available gates with embedded blocks option Available matrices : MH1099E (520K used gates) MH1156E (760K used gates) MH1242E (1190K used gates) MH1332E (1640K used gates) Operating temperature range : -55 / +125 °C Storage temperature range : -65 / +150 °C | SMD-5962-01B01 | MQFP | ATMEL | |

08 MICROCIRCUITS | 50 LINEAR OPERATIONAL AMPLIFIER

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|--|--------------------|---------------|------------------------|---------|
| 2 | AD847 | Operational Amplifier, High Speed, Low Power | SMD/5962-89647 | DIL | ANALOG DEVICES | |
| 1 | JL124S | Low Power Quad Bipolar Operational Amplifier | MIL-M-38510/110 | FP | NATIONAL SEMICONDUCTOR | |
| 2 | JL1558S | Dual, Internally Compensated Operational Amplifier | MIL-M-38510/101 | Metal Can | NATIONAL SEMICONDUCTOR | |
| 1 | LF155 | JFET Input, Low Power Operational Amplifier | MIL-M-38510/114 | DIL Metal Can | LINEAR TECHNOLOGY | |
| 1 | LF156 | JFET Input, Wide Band Operational Amplifier | MIL-M-38510/114 | DIL Metal Can | LINEAR TECHNOLOGY | |
| 1 | LM108A | Single, Externally Compensated Operational Amplifier | SMD/5962-98637 | FP | NATIONAL SEMICONDUCTOR | |
| 1 | LM118 | Precision, High Speed Operational Amplifier | MIL-M-38510/101 | FP | LINEAR TECHNOLOGY | |
| 1 | OP27A | Single, Ultra-Low Noise and Offset, Internally Compensated Operational Amplifier | SMD/5962-94680 | DIL Metal Can | ANALOG DEVICES | |
| 1 | OP470AY | Operational Amplifier, Quad, Very Low Noise | SMD/5962-88565 | DIL | ANALOG DEVICES | |
| 1 | OP77 | Ultra low offset Voltage Operational Amplifier (replacement of OP-07 and OP-108A). | SMD/5962-87738 | LCC20 FP10 | ANALOG DEVICES | |

08 MICROCIRCUITS | 52 LINEAR VOLTAGE REGULATOR

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|----------------|--|--------------------|-------------------|------------------------|---------|
| 1 | AD584TH | Voltage Reference, Precision Pin Programmable | SMD/5962-38128 | Metal Can | ANALOG DEVICES | |
| 1 | LM117H | 3-Terminal Adjustable Positive Regulator, 0.5A | SMD/5962-99517 | TO-39 | NATIONAL SEMICONDUCTOR | |
| 1 | LM117K | 3-Terminal Adjustable Positive Regulator, 1.5A | SMD/5962-99517 | TO-3 | NATIONAL SEMICONDUCTOR | |
| 1 | LM137H | 3 Terminal Adjustable Negative Regulator, 0.5A | SMD/5962-77034 | TO-39 | NATIONAL SEMICONDUCTOR | |
| 1 | LM137K | 3 Terminal Adjustable Negative Regulator, 1.5A | SMD/5962-77034 | TO-3 | NATIONAL SEMICONDUCTOR | |
| 1 | LT1009 | Precision Trimmed 2.500 Volts Shunt Regulator diode, max. initial tolerance ± 5 mV; interchangeable with LM136 for improved performance. | MIL-M-38510/148 | TO-46 (Metal Can) | LINEAR TECHNOLOGY | |
| 1 | RH-L4913 2.5 V | Fixed, Positive, 2.5 V, 2A Operating temperature range: -55 / +125 °C | SMD/5962-02534 | FP16, SMD.5 | STMicroelectronics | |
| 1 | RH-L4913 3.3 V | Fixed, Positive, 3.3 V, 2A Operating temperature range: -55 / +125 °C | SMD/5962-02534 | FP16, SMD.5 | STMicroelectronics | |
| 1 | RH-L4913 5 V | Fixed, Positive, 5 V, 2A Operating temperature range: -55 / +125 °C | SMD/5962-02534 | FP16, SMD.5 | STMicroelectronics | |
| 1 | RH-L4913 ADJ | Adjustable, Positive, Low Dropout, 2A Operating temperature range: -55 / +125 °C | SMD/5962-02524 | FP16 | STMicroelectronics | |

08 MICROCIRCUITS | 53 LINEAR VOLTAGE COMPARATOR

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|---|--------------------|---------------------|---------------------------|---------|
| 1 | JL723 | Positive or Negative Voltage Regulator | MIL-M-38510/102 | DIL Metal Can | NATIONAL SEMICONDUCTOR | |
| 1 | LM111 | Voltage Comparator/Buffer, Precision | SMD/5962-00524 | Metal Can | NATIONAL SEMICONDUCTOR | |
| 1 | LM119 | Dual, High Speed Voltage Comparator | SMD/5962-96798 | FP | NATIONAL SEMICONDUCTOR | |
| 1 | LM139AWG | Quad, Single Supply, Low Power Voltage Comparator | SMD/5962-96738 | FP | NATIONAL SEMICONDUCTOR | |
| 1 | LM193 | Dual, Low Power, Low Offset Voltage Comparator | SMD/5962-94526 | FP | NATIONAL SEMICONDUCTOR | |

08 MICROCIRCUITS | 54 LINEAR SWITCHING REGULATOR

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|----------------------------------|--------------------|---------|-------------------------------|---------|
| 2 | SG1524 | Regulating Pulse Width Modulator | SMD/5962-87645 | DIL | LINFINITY MICROELECTRONICS | |

08 MICROCIRCUITS | 55 LINEAR LINE DRIVER

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-------------|---|--------------------|---------|-----------------|---------|
| 1 | HS-26C31RH | Quad EIA RS422, Radiation Hardened CMOS, Differential Driver, with 3-State Output | SMD/5962-96663 | DIL, FP | INTERSIL | |
| 1 | HS-26CT31RH | Quad EIA RS422, Radiation Hardened CMOS, Differential Driver, TTL Compatible | SMD/5962-95632 | DIL, FP | INTERSIL | |

08 MICROCIRCUITS | 56 LINEAR LINE RECEIVER

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-------------|---|--------------------|---------|-----------------|---------|
| 1 | HS-26C32RH | Quad EIA RS422, Radiation Hardened CMOS, Differential Receiver, with 3-State Output | SMD/5962-95689 | DIL, FP | INTERSIL | |
| 1 | HS-26CT32RH | Quad EIA RS422, Radiation Hardened CMOS, Differential Receiver, TTL Compatible | SMD/5962-95631 | DIL, FP | INTERSIL | |

08 MICROCIRCUITS | 57 LINEAR TIMER

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|--------------|------------------------|--------------------|----------------------|---------------------------|---------|
| 1 | JL555SPA/SGA | Single Precision Timer | MIL-M-38510/109 | DIL, Metal Can | NATIONAL SEMICONDUCTOR | |

08 MICROCIRCUITS | 59 LINEAR SWITCHES

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|--|--------------------|---------|-----------------|---------|
| 1 | HS-302RH | Analog Switch, Dual, DPST, Radiation Hardened CMOS | SMD/5962-95812 | FP-Chip | INTERSIL | |
| 1 | HS-303RH | Analog Switch, Dual, SPDT, Radiation Hardened CMOS | SMD/5962-95813 | FP-Chip | INTERSIL | |

08 MICROCIRCUITS | 60 LINEAR MULTIPLEXERS / DEMULTIPLEXER

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|--|--------------------|---------|-----------------|---------|
| 2 | HI-546 | Multiplexer, 16-Channel, with Active Overvoltage Protection | SMD/5962-85131 | DIL | INTERSIL | |
| 1 | HS-508BRH | Analog Multiplexer/Demultiplexer, 8 Channel, with Overvoltage Protection Radiation Hardened CMOS | SMD/5962-96742 | FP | INTERSIL | |

08 MICROCIRCUITS | 61 LINEAR ANALOG TO DIGITAL CONVERTER

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|--|--------------------|---------|-----------------|---|
| 2 | AD1671S | A/D Converter, 12-Bit, 1.25 MSPS | SMD/5962-93126 | DIL | ANALOG DEVICES | |
| 1 | AD574AT | A/D Converter, 12-Bit, High Speed, with Microprocessor Interface | SMD 5962-85127 | FP | ANALOG DEVICES | |
| 2 | AD674B | A/D Converter, 12-Bit, High Speed, with Microprocessor Interface | SMD 5962-91690 | DIL | ANALOG DEVICES | |
| 2 | TS83048 | A/D Converter, 8-Bit, Flash | SP.31S.1264.0 | DIL | ATMEL - TCS | |
| 2 | TS83048 | A/D Converter, 8-Bit, Flash | SP.31S.1264.0 | DIL | ATMEL - TCS | |
| 1 | TS8388B | Linear Analog to Digital Converter 8 bit, 1 Gbps | SP.31S.0621.0/A | CQFP-68 | ATMEL | Processing at Infineon - Munich (Germany) |
| 1 | TS8388B | Linear Analog to Digital Converter 8 bit, 1 Gbps | SP.31S.0621.0/A | CQFP-68 | ATMEL | Processing at Infineon - Munich (Germany) |

08 MICROCIRCUITS | 62 LINEAR DIGITAL TO ANALOG CONVERTER

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|---|--------------------|---------|-----------------|---------|
| 2 | AD767S | D/A Converter, 12-Bit, with Microprocessor Interface, Internal Reference and Output Amplifier | SMD/5962-89617 | DIL | ANALOG DEVICES | |
| 1 | DAC08 | 8-Bit D/A Converters, 0.19% Linearity | SMD/5962-89932 | DIL | ANALOG DEVICES | |

