

EPPL | *European Preferred Parts List*

Issue: 11

Issue Date: 2007-11-16

01 CAPACITORS / 01 CERAMIC

Part	Part Type	Description	Det. Specification	Package	Manufacturer(s)	Remarks																									
1	CH (Type II)	<p>Ceramic dielectric, Fixed, high capacitance.</p> <table border="1"> <thead> <tr> <th>Cap.Range (uF)</th> <th>Tol. (±%)</th> <th>Rated Volt. (V)</th> <th>Temp.Characteristic (%)</th> </tr> </thead> <tbody> <tr> <td>0.33 to 39</td> <td>10/20</td> <td>200</td> <td>±20(Vt=0V), -50+30(Vt=Ur)</td> </tr> <tr> <td>1.2 to 150</td> <td>10/20</td> <td>100</td> <td>±20(Vt=0V), -50+30(Vt=Ur)</td> </tr> <tr> <td>1.8 to 180</td> <td>10/20</td> <td>50</td> <td>±20(Vt=0V), -50+30(Vt=Ur)</td> </tr> </tbody> </table> <p>Size (max. mm.): 40.6 x 24 x 14.8 (Style L case) Operating temperature range (°C.): -55 to +125</p>	Cap.Range (uF)	Tol. (±%)	Rated Volt. (V)	Temp.Characteristic (%)	0.33 to 39	10/20	200	±20(Vt=0V), -50+30(Vt=Ur)	1.2 to 150	10/20	100	±20(Vt=0V), -50+30(Vt=Ur)	1.8 to 180	10/20	50	±20(Vt=0V), -50+30(Vt=Ur)	ESCC 3001/030	SMD	AVX Limited										
Cap.Range (uF)	Tol. (±%)	Rated Volt. (V)	Temp.Characteristic (%)																												
0.33 to 39	10/20	200	±20(Vt=0V), -50+30(Vt=Ur)																												
1.2 to 150	10/20	100	±20(Vt=0V), -50+30(Vt=Ur)																												
1.8 to 180	10/20	50	±20(Vt=0V), -50+30(Vt=Ur)																												
2	CNC 3*	<p>Ceramic dielectric, Fixed, high capacitance.</p> <p>Tolerance: 10, 20%</p> <p>Capacitance ranges (uf):</p> <table border="1"> <thead> <tr> <th></th> <th>16V</th> <th>25V</th> <th></th> </tr> </thead> <tbody> <tr> <td>CNC31PE</td> <td>2.2 - 12</td> <td>1.2 - 6.8</td> <td>1 to 3 chips</td> </tr> <tr> <td>CNC32PE</td> <td>2.7 - 15</td> <td>1.8 - 10</td> <td>1 to 3 chips</td> </tr> <tr> <td>CNC33PE</td> <td>4.7 - 33</td> <td>3.3 - 22</td> <td>1 to 4 chips</td> </tr> <tr> <td>CNC34PE</td> <td>8.2 - 68</td> <td>5.6 - 39</td> <td>1 to 4 chips</td> </tr> </tbody> </table> <p>Size (max. mm.): 12 x 12.5 x H; H = 2.5mm (case A), 4.8mm (case B), 7mm (case C), 9.5mm (case D)</p> <p>Operating temperature range (°C.): -55 to +125</p>		16V	25V		CNC31PE	2.2 - 12	1.2 - 6.8	1 to 3 chips	CNC32PE	2.7 - 15	1.8 - 10	1 to 3 chips	CNC33PE	4.7 - 33	3.3 - 22	1 to 4 chips	CNC34PE	8.2 - 68	5.6 - 39	1 to 4 chips	EFD 635.03.390	DIL, SMD	EUROFARAD						
	16V	25V																													
CNC31PE	2.2 - 12	1.2 - 6.8	1 to 3 chips																												
CNC32PE	2.7 - 15	1.8 - 10	1 to 3 chips																												
CNC33PE	4.7 - 33	3.3 - 22	1 to 4 chips																												
CNC34PE	8.2 - 68	5.6 - 39	1 to 4 chips																												
2	CNC 5*	<p>Ceramic dielectric, Fixed, high capacitance.</p> <p>Tolerance: 10, 20%</p> <p>Capacitance ranges (uf):</p> <table border="1"> <thead> <tr> <th></th> <th>50V</th> <th>100V</th> <th>200V</th> <th>500V</th> </tr> </thead> <tbody> <tr> <td>CNC53PE</td> <td>1.8 - 12</td> <td>1.0 - 10</td> <td>0.27 - 2.70</td> <td>0.10 - 1.0</td> </tr> <tr> <td>CNC54PE</td> <td>3.3 - 22</td> <td>1.8 - 15</td> <td>0.47 - 3.9</td> <td>0.22 - 1.5</td> </tr> <tr> <td>CNC55PE</td> <td>6.8 - 39</td> <td>2.7 - 33</td> <td>1.0 - 10</td> <td>0.33 - 3.3</td> </tr> <tr> <td>CNC56PE</td> <td>10 - 68</td> <td>4.7 - 47</td> <td>1.8 - 12</td> <td>0.47 - 5.6</td> </tr> </tbody> </table> <p>Size (max. mm.): 21.6 x 16.6 x H; H = 4mm (case A), 8mm (case B), 12mm (case C), 16mm (case D)</p> <p>Operating temperature range (°C.): -55 to +125</p>		50V	100V	200V	500V	CNC53PE	1.8 - 12	1.0 - 10	0.27 - 2.70	0.10 - 1.0	CNC54PE	3.3 - 22	1.8 - 15	0.47 - 3.9	0.22 - 1.5	CNC55PE	6.8 - 39	2.7 - 33	1.0 - 10	0.33 - 3.3	CNC56PE	10 - 68	4.7 - 47	1.8 - 12	0.47 - 5.6	567.99.390 Ind. D	SMD (variant PE)	EUROFARAD	
	50V	100V	200V	500V																											
CNC53PE	1.8 - 12	1.0 - 10	0.27 - 2.70	0.10 - 1.0																											
CNC54PE	3.3 - 22	1.8 - 15	0.47 - 3.9	0.22 - 1.5																											
CNC55PE	6.8 - 39	2.7 - 33	1.0 - 10	0.33 - 3.3																											
CNC56PE	10 - 68	4.7 - 47	1.8 - 12	0.47 - 5.6																											

