

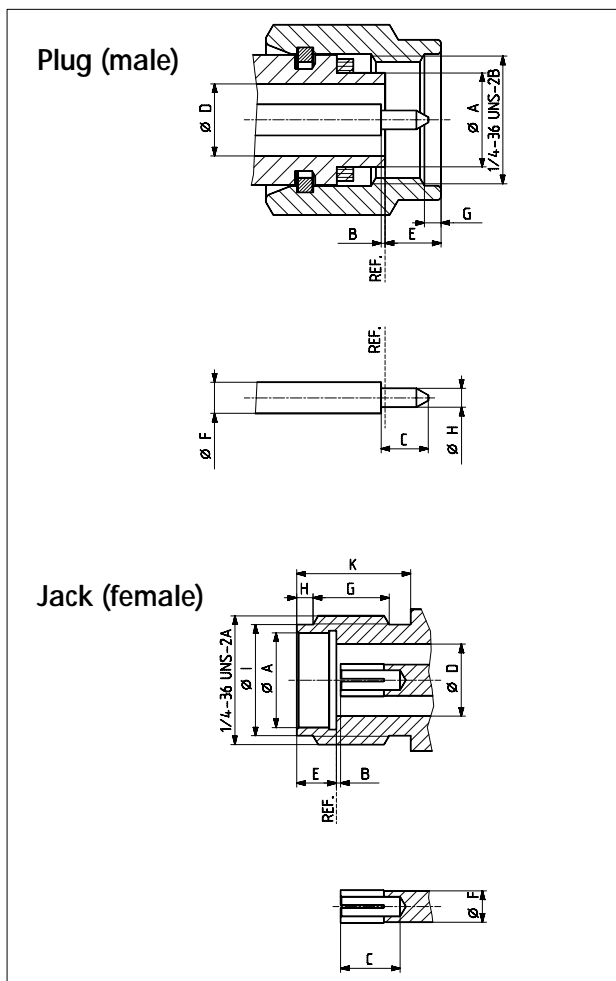


SERIES PC 3.5 PRECISION SUBMINIATURE CONNECTORS

Description

SUHNER PC 3.5 connectors are precision connectors for use in microwave applications up to 33 GHz. They are especially suitable for use with semi-rigid cables and microwave components. They are intermateable with SMA and SK connectors. Due to an air dielectric interface and the more durable construction a superior repeatability further enhances the performance.

Interface Dimensions



Interface Dimensions in mm / inches

	Plug		Jack	
	min.	max.	min.	max.
A	4.55 / .179	4.58 / .180	4.60 / .181	4.63 / .182
B	0.00 / .000	0.08 / .003	0.00 / .000	0.08 / .003
C	2.03 / .080	2.29 / .090	2.79 / .110	3.18 / .125
D	3.49 / .138	3.51 / .138	3.49 / .138	3.51 / .138
E	2.36 / .093	3.56 / .135	1.88 / .074	1.98 / .078
F	1.51 / .060	1.52 / .060	1.51 / .060	1.52 / .060
G	0.38 / .015	1.14 / .045	3.35 / .132	4.62 / .182
H	0.92 / .036	0.93 / .037	0.38 / .015	1.14 / .045
I	---	---	5.30 / .209	5.40 / .213
K	---	---	5.54 / .218	---

Interface dimensions conformable to the Standards:

International: IEC 169-23

Technical Data

ELECTRICAL DATA	REQUIREMENTS
Impedance	50 Ω
Frequency range	DC ... 33 GHz (IEC 169-23, cut-off frequency 38.8 GHz)
VSWR (typical values) - RG 405/U - RG 402/U - adaptors	≤ 1.13 up to 26.5 GHz ≤ 1.10 up to 26.5 GHz ≤ 1.08 up to 18 GHz / ≤ 1.15 up to 26.5 GHz
RF-leakage	≥ 100 dB - f (GHz) dB
Dielectric withstanding voltage (at sea level) - RG 405/U - RG 402/U	750 V rms, 50 Hz 1000 V rms, 50 Hz
Working voltage (at sea level) - RG 405/U - RG 402/U	≤ 250 V rms, 50 Hz ≤ 335 V rms, 50 Hz
Insulation resistance	$\geq 5 \cdot 10^3$ M Ω
Contact resistance - centre contact - outer contact	≤ 3 m Ω ≤ 2 m Ω
MECHANICAL DATA	REQUIREMENTS
Coupling nut torque - recommended - proof torque	0.80 Nm ... 1.10 Nm / <i>7.1 in. lbs ... 9.7 in. lbs</i> 1.70 Nm / <i>15.0 in. lbs</i>
Coupling nut retention force	≥ 270 N / <i>60.7 lbs</i>
Contact captivation	≥ 27 N / <i>6.1 lbs</i>
Durability (matings)	≥ 500
ENVIRONMENTAL DATA	TEST CONDITIONS
Temperature range	- 65°C ... + 90°C / - 85°F ... + 194°F
Thermal shock	MIL-STD-202, Method 107, Condition B
Moisture resistance	MIL-STD-202, Method 106
Corrosion	Saltspray test acc. to MIL-STD-202, Method 101, Condition B
Vibration	MIL-STD-202, Method 204, Condition D
Shock	MIL-STD-202, Method 213, Condition I

MATERIAL DATA

CONNECTOR PART	STANDARDS	MATERIAL	PLATING
Bodies, outer contacts	QQ-S-764	stainless steel	passivated
Cable entries	QQ-B-626	brass	gold
Centre contacts	QQ-C-530	beryllium-copper, hardened	gold
Support beads		polystyrene, crosslinked	
Gaskets		silicone rubber	

Some connectors may have a specification that differs from the above mentioned data.