08 MICROCIRCUITS | 69 LINEAR OTHER FUNCTIONS

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|---|--------------------|----------------|------------------------------------|---------|
| 1 | AD590M | Temperature Transducer, Two Terminals Forward voltage (E+ to E-)(Vdc): +44 Forward voltage (E- to E+)(Vdc): -20 Breakdown voltage (Case to E+ or E-)(Vdc): ± 200 Rated performance temperature range (°C.): -55 to +150 | SMD/5962-87571 | FP | ANALOG DEVICES | |
| 1 | UC1707 | High Speed Schottky, Dual Channel Power Driver. | SMD/5962-87619 | DIL16 LCC20 | TEXAS INSTRUMENTS - UNITRODE | |
| 1 | UC1707 | High Speed Schottky, Dual Channel Power Driver. | SMD/5962-87619 | DIL16 LCC20 | TEXAS INSTRUMENTS - UNITRODE | |

08 MICROCIRCUITS | 80 LOGIC FAMILIES

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|--|--------------------|---------|--------------------|---------|
| 1 | 4001B | QUAD 2-INPUT NOR GATE | ESCC 9201/041 | FP LCC | STMicroelectronics | |
| 1 | 40103B | PRESETTABLE 8-BIT SYNCHRONOUS DOWN-COUNTER | ESCC 9204/036 | FP LCC | STMicroelectronics | |
| 1 | 40105B | FIFO REGISTER WITH 3-STATE OUTPUT | ESCC 9306/033 | FP LCC | STMicroelectronics | |
| 1 | 40106B | HEX SCHMITT TRIGGER | ESCC 9409/005 | FP LCC | STMicroelectronics | |
| 1 | 40107B | DUAL 2-INPUT NAND BUFFER / DRIVER | ESCC 9401/013 | FP LCC | STMicroelectronics | |
| 1 | 40109B | QUAD LOW-TO-HIGH 3-STATE VOLTAGE LEVEL SHIFTER | ESCC 9407/003 | FP LCC | STMicroelectronics | |
| 1 | 4011B | QUAD 2 INPUT NAND GATE | ESCC 9201/043 | FP LCC | STMicroelectronics | |
| 1 | 4013B | DUAL D-TYPE FLIP-FLOP | ESCC 9203/023 | FP LCC | STMicroelectronics | |
| 1 | 4014B | 8-STAGE SYNCHRONOUS STATIC SHIFT REGISTER | ESCC 9306/014 | FP LCC | STMicroelectronics | |
| 1 | 4015B | DUAL 4-STAGE STATIC SHIFT REGISTER WITH SERIAL INPUT / PARALLEL OUTPUT | ESCC 9306/015 | FP LCC | STMicroelectronics | |
| 1 | 40161B | PROGRAMMABLE 4-BIT BINARY COUNTER WITH ASYNCHRONOUS CLEAR | ESCC 9204/054 | FP LCC | STMicroelectronics | |
| 1 | 40174B | HEX D-TYPE FLIP-FLOP | ESCC 9203/038 | FP LCC | STMicroelectronics | |
| 1 | 4017B | DECADE COUNTER / DIVIDER | ESCC 9204/020 | FP LCC | STMicroelectronics | |
| 1 | 4019B | QUAD AND/OR SELECT GATE | ESCC 9202/051 | FP LCC | STMicroelectronics | |

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|--|--------------------|---------|--------------------|---------|
| 1 | 4020B | 14-STAGE RIPPLE CARRY BINARY COUNTER / DIVIDER | ESCC 9204/022 | FP LCC | STMicroelectronics | |
| 1 | 4021B | 8-STAGE STATIC SHIFT REGISTER | ESCC 9306/016 | FP LCC | STMicroelectronics | |
| 1 | 4023B | TRIPLE 3-INPUT NAND GATE | ESCC 9201/045 | FP LCC | STMicroelectronics | |
| 1 | 4024B | 7-STAGE RIPPLE CARRY BINARY COUNTER / DIVIDER | ESCC 9204/024 | FP LCC | STMicroelectronics | |
| 1 | 4027B | DUAL J-K MASTER-SLAVE FLIP-FLOP | ESCC 9203/022 | FP LCC | STMicroelectronics | |
| 1 | 4028B | BCD-TO-DECIMAL OR BINARY-TO-OCTAL DECODER | ESCC 9205/010 | FP LCC | STMicroelectronics | |
| 1 | 4029B | PRESETTABLE UP/DOWN COUNTER BINARY OR BCD DECADE | ESCC 9204/025 | FP LCC | STMicroelectronics | |
| 1 | 4030B | QUAD 2-INPUT EXCLUSIVE OR GATE | ESCC 9201/047 | FP LCC | STMicroelectronics | |
| 1 | 4035B | 4-BIT UNIVERSAL SHIFT REGISTER | ESCC 9306/018 | FP LCC | STMicroelectronics | |
| 1 | 4040B | 12-STAGE RIPPLE CARRY BINARY COUNTER / DIVIDER | ESCC 9204/026 | FP LCC | STMicroelectronics | |
| 1 | 4047B | LOW POWER MONOSTABLE / ASTABLE MULTIVIBRATOR | ESCC 9207/003 | FP LCC | STMicroelectronics | |
| 1 | 4049UB | HEX BUFFER-CONVERTER (INVERTING TYPE) | ESCC 9202/045 | FP LCC | STMicroelectronics | |
| 1 | 4050B | HEX BUFFER-CONVERTER (NON-INVERTING TYPE) | ESCC 9202/046 | FP LCC | STMicroelectronics | |
| 1 | 4051B | ANALOGUE MULTIPLEXER / DEMULTIPLEXER | ESCC 9202/047 | FP LCC | STMicroelectronics | |
| 1 | 4063B | 4-BIT MAGNITUDE COMPARATOR | ESCC 9209/001 | FP LCC | STMicroelectronics | |

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|--|--------------------|---------|--------------------|---------|
| 1 | 4066B | QUAD BILATERAL SWITCH | ESCC 9408/005 | FP LCC | STMicroelectronics | |
| 1 | 4069UB | HEX INVERTER | ESCC 9401/010 | FP LCC | STMicroelectronics | |
| 1 | 4071B | QUAD 2-INPUT OR GATE | ESCC 9201/063 | FP LCC | STMicroelectronics | |
| 1 | 4073B | TRIPLE 3-INPUT AND GATE | ESCC 9201/064 | FP LCC | STMicroelectronics | |
| 1 | 4076B | 4-BIT D TYPE REGISTER WITH 3-STATE OUTPUT | ESCC 9306/022 | FP LCC | STMicroelectronics | |
| 1 | 4081B | 8 INPUT OR-NOR GATE | ESCC 9201/052 | FP LCC | STMicroelectronics | |
| 1 | 4093B | QUAD 2 INPUT NAND GATE WITH SCHMITT TRIGGER INPUT | ESCC 9409/002 | FP LCC | STMicroelectronics | |
| 1 | 4094B | 8-STAGE SHIFT AND STORE BUS REGISTER WITH SYNCHRONOUS SERIAL OUTPUTS AND 3-STATE PARALLEL OUTPUT | ESCC 9306/026 | FP LCC | STMicroelectronics | |
| 1 | 4098B | DUAL MONOSTABLE MULTIVIBRATOR | ESCC 9206/003 | FP LCC | STMicroelectronics | |
| 1 | 4099B | 8-BIT ADDRESSABLE LATCH | ESCC 9202/058 | FP LCC | STMicroelectronics | |
| 1 | 4502B | STROBED HEX INVERTER / BUFFER | ESCC 9401/006 | FP LCC | STMicroelectronics | |
| 1 | 4503B | HEX NON-INVERTING BUFFER WITH 3-STATE OUTPUT | ESCC 9401/030 | FP LCC | STMicroelectronics | |
| 1 | 4508B | DUAL 4-BIT LATCH WITH 3-STATE OUTPUT | ESCC 9202/063 | FP LCC | STMicroelectronics | |
| 1 | 4512B | 8-CHANNEL MULTIPLEXER WITH 3-STATE OUTPUT | ESCC 9408/006 | FP LCC | STMicroelectronics | |
| 1 | 4555B | DUAL 1-OF-4 DECODER / DEMULTIPLEXER | ESCC 9408/011 | FP LCC | STMicroelectronics | |

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|------------------------|--------------------|---------|--------------------|--|
| 1 | 54AC00 | Quad 2-Input NAND Gate | SMD/5962-87549 | FP | STMicroelectronics | Depending on the application, a Radiation Verification Test may be necessary |
| 1 | 54AC00 | Quad 2-Input NAND Gate | SMD/5962-87549 | FP | STMicroelectronics | Depending on the application, a Radiation Verification Test may be necessary |
| 1 | 54AC02 | Quad 2-Input NOR Gate | SMD/5962-87612 | FP | STMicroelectronics | Depending on the application, a Radiation Verification Test may be necessary |
| 1 | 54AC04 | Hex Inverter | SMD/5962-87609 | FP | STMicroelectronics | Depending on the application, a Radiation Verification Test may be necessary |
| 1 | 54AC08 | Quad 2-Input AND Gate | SMD/5962-87615 | FP | STMicroelectronics | Depending on the application, a Radiation Verification Test may be necessary |
| 1 | 54AC08 | Quad 2-Input AND Gate | SMD/5962-87615 | FP | STMicroelectronics | Depending on the application, a Radiation Verification Test may be necessary |