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 1500 1, 2, 5, 10 50, 100 30 4.7 to 9.1 0.5 pF 50, 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	
1	0805 (Type II)	Ceramic Dielectric, Fixed Cap. Range Tol. Rated Volt. Temp. Charact. (pF) (%) (V) (%) 820 to 10000 5, 10, 20 100 -30,+20 3900 to 27000 5, 10, 20 50 -30,+20 10000 to 47000 5, 10, 20 25 -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	
1	1206 (Type I)	Ceramic Dielectric, Fixed Cap. Range Tol. Rated Volt. Temp. Coeff. (pF) (%) (V) (±10E-6/°C) 10 to 3900 1, 2, 5, 10 50,100 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	
1	1210 (Type II)	Ceramic Dielectric, Fixed Cap. Range Tol. Rated Volt. Temp. Charact. (pF) (%) (V) (%) 3900 to 47000 5, 10, 20 100 ±20(Vt=0V),-30/+20(Vt=Ur) 33000 to 120000 5, 10, 20 50 ±20(Vt=0V),-30/+20(Vt=Ur) 47000 to 220000 5, 10, 20 25 ±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) 100 to 15000 1, 2, 5, 10 50, 100 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	
1	2220 (Type I)	Ceramic Dielectric, Fixed Cap. Range Tol. Rated Volt. Temp. Coeff. (pF) (±%) (V) (±10E-6/°C) 470 to 33000 1, 2, 5, 10 50, 100 30 Ag terminations Size (max mm) : 6.2 x 5.5 x 1.8 Operating temperature range (°C) : -55 to +125	ESCC 3009/006	Chip	AVX - DIVISION TPC	
1	2220 (Type II)	Ceramic Dielectric, Fixed Cap. Range Tol. Rated Volt. Temp. Charact. (pF) (±%) (V) (%) 180000 to 1000000 5, 10, 20 100 ±20(Vt=0V),-30/+20(Vt=Ur) 100000 to 680000 5, 10, 20 50 ±20(Vt=0V),-30/+20(Vt=Ur) 47000 to 220000 5, 10, 20 25 ±20(Vt=0V),-30/+20(Vt=Ur) Ag terminations Size (max mm) : 6.2 x 5.5 x 2.3 Operating temperature range (°C) : -55 to +125	ESCC 3009/011	Chip	AVX - DIVISION TPC	
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 (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	S02A 0100	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)																																															
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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																																															
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Part	Part Type	Description	Det. Specification	Package	Manufacturer(s)	Remarks																				
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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																							
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Capacitance Range (μ F)	Tol. (\pm %)	Rated Volt. (V)	Case Size																							
1.2 to 39	10	50	Case A, B, C, D																							
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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																																																																			
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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																																																																			
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470	10	10	11.5 x 13 x 6																																																																			
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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 ($^{\circ}\text{C}$) : -55 to +125</p>	Capacitance value (μF)	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 (μF)	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																																															
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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	HT86PS	<p>Plastic Film Dielectric, High Voltage.</p> <table border="1"> <thead> <tr> <th>Cap. Range(nF)</th> <th>Tol.(±%)</th> <th>Rated Volt.(V)</th> </tr> </thead> <tbody> <tr> <td>0.68 to 15</td> <td>10</td> <td>20000</td> </tr> <tr> <td>1.5 to 33</td> <td>10</td> <td>15000</td> </tr> <tr> <td>3.3 to 68</td> <td>10</td> <td>12500</td> </tr> <tr> <td>1.0 to 100</td> <td>10</td> <td>10000</td> </tr> <tr> <td>2.2 to 220</td> <td>10</td> <td>7500</td> </tr> <tr> <td>6.8 to 470</td> <td>10</td> <td>5000</td> </tr> <tr> <td>15 to 1000</td> <td>10</td> <td>3500</td> </tr> <tr> <td>15 to 1500</td> <td>10</td> <td>2500</td> </tr> <tr> <td>33 to 2200</td> <td>10</td> <td>1500</td> </tr> </tbody> </table> <p>Temperature Coefficient: Temperature (°C.) Capacitance change (%) +22 to -55 -3.0 min +22 to +125 +10 max</p> <p>Size (max mm):36x11x5 to 106x51x15 depending on Voltage/Capacitance Value Operating Temperature Range (°C) : -55 to +125</p>	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	ESCC 3006/022	Axial	EUROFARAD	
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																																		
1	KM94S	<p>Self-healing metalised film dielectric</p> <table border="1"> <thead> <tr> <th>Capacitance Value (nF)</th> <th>Rated Voltage (V)</th> <th>Tolerance</th> <th>Available sizes</th> </tr> </thead> <tbody> <tr> <td>4.64 - 1000</td> <td>50</td> <td>5 %</td> <td>01, 02, 03</td> </tr> <tr> <td>1.0 - 470</td> <td>100</td> <td>5 %</td> <td>01, 02, 03</td> </tr> </tbody> </table> <p>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</p>	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	ESCC 3006/023	SMD	EUROFARAD																			
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																																	

