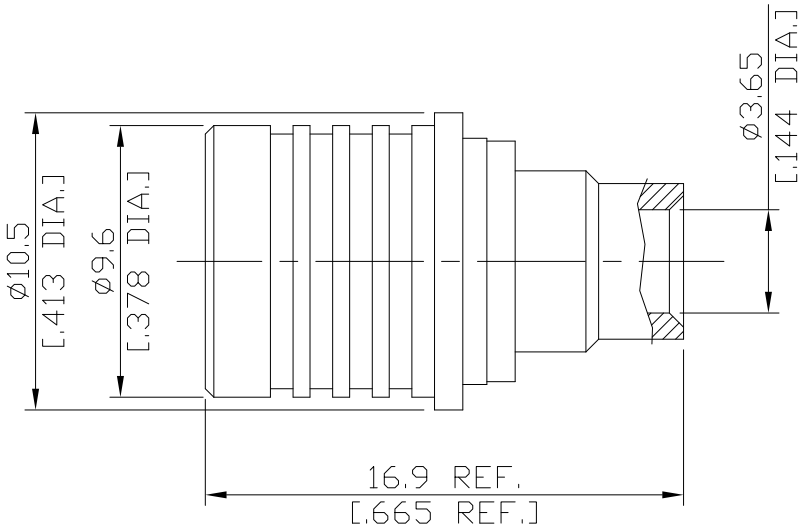
ROSNOL®
RF/Microwave Interconnect

Technical Data Sheet

QMA Plug (Male) Connector Solder Attachment For .141 Cable
DC- 6 GHz VSWR1.15

QMA1E50-0141A / 144



All dimensions are in mm [inch]
Tolerances according to DIN ISO 2768-mH

Interface

According to	IEC 61169-50

Electrical Data

Impedance	50 Ω
Frequency	DC to 6 GHz
VSWR (Return Loss)	≤ 1.15 (≥ 23.13 dB)
Insertion Loss	≤ 0.05 x √F (GHz) dB
Insulation Resistance	≥ 5 GΩ
Center Contact Resistance	≤ 3.0 mΩ
Outer Contact Resistance	≤ 2.5 mΩ
Test Voltage, at sea level, 50Hz	1000 V rms
Working Voltage, at sea level, 50Hz	250 V rms
RF Leakage	≥ 95 dB up to 2 GHz
	≥ 80 dB up to 4 GHz
	≥ 70 dB up to 6 GHz
Intermodulation	≤ -130 dBc @ 2 x 20 W

-VSWR in application depends decisive on cable assembly process-

Material And Plating

Piece Parts	Material	Plating
Centre contact	Brass	Gold plating (Non-magnetic nickel-phosphorus underplating)
Body	Brass	Copper-Tin-Zinc Alloy
Insulator	PTFE	
Coupling nut	Brass	Copper-Tin-Zinc Alloy

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Mechanical Data

Coupling Mechanisms	Quick Lock
Mating Cycles	min. 100
Center contact captivation: axial	≥ 20 N
Engagement Force	typ. 25 N
Disengagement Force	typ. 20 N
Retention Force for Interface	60 N min.
Centre Contact	Soldered
Cable Entry	Soldered

Environmental Data

Temperature Range	-40°C to +85°C
Storage temperature	-40°C to +85°C
Thermal Shock	IEC 60169-1 16.4 (-40 / +85°C)
Corrosion	IEC 60169-1 16.7 (48 hrs)
Vibration	IEC 60068-2-64 random
Damp heat, steady state	IEC 60169-1 16.3 (96 hrs)
RoHS	compliant

Suitable Cables

.141, RG402; Rosnol RSR-141, RSF-141, EF402

Packing

Single or 100

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