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|---|--------------------|---------|--------------------|--|
| 1 | 54AC10 | Triple 3-Input NAND Gate | SMD/5962-87610 | FP | STMicroelectronics | Depending on the application, a Radiation Verification Test may be necessary |
| 1 | 54AC11 | Triple 3-Input AND Gate | SMD/5962-87611 | FP | STMicroelectronics | Depending on the application, a Radiation Verification Test may be necessary |
| 1 | 54AC138 | Decoder/Demultiplexer, 3-to-8 line | SMD/5962-87622 | FP | STMicroelectronics | Depending on the application, a Radiation Verification Test may be necessary |
| 1 | 54AC139 | Dual 2 To 4 Line Decoder/Demultiplexer, with Inverted Outputs | SMD/5962-87632 | FP | STMicroelectronics | Depending on the application, a Radiation Verification Test may be necessary |
| 1 | 54AC14 | Hex Schmitt Trigger Inverter | SMD/5962-87624 | FP | STMicroelectronics | Depending on the application, a Radiation Verification Test may be necessary |
| 1 | 54AC157 | Quad 2-Input Multiplexer | SMD/5962-89539 | FP | STMicroelectronics | Depending on the application, a Radiation Verification Test may be necessary |

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|--|--------------------|---------|--------------------|--|
| 1 | 54AC161 | Synchronous 4-Bit Binary Counter | SMD/5962-89561 | FP | STMicroelectronics | Depending on the application, a Radiation Verification Test may be necessary |
| 1 | 54AC16244 | 16 bit Buffer/Driver with three-state outputs | SMD/5962-04210 | FP | STMicroelectronics | Depending on the application, a Radiation Verification Test may be necessary |
| 1 | 54AC16244 | 16 bit Buffer/Driver with three-state outputs | SMD/5962-04210 | FP | STMicroelectronics | Depending on the application, a Radiation Verification Test may be necessary |
| 1 | 54AC240 | Octal Bus Buffer with Inverted 3-State Outputs | SMD/5962-87550 | FP | STMicroelectronics | Depending on the application, a Radiation Verification Test may be necessary |
| 1 | 54AC244 | Octal Buffer/Line Driver with 3-State Outputs | SMD/5962-87552 | FP | STMicroelectronics | Depending on the application, a Radiation Verification Test may be necessary |
| 1 | 54AC245 | Bus Transceiver, 8-Bit, Bidirectional, with 3-State Inputs/Outputs | SMD/5962-87758 | FP | STMicroelectronics | Depending on the application, a Radiation Verification Test may be necessary |

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|--|--------------------|---------|--------------------|--|
| 1 | 54AC273 | Octal D-Type Flip-Flop with Clear | SMD/5962-87756 | FP | STMicroelectronics | Depending on the application, a Radiation Verification Test may be necessary |
| 1 | 54AC299 | 8-Bit Universal Shift Register with Common Parallel I/O Pins | SMD/5962-88754 | FP | STMicroelectronics | Depending on the application, a Radiation Verification Test may be necessary |
| 1 | 54AC32 | Quad 2-Input OR Gate | SMD/5962-87614 | FP | STMicroelectronics | Depending on the application, a Radiation Verification Test may be necessary |
| 1 | 54AC32 | Quad 2-Input OR Gate | SMD/5962-87614 | FP | STMicroelectronics | Depending on the application, a Radiation Verification Test may be necessary |
| 1 | 54AC373 | Octal D-Type Transparent Latches with 3-State Outputs | SMD/5962-87555 | FP | STMicroelectronics | Depending on the application, a Radiation Verification Test may be necessary |
| 1 | 54AC374 | Octal D-Type Flip-Flop with 3-State Outputs | SMD/5962-87694 | FP | STMicroelectronics | Depending on the application, a Radiation Verification Test may be necessary |

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|---|--------------------|---------|--------------------|--|
| 1 | 54AC541 | Octal Bus Buffer with 3-State Outputs | SMD/5962-88706 | FP | STMicroelectronics | Depending on the application, a Radiation Verification Test may be necessary |
| 1 | 54AC74 | Octal D-Type Flip-Flop with 3-State Outputs | SMD/5962-88520 | FP | STMicroelectronics | Depending on the application, a Radiation Verification Test may be necessary |
| 1 | 54AC86 | Quad 2-Input Exclusive OR Gate | SMD/5962-89550 | FP | STMicroelectronics | Depending on the application, a Radiation Verification Test may be necessary |
| 1 | 54AC86 | Quad 2-Input Exclusive OR Gate | SMD/5962-89550 | FP | STMicroelectronics | Depending on the application, a Radiation Verification Test may be necessary |
| 1 | 54ACT00 | Quad 2-Input NAND Gate, with TTL Compatible Inputs | SMD/5962-87699 | FP | STMicroelectronics | Depending on the application, a Radiation Verification Test may be necessary |
| 1 | 54ACT240 | Octal Bus Buffer with Inverted 3-State Outputs, TTL Compatible Inputs | SMD/5962-87759 | FP | STMicroelectronics | Depending on the application, a Radiation Verification Test may be necessary |

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|---|--------------------|---------|--------------------|--|
| 1 | 54ACT244 | Octal Buffer/Line Driver with 3-State Outputs, TTL Compatible Inputs | SMD/5962-87760 | FP | STMicroelectronics | Depending on the application, a Radiation Verification Test may be necessary |
| 1 | 54ACT245 | Octal Bidirectional Transceiver with 3-State Outputs, TTL Compatible Inputs | SMD/5962-87663 | FP | STMicroelectronics | Depending on the application, a Radiation Verification Test may be necessary |
| 1 | 54ACT574 | Octal D-Type Flip-Flop with 3-State Outputs, TTL Compatible Inputs | SMD/5962-89601 | FP | STMicroelectronics | Depending on the application, a Radiation Verification Test may be necessary |
| 1 | 54ACT86 | Quad 2-Input Exclusive OR Gate, TTL Compatible Inputs | SMD/5962-89550 | FP | STMicroelectronics | Depending on the application, a Radiation Verification Test may be necessary |
| 1 | 54ACT86 | Quad 2-Input Exclusive OR Gate, TTL Compatible Inputs | SMD/5962-89550 | FP | STMicroelectronics | Depending on the application, a Radiation Verification Test may be necessary |
| 1 | 54HC00 | Quad 2-Input NAND Gate | ESCC 9201/105 | FP LCC | STMicroelectronics | |
| 1 | 54HC02 | Quad 2-Input NOR Gate | ESCC 9201/113 | FP LCC | STMicroelectronics | |
| 1 | 54HC03 | Quad 2-Input Nand Gate with Open Drain Output | ESCC 9201/114 | FP LCC | STMicroelectronics | |

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|--|--------------------|---------|--------------------|---------|
| 1 | 54HC04 | Hex Inverter | ESCC 9401/033 | FP LCC | STMicroelectronics | |
| 1 | 54HC08 | Quad 2-Input Positive AND Gate | ESCC 9201/106 | FP LCC | STMicroelectronics | |
| 1 | 54HC10 | Triple 3-Input NAND Gate | ESCC 9201/107 | FP LCC | STMicroelectronics | |
| 1 | 54HC109 | Dual J-K Positive Edge Triggered Flip-Flop with Preset and Clear | ESCC 9306/048 | FP LCC | STMicroelectronics | |
| 1 | 54HC11 | Triple 3-Input AND Gate | ESCC 9201/117 | FP LCC | STMicroelectronics | |
| 1 | 54HC125 | Quad Bus Buffers with 3 State Outputs | ESCC 9401/039 | FP LCC | STMicroelectronics | |
| 1 | 54HC132 | Quad 2-Input NAND Gate with Schmitt-trigger Inputs | ESCC 9201/120 | FP LCC | STMicroelectronics | |
| 1 | 54HC138 | 3-to-8 Line Decoders/Demultiplexers with Inverted Outputs | ESCC 9408/046 | FP LCC | STMicroelectronics | |
| 1 | 54HC139 | Dual 2-to-4-line Decoders/Demultiplexers with Inverted Outputs | ESCC 9205/017 | FP LCC | STMicroelectronics | |
| 1 | 54HC14 | Hex Schmitt Trigger Inverter | ESCC 9409/007 | FP LCC | STMicroelectronics | |
| 1 | 54HC151 | 8-line to 1-line Data Selectors/Multiplexer | ESCC 9408/054 | FP LCC | STMicroelectronics | |
| 1 | 54HC154 | 4-to-6 Line Decoder/Demultiplexer with Inverted Output | ESCC 9205/023 | FP LCC | STMicroelectronics | |
| 1 | 54HC157 | Quad 2-line to 1-line Data Selectors/Multiplexers | ESCC 9408/057 | FP LCC | STMicroelectronics | |
| 1 | 54HC158 | Quad 2-to-1-Line Data Selectors/Multiplexers with Inverted Outputs | ESCC 9408/059 | FP LCC | STMicroelectronics | |
| 1 | 54HC161 | Asynchronous 4-Bit Binary Counter | ESCC 9204/059 | FP LCC | STMicroelectronics | |

