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 As customer end use applications vary greatly, the performance requirements stated within are superseded by performance requirements stated on the Molex Sales Drawing(s).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)

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

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 Signal (Center) LLCR: 10.0 Milliohms Max Increase Post Environment Outer Conductor LLCR: 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 Signal (Center) LLCR: 10.0 Milliohms Max Increase Post Environment Outer Conductor LLCR: 10.0 Milliohms (Noble Plating) 20.0 Milliohms (Non-Noble Plating) Max Increase Post Environment

18	**Shock (Thermal)**	MIL-PRF-39012, paragraph 3.2 Per MIL-STD-202, Method 107	Test Condition B Signal (Center) LLCR: 10.0 Milliohms Max Increase Post Environment Outer Conductor LLCR: 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)