PRODUCT SPECIFICATION

1.0 SCOPE
This Product Specification covers QMA, 50 OHM Connectors

2.0 PRODUCT DESCRIPTION

2.1 PRODUCT NAME
QMA

3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS

4.0 RATINGS

4.1 VOLTAGE
Test: 1000 Vrms at Sea Level
Working: 480 Vrms at Sea Level

4.2 TEMPERATURE
Rating: - 65°C TO + 125°C

4.3 FREQUENCY RATING
0 to 18 GHz

4.4 NOMINAL IMPEDANCE
50 Ohms

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	1000 Vrms
3	RF High Potential Withstanding	MIL-PRF-39012, paragraph 3.23	600 Vrms @ 5 MHz to 7.5 MHz
4	Contact Resistance	MIL-PRF-39012, paragraph 3.16 Center Contact Outer Contact	 3 Milliohms 2.5 Milliohms
5	Voltage Standing Wave Ratio	MIL-PRF-39012, paragraph 3.14	1.05 Max DC to 3GHz 1.12 Max 3GHz to 6GHz
6	RF Leakage	MIL-PRF-39012, paragraph 3.26	-75 dB Max @ 6GHz
7	RF Insertion Loss	MIL-PRF-39012, paragraph 3.27	0.05⊕F(GHz) dB Max

5.2 MECHANICAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
8	Material	MIL-PRF-39012, paragraph 3.3	See Sales Drawing
9	Finish	MIL-PRF-39012, paragraph 3.3.1	See Sales Drawing
10	Design	MIL-PRF-39012, paragraph 3.4	See Sales Drawing
11	Recommended Mating Torque		N/A
12	Force to Engage	Axial Force	5.62 lbs (25 N) Typ
13	Force to Disengage	Axial Force	4.50 lbs (20 N) Typ
14	Retention Force Between Mated Pairs	Axial Force	80 lbs (355.86 N)
15	Coupling Proof Torque	MIL-PRF-39012, paragraph 3.6	N/A

5.2 MECHANICAL REQUIREMENTS (continued)

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
16	Mating Characteristics	MIL-PRF-39012, paragraph 3.7	N/A
17	Connector Durability	MIL-PRF-39012, paragraph 3.15	100 Cycles Min
18	Center Contact Retention	MIL-PRF-39012, paragraph 3.12 Axial Force	6 lbs (captivated contact designs)
19	Hermetic Seal	MIL-PRF-39012, paragraph 3.9 Helium Tracer Gas	See Sales Drawing

5.3 ENVIRONMENTAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
20	Vibration	MIL-PRF-39012, paragraph 3.18 Per MIL-STD-202, Method 204	Test Condition B
21	Shock	MIL-PRF-39012, paragraph 3.19 Per MIL-STD-202, Method 213	Test Condition B
22	Shock (Thermal)	MIL-PRF-39012, paragraph 3.2 Per MIL-STD-202, Method 107	Test Condition B
23	Corrosion (Salt Spray)	MIL-PRF-39012, paragraph 3.13 Per MIL-STD-202, Method 101	Test Condition B
24	Moisture Resistance	MIL-PRF-39012, paragraph 3.21 Per MIL-STD-202, Method 106	DWV 1000 Vrms (after drying)