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|--|--------------------|---------|--------------------|---------|
| 1 | 54HC163 | Synchronous 4-Bit Binary Counter | ESCC 9204/073 | FP LCC | STMicroelectronics | |
| 1 | 54HC164 | 8-bit Sipo Shift Register | ESCC 9306/041 | FP LCC | STMicroelectronics | |
| 1 | 54HC165 | 8-bit Sipo Shift Register | ESCC 9306/042 | FP LCC | STMicroelectronics | |
| 1 | 54HC166 | 8-bit Piso Shift Register | ESCC 9306/043 | FP LCC | STMicroelectronics | |
| 1 | 54HC174 | Hex D-Type Edge-triggered Flip-Flop with Clear | ESCC 9306/052 | FP LCC | STMicroelectronics | |
| 1 | 54HC175 | Quad D-Type Edge-triggered Flip-Flop with Clear | ESCC 9203/052 | FP LCC | STMicroelectronics | |
| 1 | 54HC191 | Synchronous 4-Bit Up/Down Binary Counter | ESCC 9204/066 | FP LCC | STMicroelectronics | |
| 1 | 54HC193 | Synchronous 4-Bit Up/Down Binary Counter (Dual Clock with Clear) | ESCC 9204/065 | FP LCC | STMicroelectronics | |
| 1 | 54HC20 | Dual 4-Input NAND Gate | ESCC 9201/118 | FP LCC | STMicroelectronics | |
| 1 | 54HC21 | Dual 4-Input AND Gate | ESCC 9201/108 | FP LCC | STMicroelectronics | |
| 1 | 54HC237 | 3-to-8-Line Decoder/Demultiplexer with Address Latch | ESCC 9205/021 | FP LCC | STMicroelectronics | |
| 1 | 54HC240 | Octal Bus Buffer with Inverted 3-State Outputs | ESCC 9401/034 | FP LCC | STMicroelectronics | |
| 1 | 54HC244 | Octal Bus Buffer with 3-State Outputs | ESCC 9401/048 | FP LCC | STMicroelectronics | |
| 1 | 54HC245 | Octal Bus Transceiver with 3-State Outputs | ESCC 9405/013 | FP LCC | STMicroelectronics | |
| 1 | 54HC257 | Quad 2-to-1-Line Data Selector/Multiplexer with 3-State Outputs | ESCC 9408/047 | FP LCC | STMicroelectronics | |

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|---|--------------------|----------|--------------------|---------|
| 1 | 54HC27 | Triple 3-Input NOR Gate | ESCC 9201/109 | FP LCC | STMicroelectronics | |
| 1 | 54HC273 | Octal D-Type Edge-triggered Flip-Flop with Clear | ESCC 9203/053 | FP LCC | STMicroelectronics | |
| 1 | 54HC283 | 4-Bit Binary Full Adders with Fast Carry | ESCC 9202/075 | FP LCC | STMicroelectronics | |
| 1 | 54HC32 | Quad 2-Input OR Gate | ESCC 9201/111 | FP LCC | STMicroelectronics | |
| 1 | 54HC373 | Octal D-Type Transparent Latches with 3-State Outputs | ESCC 9203/059 | FP LCC | STMicroelectronics | |
| 1 | 54HC374 | Octal D-Type Edge-triggered Flip-Flop with 3-State Outputs | ESCC 9203/060 | FP LCC | STMicroelectronics | |
| 1 | 54HC4040 | Asynchronous Negative Edge-triggered 12-Bit Binary Counters | ESCC 9204/069 | FP LCC | STMicroelectronics | |
| 1 | 54HC4049 | Hex Buffer Converter with Inverted Outputs | ESCC 9401/037 | FP LCC | STMicroelectronics | |
| 1 | 54HC4050 | Hex Buffer Converter | ESCC 9401/038 | FP LCC | STMicroelectronics | |
| 1 | 54HC540 | Octal Bus Buffer with Inverted 3-State Outputs | ESCC 9401/049 | FP - LCC | STMicroelectronics | |
| 1 | 54HC541 | Octal bus buffer with 3-state output | ESCC 9401/047 | FP LCC | STMicroelectronics | |
| 1 | 54HC573 | Octal D-type transparent latch with 3-state output | ESCC 9202/072 | FP LCC | STMicroelectronics | |
| 1 | 54HC574 | Octal D-type edge-triggered flip-flop with 3-state output | ESCC 9203/054 | FP LCC | STMicroelectronics | |
| 1 | 54HC590 | 8-Bit Binary Counter with 3-State Output Registers | ESCC 9204/071 | FP - LCC | STMicroelectronics | |
| 1 | 54HC595 | 8-Bit Shift Registers with 3-State Output Registers | ESCC 9306/051 | FP - LCC | STMicroelectronics | |

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|--------------|--|--------------------|----------|--------------------|---------|
| 1 | 54HC597 | 8-Bit PISO Shift Register | ESCC 9306/054 | FP - LCC | STMicroelectronics | |
| 1 | 54HC688 | 8-bit identify comparator | ESCC 9209/005 | FP LCC | STMicroelectronics | |
| 1 | 54HC74 | Dual Negative Edge Triggered D-Type Flip-Flop with Clear | ESCC 9203/050 | FP LCC | STMicroelectronics | |
| 1 | 54HC85 | 4-Bit Magnitude Comparator | ESCC 9209/004 | FP LCC | STMicroelectronics | |
| 1 | 54HC86 | Quad 2-Input Exclusive OR Gate | ESCC 9201/119 | FP LCC | STMicroelectronics | |
| 1 | 54HCT240 | Octal Bus Buffer with Inverted 3-State Outputs | ESCC 9401/045 | FP LCC | STMicroelectronics | |
| 1 | 54HCT244 | Octal Bus Buffer with 3-State Outputs | ESCC 9402/009 | FP LCC | STMicroelectronics | |
| 1 | 54HCT245 | Octal Bus Transceiver with 3-State Outputs | ESCC 9405/014 | FP LCC | STMicroelectronics | |
| 1 | 54HCT373 | Octal D-Type Transparent Latch with 3-State Outputs | ESCC 9203/064 | FP LCC | STMicroelectronics | |
| 1 | 54HCT374 | Octal D-Type Edge-triggered Flip-Flop with 3-State Outputs | ESCC 9203/066 | FP LCC | STMicroelectronics | |
| 1 | 54HCT74 | Dual D-Type Flip-Flop with Preset and Clear | ESCC 9203/070 | FP LCC | STMicroelectronics | |
| 1 | 54VCXH162245 | 16 bit Bus Transceiver, Low Voltage, three-state outputs | SMD/5962-02508 | FP-48 | STMicroelectronics | |

08 MICROCIRCUITS | 90 OTHER FUNCTIONS

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|---|--------------------|---------|----------------------------|------------------------------|
| 2 | PE9601-11 | 2.2 GHz Integer-N Phase Locked Loop Featuring 10/11 Dual-Modulus Prescaler, Programmable Counters and Phase Comparator Current consumption : 25mA @ 3 V Operating temperature range : -55 / +125 °C Storage temperature range : -65 / +150 °C | TPR-08-247 | LCC | PEREGRINE SEMICONDUCTOR | NEW DESIGN, RAD- HARD PLL |

08 MICROCIRCUITS | 95 MICROWAVE MONOLITIC INTEGRATED CIRCUITS (MMIC)

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|---|---------------------------|---------|-----------------|---|
| 1 | DO2AH | MMIC GaAs Foundry Process, PHEMT 0.25 um for Low-Noise, Wide-Band Amplifiers, Mixers and Down-Converters applications | NO DETAIL SPEC. AVAILABLE | DIE | OMMIC | |
| 1 | HB20P | HBT GaInP/GaAs Foundry Process, 0.7 um Gate Applications in Power Amplifiers up to Ku Band | ESCC 9010 | N/A | UMS | |
| 1 | HP07 | MMIC, GaAs Foundry Process, MESFET 0.7 um for power applications up to Ku Band | ESCC 9010 | N/A | UMS | DO NOT USE BEYOND Ugdmax/2 DUE TO SENSITIVITY TO HEAVY IONS |
| 2 | PH15 | MMIC GaAs Foundry Process, 0.15 um Pseudomorphic High Electron Mobility Transistor (PHEMT) for low noise, low level applications up to 1000 GHz | NONE | N/A | UMS | Passive elements are similar to PH25 Process |
| 1 | PH25 | MMIC GaAs Foundry Process, 0.25 um Pseudomorphic High Electron Mobility Transistor (PHEMT) for low noise, low level applications up to 1000 GHz | ESCC 9010 | N/A | UMS | |

08 MICROCIRCUITS | 99 MISCELLANEOUS

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|--------------|---|--------------------|--------------------------------------|-----------------|---------|
| 1 | SMFR-29C516E | 16 bit flow through EDAC | SMD/5962-01A18 | QUAD FLAT- PACK 100 pins | ATMEL | |
| 1 | T7906E | SMCS Lite (belonging to standard ASIC library MG1RT) ASIC Matrix : MG1090E Operating temperature range : -55 / +125 °C | SMD-5962-02A02 | FP 256 | ATMEL | |
| 1 | T7906E | SMCS Lite (belonging to standard ASIC library MG1RT) ASIC Matrix : MG1090E Operating temperature range : -55 / +125 °C | SMD-5962-02A02 | FP 256 | ATMEL | |
| 1 | TSS901E | Scalable multi channel subsystem | SMD/5962-01A17 | QUAD FLAT- PACK 256 pins | ATMEL | |
| 1 | TSS901E | Scalable multi channel subsystem | SMD/5962-01A17 | QUAD FLAT- PACK 256 pins | ATMEL | |

