6.7 INDUCTORS (07)

6.7.1 Fixed, RF

| INDUCTORS, FIXED, RF,<br>MINIATURE, MOULDED, SURFACE MOUNT,<br>BASED ON SERIES MSCI 10k, 12k, 20k and H01 | | | | **241M** |
|---|---|---|---|---|
| Procurement Specifications | Manufacturer | Nature of Approval | Supervising Authority | Initial Qualification Date |
| Generic<br>ESCC 3201<br>Detail ESCC 3201/008 | Exxelia SAS<br>Illange<br>France | Qualification | ESA/ESTEC | Jun 2016 |
| | | Remarks | | |

Qualified range:

Variants 01 to 05 are qualified

| Series No. | Range (µH) | Tolerance (±%) | Q min. | Min. SRF $f_r$ (MHz) | Max. DCR, $R_{dc}(\Omega)$ | Rated DC Current, $I_R$ (mA) |
|---|---|---|---|---|---|---|
| 10k | 0.010- 10 | 2.0, 5.0, 10 | 60 - 42 | 1000 -33 | 0.025 -3.3 | 750 - 87 |
| 12k | 12- 1000 | 2.0, 5.0, 10 | 56 - 12 | 26 - 1.5 | 2.0 - 120 | 110 - 15 |
| 20k | 0.010 -1000 | 10 | 75 - 30 | 1000 - 1.7 | 0.04 - 80 | 1000 - 25 |
| H01 | 0.380 - 100 | 15 | 30 | 8 | 0.029 - 3.8 | 1500 - 100 |

Dielectric Withstanding Voltage (DWV): 200 Vrms

Operating Temperature Range (°C): -55 to +125

6.7.2 Power

| INDUCTORS, POWER, MOULDED, SURFACE MOUNT, BASED ON SERIES SESI AND CMC | | | | **276J** |
|---|---|---|---|---|
| Procurement Specifications | Manufacturer | Nature of Approval | Supervising Authority | Initial Qualification Date |
| Generic<br>ESCC 3201<br>Detail ESCC<br>3201/009<br>3201/010 | Exxelia SAS<br>Illange<br>France | Qualification | ESA/ESTEC | April 2004 |
| | | Remarks<br>Termination finish shall be Sn60Pb40 | | |

Qualified range:

3201/009: Variants 01 to 08 are qualified
3201/010 Variants 01, 03 and 05 are qualified

Component types:

| 3201/009 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SESI | 14SR | 15SR | 15WR | 18WR | 9.1WR | 22WR | 32WR | 32PR |
| Variant | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 |
| 3201/010 | | | | | | | | |
| CMC | 15WR | 18WR | 22WR | | | | | |
| Variant | 01 | 03 | 05 | | | | | |

Operating Temperature Range (°C): -55 to +125

6.1 TRANSFORMERS (14)

6.1.1 CCM

| Molded SMD Custom Magnetics Components, Linear (CCM) Winding Technology | | | | **356B** |
|---|---|---|---|---|
| Procurement Specifications | Manufacturer | Nature of Approval | Supervising Authority | Initial Qualification Date |
| Generic<br>ESCC 3201<br>Detail ESCC 3201/011 | Exxelia SAS<br>Illange<br>France | Qualification | ESA/ESTEC | Jan 2019 |
| | | Remarks | | |

Technology Flow qualified as defined into the current QML published document REP006 (ESCC/RP/QML006).

| Variant Number | Type | Design Domain | Electrical Characteristics | Total Power Max (W) | No. of Terminals (3) | Terminal Finish (4) | Weight Max (g) |
|---|---|---|---|---|---|---|---|
| 01 | CCM4 | Note 1 from QML | Note 2 from QML | ≤ 18 | 12 | Sn60Pb40 | 5.1 |
| 02 | CCM5 | | | ≤ 40 | 16 | Sn60Pb40 | 7.4 |
| 03 | CCM6 | | | ≤ 50 | 16 | Sn60Pb40 | 12.1 |
| 04 | CCM20 | | | ≤ 120 | 16 | Sn60Pb40 | 21.4 |
| 05 | CCM25 | | | ≤ 150 | 20 | Sn60Pb40 | 44.2 |