Part	Part Type	Description	Det. Specification	Package	Manufacturer(s)	Remarks																								
1	PM90SR2	<p>Self-healing metalised film dielectric</p> <table border="1"> <thead> <tr> <th>Cap. Range (μF)</th> <th>Tol. (\pm%)</th> <th>Rated Volt. (V)</th> </tr> </thead> <tbody> <tr> <td>0.22 to 5.6</td> <td>10</td> <td>630</td> </tr> <tr> <td>0.39 to 15</td> <td>10</td> <td>400</td> </tr> <tr> <td>1.0 to 39</td> <td>10</td> <td>250</td> </tr> <tr> <td>3.3 to 100</td> <td>10</td> <td>100</td> </tr> <tr> <td>8.2 to 150</td> <td>10</td> <td>50</td> </tr> </tbody> </table> <p>Size (max mm): 31.5 x 33 x 32.5 (Variant 09 to 16) depending on Voltage/capacitance value</p> <p>Temperature Coefficient:</p> <table border="1"> <thead> <tr> <th>Temperature ($^{\circ}$C.)</th> <th>Capacitance change (max) (%)</th> </tr> </thead> <tbody> <tr> <td>+22 to -55</td> <td>-10</td> </tr> <tr> <td>+22 to +100</td> <td>+8.0</td> </tr> </tbody> </table> <p>Operating temperature range ($^{\circ}$C.): -55 to +100.</p>	Cap. Range (μ F)	Tol. (\pm %)	Rated Volt. (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	Temperature ($^{\circ}$ C.)	Capacitance change (max) (%)	+22 to -55	-10	+22 to +100	+8.0	ESCC 3006/020	SMD	EUROFARAD	
Cap. Range (μ F)	Tol. (\pm %)	Rated Volt. (V)																												
0.22 to 5.6	10	630																												
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1.0 to 39	10	250																												
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1	PM94S	<p>Self-healing metalised film dielectric</p> <table border="1"> <thead> <tr> <th>Capacitance Value (μF)</th> <th>Rated Voltage (V)</th> <th>Tolerance</th> <th>Available sizes</th> </tr> </thead> <tbody> <tr> <td>0.56 - 12</td> <td>100</td> <td>10 %</td> <td>01, 02, 03, 04</td> </tr> <tr> <td>0.22 - 4.7</td> <td>250</td> <td>10 %</td> <td>01, 02, 03, 04</td> </tr> <tr> <td>0.1 - 1.8</td> <td>400</td> <td>10 %</td> <td>01, 02, 03, 04</td> </tr> </tbody> </table> <p>Size 01 (max mm) : 10.7 x 10.7 x B (6, 8, 10, 12, 14, 15 mm depending on cap. value)</p> <p>Size 02 (max mm) : 15.5 x 11.5 x B (6, 8, 10, 12, 14, 15 mm depending on cap. value)</p> <p>Size 03 (max mm) : 16.5 x 15.5 x B (6, 8, 10, 12, 14, 15 mm depending on cap. value)</p> <p>Size 04 (max mm) : 18.5 x 17.0 x B (6, 8, 10, 12, 14, 15 mm depending on cap. value)</p>	Capacitance Value (μ F)	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	ESCC 3006/024	SMD	EUROFARAD									
Capacitance Value (μ F)	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																											

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 (ITT Cannon). Power Contact Arrangements: contact variants 01 to 12 (ITT Cannon). 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	Souriau is not qualified for Coaxial and Power Contacts				
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. 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	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												