09 RELAYS | 01 NON LATCHING

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|---|--------------------|-------------------------------|--|---------|
| 2 | 317 | Contact Rating: 15A at 28 Vdc Contact Configuration: 2PDT Coil Voltage: 6, 12 and 28Vdc Mounting Variants 01 to 06 Size (max mm.): 26 x 26 x 14. Operating Temperature Range (°C): -65 to +125 | ESCC 3601/007 | 1/2 CAN | STPI | |
| 1 | E | Contact Rating: 1A at 28 Vdc Contact Configuration: 2PDT Coil Voltage: 6, 12 and 26.5Vdc Mounting Variants 01 and 11 Size (max mm.): 13.00 x 10.40 x 6.10. Operating Temperature Range (°C): -65 to +125 | ESCC 3601/012 | 1/6 Crystal CAN | LEACH INTERNATIONAL Europe | |
| 2 | E215 | Contact Rating: 15 A at 28 Vdc Contact Configuration: 2PDT Coil Voltage: 6, 12 and 28 Vdc Mounting Variants 03,04 and 06 Size (max mm.): 13.00 x 25.70 x 25.80. Operating Temperature Range (°C): -65 to +125 | ESCC 3601/007 | Half- cubic inch can | COMPANY DEUTSCH DIVISION RELAYS FRANCE | |
| 1 | GP5 | Contact Rating: 2A at 28 Vdc Contact Configuration: 2PDT Coil Voltage: 6, 12 and 26.5 Vdc Mounting Variants 02, 03 and 06 Size (max mm.): 20.57 x 10.41 x 10.41. Operating Temperature Range (°C): -65 to +125 | ESCC 3601/003 | Half crystal can | LEACH INTERNATIONAL Europe | |
| 2 | T | Contact Rating: 1A at 28 Vdc Contact Configuration: 2PDT Coil Voltage: 6.0, 12 V Size (max mm):DIA 9.40 x 7.00 Operating Temperature Range (°C.): -65 to +125 | ESCC 3601/002 | TO-5 | COMPANY DEUTSCH DIVISION RELAYS FRANCE | |
| 2 | T | Contact Rating: 1A at 28 Vdc Contact Configuration: 2PDT Coil Voltage: 6.0, 12 V Size (max mm):DIA 9.40 x 7.00 Operating Temperature Range (°C.): -65 to +125 | ESCC 3601/002 | TO-5 | COMPANY DEUTSCH DIVISION RELAYS FRANCE | |

09 RELAYS | 02 LATCHING

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|--|--------------------|------------------------|----------------------------------|---------|
| 2 | 317B | Contact Rating: 15A at 28 Vdc Contact Configuration: 2PDT Coil Voltage: 6, 12 and 28Vdc Mounting Variants 03, 04, 06, 14 and 16 Size (max mm.): 26 x 26 x 13.34 Operating Temperature Range (°C): -65 to +125 | ESCC 3602/007 | 1/2 CAN | STPI | |
| 2 | 327B | Contact Rating: 15A at 28 Vdc Contact Configuration: 4PDT Coil Voltage: 6, 12 and 28Vdc Mounting Variants 04, 06, 09, 14, 16 and 19 Size (max mm.): 26 x 26 x 26 Operating Temperature Range (°C): -65 to +125 | ESCC 3602/004 | CAN | STPI | |
| 1 | D | Contact Rating: 1A at 28 Vdc Contact Configuration: 2PDT Coil Voltage: 6, 12 and 26.5 Vdc Mounting Variants 01 and 11 Size (max mm.): 13.00 x 10.40 x 6.10. Operating Temperature Range (°C): -65 to +125 | ESCC 3602/019 | 1/6 Crystal CAN | LEACH INTERNATIONAL Europe | |
| 1 | GP2 | Contact Rating: 2A at 28 Vdc Contact Configuration: 2PDT Coil Voltage: 6, 12 and 26.5 Vdc Mounting Variants 02, 03 and 06 Size (max mm.): 20.57 x 10.41 x 11.00. Operating Temperature Range (°C): -65 to +125 | ESCC 3602/003 | Half crystal can | LEACH INTERNATIONAL Europe | |
| 1 | GP250 | Contact Rating: 2A at 50 Vdc (4A pp. at 56 Vrms, 20 kHz) Contact Configuration: 2PDT Coil Voltage: 12 and 26.5 Vdc Mounting Variants 02, 03 and 06 Size (max mm.): 20.57 x 10.41 x 11.00. Operating Temperature Range (°C): -65 to +125 | ESCC 3602/010 | Half crystal can | LEACH INTERNATIONAL Europe | |
| 1 | GP3A | Contact Rating: 10A at 50 Vdc Contact Configuration: 2PST Coil Voltage: 6, 12 and 26.5 Vdc Mounting Variants 03, 04 and 06 Size (max mm.): 26.10 x 33.00 x 13.40. Operating Temperature Range (°C): -65 to +125 | ESCC 3602/005 | Crystal can | LEACH INTERNATIONAL Europe | |

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|---|--------------------|--------------|--|---------|
| 2 | PHL50 | Contact Rating: 50A at 50 Vdc Contact Configuration: 1PDT Coil Voltage : 48, 28, 12 Vdc Size (max mm): 47.8 x 34.6 x 26.2 Operating Temperature Range (°C): -65 to +125 | ESCC 3602/014 | AS PER SPEC. | COMPANY DEUTSCH DIVISION RELAYS FRANCE | |
| 2 | TL | Contact Rating: 1A at 28 Vdc Contact Configuration: 2PDT Coil Voltage: 6.0, 12 V Size (max mm): DIA 9.40 x 7.00 Operating Temperature Range (°C.): -65 to +125 | ESCC 3602/002 | TO-5 | COMPANY DEUTSCH DIVISION RELAYS FRANCE | |
| 2 | TL | Contact Rating: 1A at 28 Vdc Contact Configuration: 2PDT Coil Voltage: 6.0, 12 V Size (max mm): DIA 9.40 x 7.00 Operating Temperature Range (°C.): -65 to +125 | ESCC 3602/002 | TO-5 | COMPANY DEUTSCH DIVISION RELAYS FRANCE | |

10 RESISTORS | 08 METAL FILM

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|---|--------------------|---------|------------------------------|---------|
| 2 | MG680 | High Voltage Range (Ohm): 600 - 20M Tol. (±%) : 0.5 TC (10E-6/±C): 140 Power Rating (W): 0.800 Max. Voltage (V): 2000 Size (max mm): DIA 1.80 x 4.30 Operating temperature range (°C): -55 to +125 | GSFC S-311-P-683 | Axial | CADDOCK ELECTRONICS | |
| 2 | MG710 | High Voltage Range (Ohm): 800 - 50M Tol. (±%) : 0.5 TC (10E-6/°C): 140 Power Rating (W): 1 Max. Voltage (V): 4000 Size (max mm): DIA 1.80 x 4.30 Operating temperature range (°C): -55 to +125 | GSFC S-311-P-683 | Axial | CADDOCK ELECTRONICS | |
| 2 | MG716 | High Voltage Range (Ohm): 600 - 75M Tol. (±%) : 0.5 TC (10E-6/°C): 140 Power Rating (W): 1.5 Max. Voltage (V): 4000 Size (max mm): DIA 1.80 x 4.30 Operating temperature range (°C): -55 to +125 | GSFC S-311-P-683 | Axial | CADDOCK ELECTRONICS | |
| 2 | MG721 | High Voltage Range (Ohm): 200 - 100M Tol. (±%) : 0.5 TC (10E-6/°C): 140 Power Rating (W): 2 Max. Voltage (V): 4000 Size (max mm): DIA 1.80 x 4.30 Operating temperature range (°C): -55 to +125 | GSFC S-311-P-683 | Axial | CADDOCK ELECTRONICS | |
| 1 | RNC90 | Film Non-Hermetically Sealed Range (Ohm): 33 - 100K Tol. (±%) : 0.02, 1 TC (10E-6/°C): 5 Power Rating (W): 0.5 Max. Voltage (V): 300 Size (max mm): 7.5 x 8 x 2.5 Operating temperature range (°C): -55 to +175 | ESCC 4001/011 | AXIAL | VISHAY S.A. div. SFERNICE | |

10 RESISTORS / 09 CHIP (ALL)

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|--|--------------------|---------|---------------------------|---------|
| 1 | P HR | Thin Film, 1206/0805/2010/0603 Series, High Precision and Stability Case Size Resistance Range (ohm) Tolerance Power Rating (mW) Dimensions (max. mm) 0603(Var. 01-05) 250 to 200 k 0.01, 0.02 % 100 2.16 x 1.01 x 1.02 0805(Var. 02-06) 250 to 250 k 0.01, 0.02 % 125 2.55 x 1.53 x 1.02 1206(Var. 03-07) 250 to 1 M 0.01, 0.02 % 250 3.64 x 1.86 x 1.02 TC (10E-6/°C) : 10 Operating Temperature Range -55 to +125 °C | ESCC 4001/023 | CHIP | VISHAY S.A. div. SFERNICE | |
| 1 | PRA HR | Surface mounting, high precision thin film array Range (Ohm): 100 - 1.0M (E48 series with 1 out of 4) Tol. (± %): 0.1, 1 Power Rating (mW): 100/resistor Voltage Rating (V): see table 1(b) of detail specification Temp. Coeff. (±10E-6/°C) : 10 (see note 4 of Table 1(a) of detail specification) Terminations : Nickel, hot-solder dip finish Size (max mm) : 3.20 x 1.45 x 0.58 Operating Temperature Range (°C) : -55 to +155 | ESCC 4001/025 | SMD | VISHAY S.A. div. SFERNICE | |
| 1 | RM2010 | Film Range (Ohm): 5.6 - 15M Tol. (± %): 1, 2 Power Rating (mW): 800 Voltage Rating (V): 150 Temp. Coeff. (±10E-6/°C) : 100(K), 300(M) Size (max mm) : 5.60 x 2.65 x 0.85 Operating temperature range (°C) : -55 to +70 (+150 at 0 watt) | MIL-PRF-55342/8 | CHIP | STATE OF THE ART | |

