

Space Grade Single Line EMI Filter

MIL-PRF-28861 – Inspection (Class B versus B Plus)

| Class B PDA | B Plus PDA | Group A 100% testing | | Class B | B Plus | |
|-------------|----------------------|--|--|--------------------------|----------------|---------------|
| 10% | 10% total cumulative | 5% PDA | Thermal shock, -55- +125C | 5 cycles | 25 cycles | |
| | | | Voltage Conditioning (Burn in), 2X rated voltage | 164 hours | 250 hours | |
| | | Dielectric Withstanding Voltage, 2.5X rated voltage DC | same | same | | |
| | | Insulation Resistance, Room & Hot, rated voltage | same | same | | |
| | | Capacitance | same | same | | |
| | | Dissipation factor | same | same | | |
| | | Voltage Drop | same | same | | |
| | | X-Ray | same | same | | |
| | | Seal (glass seal) | Gross | Gross & Fine (Helium) | | |
| | | Outgassing (resin seal only) | n/a | Qualification of Potting | | |
| | | Group A sample testing | | | Class B | B Plus |
| | | Visual/Mechanical | | | same | same |
| | | Solderability | | | same | same |

| Group B Inspections | Class B Glass | B Plus Glass | Class B Resin | B Plus Resin |
|---|---------------|--------------|---------------|--------------|
| Group I | | | | |
| AC voltage drop (when applicable) | X | X | n/a | n/a |
| Voltage and temperature limits of capacitance | X | X | X | X |
| Insertion loss (at temperature) | X | X | X | X |
| Barometric pressure (reduced) | X | X | X | X |
| Temperature rise | X | X | X | X |
| Current overload | X | X | X | X |
| Thermal strength | X | X | X | X |
| Thermal shock and immersion (when applicable) | X | X | n/a | n/a |
| Destructive physical analysis | n/a | X | n/a | X |
| Group II | | | | |
| Subgroup 1 | | | | |
| Life | X | X | X | X |
| Subgroup 2 | | | | |
| Resistance to soldering heat | X | X | X | X |
| Salt spray (corrosion) | X | X | X | X |
| Radiographic inspection | X | X | X | X |
| Destructive physical analysis | n/a | X | n/a | X |
| Subgroup 3 | | | | |
| Resistance to solvents | X | X | X | X |
| Group III | | | | |
| Shock (specified pulse) | X | X | X | X |
| Vibration (high frequency) | X | X | X | X |
| Random vibration | n/a | X | n/a | X |
| Thermal shock and moisture resistance (when applicable) | X | X | n/a | n/a |
| Seal (when applicable) | X | X | n/a | n/a |
| Radiographic inspection | X | X | X | X |
| Destructive physical analysis | n/a | X | n/a | X |