



PRODUCT SPECIFICATION

1.0 SCOPE

This Product Specification covers FAKRA connectors. In the event of a discrepancy between this product specification and a specific sales drawing the sales drawing always takes precedence.

2.0 PRODUCT DESCRIPTION

2.1 PRODUCT NAME

FAKRA

3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS

3.1 DIN 72594-1

DIN 72594-2

USCAR-17

USCAR-18

4.0 RATINGS

4.1 WORKING VOLTAGE

335 Vrms

4.2 TEMPERATURE

Rating: - 40°C TO + 105°C

4.3 FREQUENCY RATING

DC to 6 GHz

4.4 NOMINAL IMPEDANCE

50 Ohms

REVISION:	ECR/ECN INFORMATION:	TITLE:	SHEET No.
A5	EC No: URF2013-0249 DATE: 2012 / 10 / 29	FAKRA	1 of 3
DOCUMENT NUMBER:	CREATED / REVISED BY:	CHECKED BY:	APPROVED BY:
PS-89675-331	SSS/JDW	TEF	GMH



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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 Min.
2	Dielectric Withstanding Voltage	MIL-PRF-39012, paragraph 3.17	1000 Vrms
3	RF High Potential Withstanding	MIL-PRF-39012, paragraph 3.23	750 Vrms @ 5 MHz
4	Contact Resistance	MIL-PRF-39012, paragraph 3.16 Center Contact Outer Contact	5 Milliohms Max 2.5 Milliohms Max
5	Voltage Standing Wave Ratio	MIL-PRF-39012, paragraph 3.14	1.29 Max
6	RF Leakage	MIL-PRF-39012, paragraph 3.26	> 80 dB
7	RF Insertion Loss	MIL-PRF-39012, paragraph 3.27	< .1 X $\sqrt{f}$ (GHz) dB

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	MIL-PRF-39012, paragraph 3.5, Axial Force	25 N Max
13	Force to Disengage	MIL-PRF-39012, paragraph 3.5, Axial Force	25 N Max
14	Retention Force with Latch Engaged	MIL-PRF-39012, paragraph 3.5, Axial Force	> 110 N

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5.2 MECHANICAL REQUIREMENTS (continued)

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
15	Coupling Nut Retention Force	MIL-PRF-39012, paragraph 3.25	N/A
16	Mating Characteristics	MIL-PRF-39012, paragraph 3.7	SEE ENGAGEMENT AND DISENGAGEMENT ABOVE
17	Connector Durability	MIL-PRF-39012, paragraph 3.15	50 Cycles Min
18	Center Contact Retention	MIL-PRF-39012, paragraph 3.12 Axial Force Radial Torque	4 lbs Min N/A
19	Coding Efficiency (Polarization Effectiveness)	ISO 20860-2	≥40N

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 I
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)

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