10 RESISTORS | 11 HEATERS, FLEXIBLE

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|------------------|--|----------------------------------|--------------|--------------------|---------|
| 1 | Heater | Resistor, Heater, Flexible, Single and double layer. Maximum ohmic density: 200 ohm/cm2 Tolerances: ±2, 5 % Resistance range: 1 to 5000 ohm Heating area: 1.6 to 1300 cm2 Maximum heating side dimension: 60 cm Terminal lead: 20, 22, 24, 26, 28, 30 AWG Temperature range (10-6°C.): 175 Operating Temperature Range (°C.): -65 to +200. | ESCC 4009/002 | AS PER SPEC. | IRCA-DIVISION RICA | |
| 2 | HEATERS FLEXIBLE | Single sided flexible heated, polyimide coated Operating temperature range: -200 to +200 °C | MINCO P.Q.02 Rev. 01 18/09/01 | N/A | MINCO - SA | |

11 THERMISTORS | 02 TEMPERATURE MEASURING

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|--------------|--|--------------------|-----------------|------------------------------|---------|
| 1 | 4006013*** | NTC, range 1000 to 5000 ohms @ +25 °C temperature range -55 / +115 °C nominal values and tolerances at +25 °C : Var. 01 : 1000 ohm 0.88 % Var. 02 : 2000 ohm 0.88 % Var. 03 : 3000 ohm 0.88 % Var. 04 : 4000 ohm 0.88 % Var. 05 : 5000 ohm 0.88 % | ESCC 4006/013 | AS PER SPEC. | BETATHERM IRELAND LIMITED | |
| 1 | 4006014*** | NTC, range 2000 to 100000 ohms @ +25 °C temperature range -40 / +160 °C nominal values and tolerances at +25 °C : Var. 01 : 2000 ohm 1.35 % Var. 02 : 4000 ohm 1.35 % Var. 03 : 4000 ohm 1.35 % Var. 04 : 15000 ohm 1.41 % Var. 05 : 100000 ohm 1.63 % | ESCC 4006/014 | AS PER SPEC. | BETATHERM IRELAND LIMITED | |
| 2 | 44900 Series | Leaded, Epoxy Encapsulated, Negative Temperature Coefficient Pd (mW): 1 Tolerance (± %): 0.4 to 10 Range (Ohm @ 25°C): 2.2k, 3k, 5k, 10k, 30k Package (max mm): S Variant DIA 2.40, T Variant DIA 2.80 Various Wires Definitions (Type & AWG) Operating Temperature Range (°C): -55 to +90 | GSFC S-311-P-18 | AS PER SPEC. | YELLOWSPRINGS Inc. | |

12 TRANSISTORS / 01 LOW POWER, NPN (< 2WATTS)

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|----------------|---|--------------------|---------|------------------------|---------|
| 1 | 2N2219A | hFE min/max: 100/300 @ IC = 150 mA PD (mW): 800 BV CBO (V): 75 BV CEO (V): 40 IC (mA): 800 Operating Temperature Range (°C.): -65 to +200 | ESCC 5201/003 | TO39 | STMicroelectroni cs | |
| 1 | 2N2222A | hFE min/max: 100/300 @ IC = 150 mA PD (mW): 500 BV CBO (V): 75 BV CEO (V): 40 IC (mA): 800 @10 us pulse Operating Temperature Range (°C.): -65 to +200 | ESCC 5201/002 | LCCC3 | STMicroelectroni cs | |
| 1 | 2N2369A | hFE min/max: 40/120 @ IC = 10 mA PD (mW): 360 BV CBO (V): 40 BV CEO (V): 15 IC (mA): 500 @10 us pulse Operating Temperature Range (°C.): -65 to +200 | ESCC 5201/006 | LCCC3 | STMicroelectroni cs | |
| 1 | 2N2484 | hFE min/max: 250/650 @ IC = 1 mA PD (mW): 360 BV CBO (V): 60 BV CEO (V): 60 IC (mA): 50 Operating Temperature Range (°C.): -65 to +200 | ESCC 5201/001 | LCCC3 | STMicroelectroni cs | |
| 1 | 2N3019 | hFE min/max: 100/300 @ IC = 150 mA PD (mW): 800 BV CBO (V): 140 BV CEO (V): 80 IC (A): 1 Operating Temperature Range (°C.): -55 to +175 | ESCC 5201/011 | TO39 | STMicroelectroni cs | |
| 1 | 2N3501L | hFE min/max: 100/300 @ IC = 150 mA PD (W): 1 BV CBO (V): 150 BV CEO (V): 150 IC (A): 0.3 Operating Temperature Range (°C.): -65 to +200 | MIL-S-19500/366 | TO205 | MICROSEMI LAWRENCE | |
| 1 | 2N3700 | hFE min/max: 100/300 @ IC = 150 mA PD (mW): 500 BV CBO (V): 140 BV CEO (V): 80 IC (A): 1 Operating Temperature Range (°C.): -65 to +200 | ESCC 5201/004 | LCCC3 | STMicroelectroni cs | |
| 1 | 2N5666, 2N5667 | hFE min/max: 40/120 @ IC = 1 A (2N5666) PD (W): 1.2 hFE min/max: 25/75 @ IC = 1 A (2N5667) PD (W): 1.2 BV CBO (V): 250 BV CEO (V): 200 IC (A): 5 (2N5666) BV CBO (V): 400 BV CEO (V): 300 IC (A): 5 (2N5667) Operating Temperature Range (°C.): -65 to +200 | MIL-S-19500/455 | TO205 | MICROSEMI LAWRENCE | |

12 TRANSISTORS / 02 LOW POWER, PNP (< 2WATTS)

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|------------------|--|--------------------|---------|------------------------|---------|
| 2 | 2N2605 | hFE min/max: 100/300 @ IC = -10 mA PD (mW): 400 BV CBO (V): -70 BV CEO (V): -60 IC (mA): -30 Operating Temperature Range (°C.): -65 to +200 | MIL-S-19500/354 | TO-206 | MICROSEMI LAWRENCE | |
| 1 | 2N2905A | hFE min/max: 100/300 @ IC = -150 mA PD (mW): 600 BV CBO (V): -60 BV CEO (V): -60 IC (mA): -600 Operating Temperature Range (°C.): -65 to +200 | ESCC 5202/002 | TO39 | STMicroelectroni cs | |
| 1 | 2N2907A | hFE min/max: 100/300 @ IC = -150 mA PD (mW): 400 BV CBO (V): -60 BV CEO (V): -60 IC (mA): -600 (-500 for LCC3) Operating Temperature Range (°C.): -65 to +200 | ESCC 5202/001 | LCCC3 | STMicroelectroni cs | |
| 1 | 2N3637 | hFE min/max: 100/300 @ IC = -50 mA pulsed PD (W): 1 BV CBO (V): -175 BV CEO (V): -175 IC (A): -1 Operating Temperature Range (°C.): -65 to +200 | MIL-S-19500/357 | TO-205 | MICROSEMI LAWRENCE | |
| 2 | 2N3764 | hFE min/max: 40/140 @ IC = -0.5 mA PD (W): 1 BV CBO (V): -60 BV CEO (V): -60 IC (A): -1.5 Operating Temperature Range (°C.): -65 to +200 | MIL-S-19500/396 | TO-205 | MICROSEMI LAWRENCE | |
| 1 | 2N3867S, 2N3868S | hFE min/max: 40/120 @ IC = -1.5 A (2N3867S) PD (W): 1 hFE min/max: 30/150 @ IC = -1.5 A (2N3868S) PD (W): 1 BV CBO (V): -40 BV CEO (V): -40 IC (A): -3 (2N3867S) BV CBO (V): -60 BV CEO (V): -60 IC (A): -3 (2N3868S) Operating Temperature Range (°C.): -65 to +200 | MIL-S-19500/350 | TO205 | MICROSEMI LAWRENCE | |
| 1 | 2N5415 | hfe = 30/120 @ Ic=50mA P _{dmax.} = 0,75 W @T _{amb.} = +25°C. BV CBO = 200 V BV CEO = 200 V Ic = 1 A Operating Temperature Range (°C.): -65 to +200 | MIL-S-19500/485 | TO39 | MICROSEMI LAWRENCE | |

12 TRANSISTORS / 03 HIGH POWER, NPN (> 2WATTS)

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|---|-------------------------|----------------|--------------------------|---------|
| 2 | 2N5038 | hFE min/max: 50/200 @ IC = 2 A PD (W): 140 @ Tcase = +25°C. BV CBO (V): 150 BV CEO (V): 90 IC (A): 20 Operating Temperature Range (°C.): -65 to +200 | MIL-S-19500/439 | TO204 | MICROSEMI LAWRENCE | |
| 1 | 2N5154 | hFE min/max: 70/200 @ IC = 2.5 mA PD (W): 8.75 BV CBO (V): 100 BV CEO (V): 80 IC (A): 5 Operating Temperature Range (°C.): -65 to +200 | ESCC 5203/010 | TO39- TO257 | STMicroelectroni cs | |
| 1 | 2SC4832 | hFE min: 10 @ IC = 6 A PD (W): 140 BV CBO (V): 500 BV CEO (V): 400 IC (A): 15 | NASDA QTS 19500/1044 | TO3 | FUJI ELECTRIC CO. LTD | |
| 1 | BUX77 | hFE min/max: 50/200 @ IC = 2 A PD (W): 40 (Var. 01-05), 35 (Var.06-07) BV CBO (V): 100 BV CEO (V): 80 IC (A): 5 Operating Temperature Range (°C.): -65 to +200 | ESCC 5203/016 | TO257 | STMicroelectroni cs | |

