



PRODUCT SPECIFICATION

1.0 SCOPE

This Product Specification covers the 2.92mm (SMK) 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 As customer end use applications vary greatly, the performance requirements stated within are superseded by performance requirements stated on the Molex Sales Drawing(s).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

2.92mm (SMK)

3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS

MIL-STD-348B

4.0 RATINGS

4.1 VOLTAGE

350 Vrms at Sea Level

4.2 TEMPERATURE

Rating: - 65°C TO + 155°C

4.3 FREQUENCY RATING

DC to 40 GHz

4.4 NOMINAL IMPEDANCE

50 Ohm

REVISION: B	ECR/ECN INFORMATION: EC No: 626137 DATE: 2019 / 11 / 26	TITLE: 2.92 MM (SMK) PRODUCT FAMILY INTERFACE ONLY	SHEET No. 1 of 3
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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	>=5000 Megohms
2	Dielectric Withstanding Voltage	MIL-PRF-39012, paragraph 3.17	750 Vrms
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 (Nobel Plating) 20.0 Milliohms (Non-Nobel 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	See Sales Drawing

5.2 MECHANICAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
6	Material / Finish	MIL-PRF-39012, paragraph 3.3	See Sales Drawing
7	Design	MIL-PRF-39012, paragraph 3.4	See Sales Drawing
8	Panel Nut Torque	N/A	N/A
9	Recommended Mating Torque	MIL-PRF-39012	7-10 inch-pounds (steel part) 4-5 inch-pounds (brass part)
10	Force to Engage and Disengage	MIL-PRF-39012, paragraph 3.5.1 Axial Force Radial Force	N/A 2 in-lb
11	Coupling Proof Torque	MIL-PRF-39012, paragraph 3.6	15 inch-pounds
12	Coupling Nut Retention Force	MIL-PRF-39012, paragraph 3.25	60 pounds

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5.2 MECHANICAL REQUIREMENTS (continued)

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
13	Mating Characteristics	MIL-PRF-39012, paragraph 3.7	MIL-STD-348B dimensions
14	Connector Durability	MIL-PRF-39012, paragraph 3.15	500 Cycles
15	Center Contact Retention	MIL-PRF-39012, paragraph 3.12 Axial Force (Cable Connectors) Axial Force (Adapters) Axial Force (PCB Connectors) Radial Torque	6 lbs MIN (terminated to cable) 4 lbs MIN N/A N/A
16	Cable Retention	MIL-PRF-39012, paragraph 3.24 Axial Force	Per Cable Specification

5.3 ENVIRONMENTAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
17	Vibration	MIL-PRF-39012, paragraph 3.18 Per MIL-STD-202, Method 204	Test Condition D
18	Shock	MIL-PRF-39012, paragraph 3.19 Per MIL-STD-202, Method 213	Test Condition I
19	Shock (Thermal)	MIL-PRF-39012, paragraph 3.2 Per MIL-STD-202, Method 107	Test Condition B (115 °C)
20	Corrosion (Salt Spray)	MIL-PRF-39012, paragraph 3.13 Per MIL-STD-202, Method 101	Test Condition B
21	Moisture Resistance	MIL-PRF-39012, paragraph 3.21 Per MIL-STD-202, Method 106	Insulation resistance 200 MΩ MIN (after drying)

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