



PRODUCT SPECIFICATION

1.0 SCOPE

This Product Specification covers the SMB product family (Interface Only) and is a general performance guideline. Please contact Molex RFMS Engineering for specific design iteration performance ratings. As customer end use applications vary greatly, the performance requirements stated within are superseded by performance requirements stated on the Molex Sales Drawing(s).

2.0 PRODUCT DESCRIPTION

2.1 PRODUCT NAME

SMB

3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS

MIL-STD-348B

4.0 RATINGS

4.1 VOLTAGE

335 Vrms at Sea Level
85 Vrms at 70,000 Feet

4.2 TEMPERATURE

Rating: - 65°C TO + 165°C

4.3 FREQUENCY RATING

0 to 4.0 GHz

4.4 NOMINAL IMPEDANCE

50 or 75 Ohm (see sales drawing)

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5.0 PERFORMANCE

5.1 ELECTRICAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
1	Insulation Resistance	MIL-PRF-39012, paragraph 3.11	≥ 1000 Megohms
2	Dielectric Withstanding Voltage	MIL-PRF-39012, paragraph 3.17 Cable group I Cable group II, IIa	750 Vrms Min 1000 Vrms Min
3	Low Level Contact Resistance (LLCR)	MIL-PRF-39012, paragraph 3.16 Center Contact Outer Contact	Initial: Baseline (Reference Only) Post Environment: 10.0 Milliohms Max Increase Initial: Baseline (Reference Only) Post Environment: 10.0 Milliohms (Noble Plating) 20.0 Milliohms (Non-Noble Plating) Max Increase
4	Voltage Standing Wave Ratio	MIL-PRF-39012, paragraph 3.14	See Sales Drawing
5	RF Insertion Loss	MIL-PRF-39012, paragraph 3.27	Application specific. See Sales Drawing where applicable.

5.2 MECHANICAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
6	Material	MIL-PRF-39012, paragraph 3.3	See Sales Drawing
7	Finish	MIL-PRF-39012, paragraph 3.3.1	See Sales Drawing
8	Design	MIL-PRF-39012, paragraph 3.4	See Sales Drawing
9	Recommended Mating Torque		N/A
10	Force to Engage and Disengage	MIL-PRF-39012, paragraph 3.5.1 Axial Force Radial Force	14.0 lbs Max. N/A
11	Coupling Proof Torque	MIL-PRF-39012, paragraph 3.6	N/A

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5.2 MECHANICAL REQUIREMENTS (continued)

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
12	Mating Characteristics	MIL-PRF-39012, paragraph 3.7	MIL-STD-348B dimensions
13	Connector Durability	MIL-PRF-39012, paragraph 3.15	500 Cycles
14	Center Contact Retention	MIL-PRF-39012, paragraph 3.12 Axial Force (Cable Connectors) Axial Force (Adapters) Axial Force (PCB Connectors) Radial Torque	4 lbs MIN (terminated to cable) 4 lbs MIN N/A N/A
15	Cable Retention	MIL-PRF-39012, paragraph 3.24 Axial Force	Per Cable Specification

5.3 ENVIRONMENTAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
16	Vibration	MIL-PRF-39012, paragraph 3.18 Per MIL-STD-202, Method 204	Test Condition B <u>Signal (Center) LLCr:</u> 10.0 Milliohms Max Increase Post Environment <u>Outer Conductor LLCr:</u> 10.0 Milliohms (Noble Plating) 20.0 Milliohms (Non-Noble Plating) Max Increase Post Environment
17	Shock	MIL-PRF-39012, paragraph 3.19 Per MIL-STD-202, Method 213	Test Condition B <u>Signal (Center) LLCr:</u> 10.0 Milliohms Max Increase Post Environment <u>Outer Conductor LLCr:</u> 10.0 Milliohms (Noble Plating) 20.0 Milliohms (Non-Noble Plating) Max Increase Post Environment

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18	Shock (Thermal)	MIL-PRF-39012, paragraph 3.2 Per MIL-STD-202, Method 107	Test Condition B <u>Signal (Center) LLCR:</u> 10.0 Milliohms Max Increase Post Environment <u>Outer Conductor LLCR:</u> 10.0 Milliohms (Noble Plating) 20.0 Milliohms (Non-Noble Plating) Max Increase Post Environment
19	Corrosion (Salt Spray)	MIL-PRF-39012, paragraph 3.13 Per MIL-STD-202, Method 101	Test Condition B
20	Moisture Resistance	MIL-PRF-39012, paragraph 3.21 Per MIL-STD-202, Method 106	DWV 750 Vrms (after drying)

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