12 TRANSISTORS | 04 HIGH POWER, PNP (> 2WATTS)

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|---|--------------------|----------------|------------------------|---------|
| 1 | 2N5153 | hFE min/max: 70/200 @ IC = -2.5 mA PD (W): 10 BV CBO (V): -100 BV CEO (V): -80 IC (A): -2 Operating Temperature Range (°C.): -65 to +200 | ESCC 5204/002 | TO39- TO257 | STMicroelectroni cs | |
| 1 | BUX78 | hFE min/max: 50/200 @ IC = -2 A PD (W): 40 (Var. 01-05), 35 (Var.06-07) BV CBO (V): -100 BV CEO (V): -80 IC (A): -5 Operating Temperature Range (°C.): -65 to +200 | ESCC 5204/006 | TO257 | STMicroelectroni cs | |

12 TRANSISTORS / 05 FET N CHANNEL

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|---|-----------------------|---------|----------------------------|---------|
| 1 | 2N7381 | Vds=200 V Rds on = 0.4 ohm Idss = 25 uA Pd = 2 W @ 25°C Operating Temperature Range (°C.): -55 to +150 | MIL-PRF- 19500/614 | TO257AA | INTERNATIONAL RECTIFIER | |

12 TRANSISTORS | 06 FET P CHANNEL

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|--|-----------------------|---------------------|----------------------------|---------|
| 1 | 2N7389 | VGS = ± 20V, Breakdown Voltage DS min. = -100 V, ID = -6.5 A max. thermal resistance = 5 °C/W, max. rds = 0.3 ohms @ Vgs = 12 V Operating Temperature Range (°C.): -55 to +150 | MIL-PRF- 19500/630 | TO- 205AF LCC | INTERNATIONAL RECTIFIER | |

12 TRANSISTORS | 08 MULTIPLE

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|---------------|---|--------------------|---------|------------------------|---------|
| 1 | 2N2920A (NPN) | hFE min/max: 150/600 @ IC = 10 uA PD (mW): 500 (both section) BV CBO (V): 60 BV CEO (V): 60 IC (mA): 30 Operating Temperature Range (°C.): -65 to +200 | ESCC 5207/002 | LCC6 | STMicroelectroni cs | |
| 1 | 2N3810 (PNP) | hFE min/max: 150/450 @ IC = -1 mA PD (mW): 600 (both section) BV CBO (V): -60 BV CEO (V): -60 IC (mA): 50 Operating Temperature Range (°C.): -65 to +200 | ESCC 5207/005 | LCC6 | STMicroelectroni cs | |

12 TRANSISTORS | 10 RF/MICROWAVE NPN LOW POWER / LOW NOISE

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|---|--------------------|---------|----------------------------------|---------|
| 1 | BFY180 | BV CBO (V): 15 BV CEO (V): 8 Ic (mA): 4.0 hFE min/max: 30/175 @ IC max = 0.25 mA Pout (mW): 30 Nf max: 3.2 dB @ 2 GHz MAG/MSG min: 12 dB @ 2 GHz fT min: 7.0 GHz Variant 01 of ESCC spec. Operating Temperature Range (°C.): -65 to +200 | ESCC 5611/006 | MICRO X | INFINEON TECHNOLOGIES A.G. | |
| 1 | BFY181 | BV CBO (V): 20 BV CEO (V): 12 Ic (mA): 20 hFE min/max: 55/175 @ IC max = 5.0 mA Pout (mW): 175 Nf max: 2,9 dB @ 2 GHz MAG/MSG min: 13.5 dB @ 2 GHz fT min: 7.0 GHz Variant 03 of ESCC spec. Operating Temperature Range (°C.): -65 to +200 | ESCC 5611/006 | MICRO X | INFINEON TECHNOLOGIES A.G. | |
| 1 | BFY183 | BV CBO (V): 20 BV CEO (V): 12 Ic (mA): 65 hFE min/max: 55/160 @ IC max = 5.0 mA Pout (mW): 450 Nf max: 2,9 dB @ 2 GHz MAG/MSG min: 12.5 dB @ 2 GHz fT min: 7.0 GHz Variant 05 of ESCC spec. Operating Temperature Range (°C.): -65 to +200 | ESCC 5611/006 | MICRO X | INFINEON TECHNOLOGIES A.G. | |
| 1 | BFY193 | BV CBO (V): 20 BV CEO (V): 12 Ic (mA): 80 hFE min/max: 50/175 @ IC max = 30 mA Pout (mW): 580 Nf max: 2,9 dB @ 2 GHz MAG/MSG min: 12.5 dB @ 2 GHz fT min: 7.0 GHz Variant 06 of ESCC spec. Operating Temperature Range (°C.): -65 to +200 | ESCC 5611/006 | MICRO X | INFINEON TECHNOLOGIES A.G. | |
| 1 | BFY280 | BV CBO (V): 8 BV CEO (V): 15 Ic (mA): 10 hFE min/max: 30/175 @ IC max = 0.25 mA Pout (mW): 80 Nf max: 2.9 dB @ 2 GHz MAG/MSG min: 13 dB @ 2 GHz fT min: 7.0 GHz Variant 02 of ESCC spec. Operating Temperature Range (°C.): -65 to +200 | ESCC 5611/006 | MICRO X | INFINEON TECHNOLOGIES A.G. | |

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|---|--------------------|---------|----------------------------------|---------|
| 1 | BFY405 | BV CBO (V): 15 BV CEO (V): 4.5 Ic (mA): 12 hFE min/max: 50/150 @ IC max = 2.0 mA Pout (mW): 55 Nf max: 1.8 dB @ 1.8 GHz Ic (mA): 2.0 fT min: 20 GHz Variant 01 of ESCC spec. Operating Temperature Range (°C.): -65 to +175 | ESCC 5611/008 | MICRO X | INFINEON TECHNOLOGIES A.G. | |
| 1 | BFY420 | BV CBO (V): 15 BV CEO (V): 4.5 Ic (mA): 35 hFE min/max: 50/150 @ IC max = 20 mA Pout (mW): 160 Nf max: 1.7 dB @ 1.8 GHz Ic (mA): 5.0 fT min: 20 GHz Variant 02 of ESCC spec. Operating Temperature Range (°C.): -65 to +175 | ESCC 5611/008 | MICRO X | INFINEON TECHNOLOGIES A.G. | |
| 1 | BFY450 | BV CBO (V): 15 BV CEO (V): 4.5 Ic (mA): 100 hFE min/max: 50/150 @ IC max = 20 mA Pout (mW): 450 Nf max: 2.0 dB @ 1.8 GHz Ic (mA): 10 fT min: 18 GHz Variant 03 of ESCC spec. Operating Temperature Range (°C.): -65 to +175 | ESCC 5611/008 | MICRO X | INFINEON TECHNOLOGIES A.G. | |

12 TRANSISTORS | 15 MICROWAVE POWER (GaAs)

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|--|--------------------|---------|----------------------------------|---------|
| 1 | CLY32 | VDS max. 14 V VDG max. 16 V VGS max. -6.0 V Id max. 1.2 A Pout > 32 dBm, n% > 45 % @ Vds = 9.0 V, f = 2.0 GHz Ptot (W): 7.5 Operating Temperature Range (°C.): -65 to +175 | ESCC 5614/006 | MWP25 | INFINEON TECHNOLOGIES A.G. | |

12 TRANSISTORS / 16 MICROWAVE LOW NOISE (GaAs)

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|------------------|---|--------------------|---------|----------------------------------|---|
| 1 | CFY 67 CFY 67_08 | Pseudomorphic HEMT Vds (V): 3.5 Vdg (V): 4.5 Id (mA): 60 NF <= 0.8 dB Ga >= 11 dB @ 12 GHz (Variant 01 and 03) NF <= 1.0 dB Ga >= 10.5 dB @ 12 GHz (Variant 02 and 04) Ptot (mW): 200 Operating Temperature Range (°C.): -65 to +150 | ESCC 5613/004 | MICRO X | INFINEON TECHNOLOGIES A.G. | Rrecommended for applications in X and Ku bands |

12 TRANSISTORS | 17 CHOPPER

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|---|--------------------|---------|-----------------------|---------|
| 2 | 2N2432A | hFE min/max: 80/400 @ IC = 1 mA PD (mW): 300 BV CBO (V): 45 BV CEO (V): 45 IC (mA): 100 | MIL-S-19500/313 | TO-206 | MICROSEMI LAWRENCE | |

13 WIRES AND CABLES | 01 LOW FREQUENCY

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|------------------------------------|---|--------------------|---------|---|---------|
| 1 | 3901001**B (AXON) 1871 (NEXANS) | Low Frequency, Polyimide Insulation Voltage Rating, maximum (Vrms): 600 Insulation Type: Polyimide/Kapton, Light weight Wire size AWG 26 to 12, shielded and jacketed wires only, up to 3 cores Operating Temperature Range (°C): -100 to +200C | ESCC 3901/001 | N/A | DRAKA - FILECA NEXANS | |
| 1 | 3901002**B (AXON) 1872 (NEXANS) | Low Frequency, Polyimide Insulation Voltage Rating, maximum (Vrms): 600 Insulation Type: Polyimide/Kapton, medium weight Wire size AWG 28 to 18, single finished wires unjacketed and unshielded Operating Temperature Range (°C): -100 to +200C | ESCC 3901/002 | N/A | AXON' CABLE DRAKA - FILECA NEXANS | |
| 2 | FA3903/WP | PFA insulated solid wire for wire wrapping Max. Voltage (V): 350 Max. Current (A): 1.0 (for AWG 30) 1.5 (for AWG 28) 2.5 (for AWG 26) Operating Temperature Range (°C.): -100 to +200 | ESCC 3903/002 | - | DRAKA - FILECA | |
| 2 | FA3903/WY | Kynar insulated solid wire for wire wrapping Max. Voltage (V): 350 Max. Current (A): 1.0 (for AWG 30) 1.5 (for AWG 28) 2.5 (for AWG 26) Operating Temperature Range (°C.): -60 to +100 | ESCC 3903/001 | - | DRAKA - FILECA | |
| 1 | MTV-BTV | Low Frequency, PTFE/Polyimide Insulation Voltage Rating, maximum (Vrms): 600 Insulation Type: Extruded PTFE for flexibility Wire size AWG 30 to 18, shielded and unshielded, up to 5 cores Operating Temperature Range (°C): -100 to +200C | ESCC 3901/013 | N/A | NEXANS | |
| 1 | Series 55 | Low Frequency, 600V, Silver-plated Copper, Extruded Crosslinked Fluoropolymer Insulation. Voltage Rating (max Vrms): 600 Wire size ISO 001, 002, 004, 006, 010, 012, 020, 030, shielded and unshielded , up to 4 cores Operating Temperature Range (°C): -100 to +200C | ESCC 3901/012 | N/A | TYCO ELECTRONICS DORCAN | |

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|--|--------------------|---------|-----------------|---------|
| 1 | SPL | Low Frequency, Polyimide Insulation. Voltage Rating, maximum (Vrms): 600 Insulation Type: Polyimide/Expanded PTFE Wire size AWG 28 to 12, shielded and unshielded, up to 7 cores Operating Temperature Range (°C): -200 to +200C | ESCC 3901/019 | N/A | W.L.GORE | |
| 1 | SPL | Low Frequency, Polyimide Insulation. Voltage Rating, maximum (Vrms): 600 Insulation Type: Polyimide/Expanded PTFE Wire size AWG 28 to 12, shielded and unshielded, up to 7 cores Operating Temperature Range (°C): -200 to +200C | ESCC 3901/019 | N/A | W.L.GORE | |
| 1 | SPM | Low Frequency, Polyimide/Fluorthermoplast. Voltage Rating, maximum (Vrms): 600 Wire size AWG 30 to 12, shielded and unshielded, up to 7 cores Operating Temperature Range (°C): -200 to +200C | ESCC 3901/018 | N/A | W.L.GORE | |
| 1 | SPM | Low Frequency, Polyimide/Fluorthermoplast. Voltage Rating, maximum (Vrms): 600 Wire size AWG 30 to 12, shielded and unshielded, up to 7 cores Operating Temperature Range (°C): -200 to +200C | ESCC 3901/018 | N/A | W.L.GORE | |
| 1 | SPP | Power Wires for Crimping, Low Frequency Voltage Rating, maximum (Vrms): 600 Insulation Type: Expanded PTFE Tape Wire size AWG 4 and 8 Operating Temperature Range (°C): -200 to +200C | ESCC 3901/017 | N/A | W.L.GORE | |
| 1 | SPP | Power Wires for Crimping, Low Frequency Voltage Rating, maximum (Vrms): 600 Insulation Type: Expanded PTFE Tape Wire size AWG 4 and 8 Operating Temperature Range (°C): -200 to +200C | ESCC 3901/017 | N/A | W.L.GORE | |

13 WIRES AND CABLES | 02 COAXIAL

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|---|--------------------|---------|-----------------|---------|
| 1 | 50CIS | Coaxial, double shield coaxial, shielded and jacketed coaxial. Miniature, 50 Ohms, PTFE Dielectric, Polyimide Jacket Maximum Voltage: 900 Vrms Operating Temperature Range (°C): -100 to + 200 | ESCC 3902/001 | N/A | NEXANS | |

16 SWITCHES | 04 MICROSWITCH

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|--|--------------------|--------------|-----------------|---------|
| 2 | T3 | Microswitches, Sensitive, 1PDT Contact Rating: 4A, 28 Vdc, Contact Configuration SPDT Operating Temperature Range (°C): -55 to + 125 | ESCC 3701/003 | AS PER SPEC. | ABB CONTROL | |
| 2 | T3 | Microswitches, Sensitive, 1PDT Contact Rating: 4A, 28 Vdc, Contact Configuration SPDT Operating Temperature Range (°C): -55 to + 125 | ESCC 3701/003 | AS PER SPEC. | ABB CONTROL | |

20 THERMOSTAT | 01 ALL

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------|---|--------------------|--------------|-----------------|---------|
| 1 | 47 | Contact Configuration SPST, Contact Rating: 4A, 30 Vdc Difference between contact opening temp. and closing temp. (°C max): For switching temp < -35°C 10 For -35 < switching temp > +79°C 5 or 10 For switching temp > +80°C 15 Variant 02 Dimensions (max., mm.) : 16.2 DIA, 11.5 height Minimum temperature gradient: 0.11 deg.C/minute Operating Temperature Range (°C): -50 to + 150 | ESCC 3702/001 | AS PER SPEC. | COMEPA | |

30 RF PASSIVE COMPONENTS | 01 COAXIAL COUPLERS

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|---------------------|---|--------------------|-----------------|-----------------|---------|
| 2 | RF Coaxial Couplers | RF Couplers, Unsealed, SMA Connectors Frequency Range (GHz): 1 - 22 Coupling factor (dB): 4 - 30 RF Power (W): 50 Operating Temperature Range (°C):as per spec. | ESCC 3404/005 | AS PER SPEC. | RADIALL | |

30 RF PASSIVE COMPONENTS | 09 COAXIAL POWER DIVIDERS

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|------------------|---|--------------------|--------------|-----------------|---------|
| 2 | RF Power Divider | RF Power Divider, unsealed, 4-port quadrature, SMA connectors Frequency Range (GHz): 1 - 18 Coupling Factor (dB): 3 RF Power P (W): 1 - 60 RF Leakage (dB): 65 - 85 Size (max mm): 37.5 x 13.5 x 7.7 Operating Temperature Range (°C): -40 to +85 | ESCC 3404/004 | AS PER SPEC. | RADIALL | |

30 RF PASSIVE COMPONENTS | 10 COAXIAL ATTENUATORS/LOADS

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|---------------------|--|--------------------|--------------|-----------------|---------|
| 1 | Coaxial Attenuators | R.F. Attenuators, Fixed, Coaxial. Frequency Range (GHz): 0 - 22 Attenuation value range (dB): 0 - 20 Operating Temperature Range (°C): -55 + 125 | ESCC 3403/005 | AS PER SPEC. | RADIALL | |
| 1 | RF Coaxial Loads | Passive Devices, RF, Coaxial, Loads Frequency Range (GHz): 0 - 22 Rated P (in) (W): 1 Impedance (Ohm): 50 VSWR (Max.): Type 0<f(GHz)<= 4; 4<f(GHz)< = 12.4; 12.4<f(GHz)< = 18; 18<f(GHz)<= 22 1 1.05 1.10 1.15 1.20 2 1.05 1.15 1.20 1.25 Operating Temperature Range (°C): -55 to + 125 | ESCC 3403/006 | AS PER SPEC. | RADIALL | |

40 HYBRIDS | 01 THICK FILM

| Part | Part Type | Description | Det. Specification | Package | Manufacturer(s) | Remarks |
|------|-----------------------------------|---|--|---------------------------------|-----------------|--|
| 2 | A0000055 (H757) | MIL-STD-1553B Dual Transceiver (Integrated MIL-STD-1553B Dual Complete Transmitter + MIL-STD-1553B Dual Complete Receiver) Operational Rated Temperature -30 to +85 °C | DPN-A5-ST-0426 | Metall c FP-46 | Astrium Velizy | |
| 2 | A0005367 | MIL-STD-1553B Remote Terminal Coupler (Integrated MIL-STD-1553B Single Transceiver + MIL-STD-1553B Remote Terminal ASIC) Operational Rated Temperature -30 to +85 °C | A5-PS-CA5-491- MMV + DPN-A5-ST- 0376_ASP20-RT-Ed 01 | Metalli c FP-64 | Astrium Velizy | |
| 2 | MCM 21020 DSP BR334 (A0008778) | Multi-chip Module Digital Signal Processor 21020 (TSC21020E floating-point DPS + DPC co-prcessor + 128 kwords on-module SRAM + cascadable timers, full duplex UARTs, 1355 serial links, watchdog timers and PWM channels). Operational Rated Temperature -30 to +85 °C | MCM-DSP-SPEC- DA0018744-V-ASTR | CQFP- 334 | Astrium Velizy | Replaces the old version MCM2102- A0005305 (obsolete) |
| 2 | MCM ERC32 | Software processing module (20 Mips at 25 MHz) based on a CPU core embedding the ERC32SC, VASI ASIC chip and memories Operational Rated Temperature -30 to +85 °C | ERC32.MCM.SP.12. V.MMS iss02 rev00 14/10/02 | Dual- cavity co- fired | Astrium Velizy | |