



SERIES SK PRECISION SUBMINIATURE CONNECTORS

Description

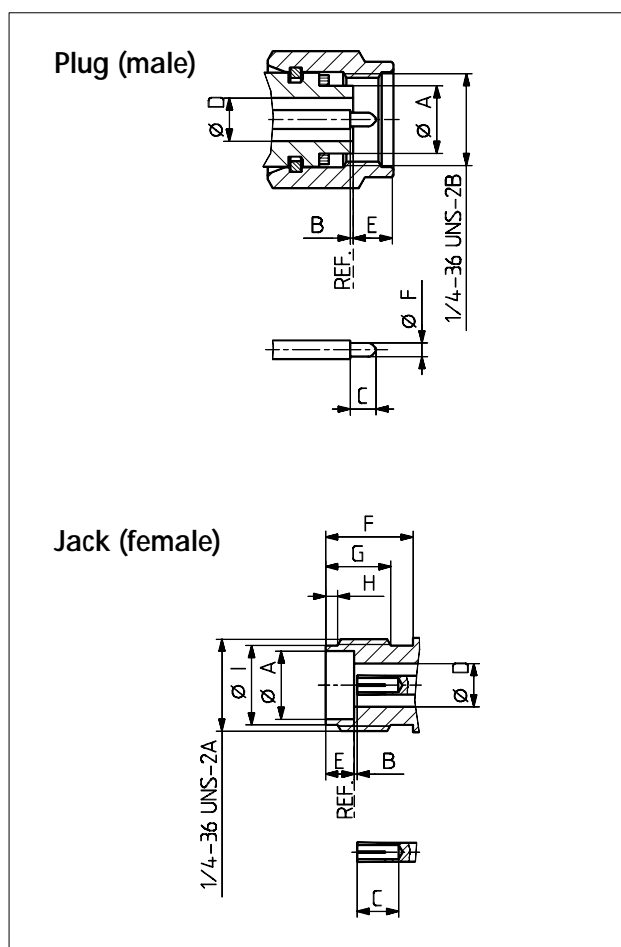
SUHNER SK connectors are precision connectors for microwave applications up to 40 GHz.

SK connectors are intermateable with series SMA and PC 3.5. They have a high mechanical stability and an excellent repeatability. The shortened male pin ensures a non-destructive mating process. The glass beads, when used in conjunction with the SK launchers, enable the connectors to be replaced without disturbing the hermetic seal.

For a mechanical decoupling between glass bead and internal microwave circuit, stress relief contacts are available.

Interface Dimensions

Interface Dimensions in mm / inches



	Plug		Jack	
	min.	max.	min.	max.
A	4.53/.178	4.57/.180	4.60/.181	4.64/.183
B	0.00/.000	0.13/.001	0.00/.000	0.13/.001
C	1.55/.061	1.65/.065	2.80/.110	–
D	2.89/.114	2.95/.116	2.89/.114	2.95/.116
E	–	3.28/.129	1.88/.074	1.98/.078
F	0.91/.036	0.94/.037	5.90/.232	–
G	–	–	4.40/.173	–
H	–	–	0.70/.028	0.90/.036
I	–	–	5.30/.208	5.40/.213

Technical Data

ELECTRICAL DATA	REQUIREMENTS
Impedance	50 Ω
Frequency range	DC ... 40 GHz
VSWR (typical values) - cable connectors (cable assembly with 2 connectors) - launchers	≤ 1.37 DC ... 40 GHz ≤ 1.43 DC ... 40 GHz
Dielectric withstanding voltage (at sea level)	750 V rms, 50 Hz
Working voltage (at sea level) mated/unmated	≤ 250 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	1.30 Nm / 11.47 in. lbs 1.70 Nm / 15.00 in. lbs
Contact captivation	≥ 22 N / 4.9 lbs
Durability (matings)	≥ 500

ENVIRONMENTAL DATA	TEST CONDITIONS
Temperature range	- 55°C ... + 125°C / - 67° F ... + 257° F
Thermal shock	MIL-STD-202, Method 107, Condition B
Vibration	MIL-STD-202, Method 204, Condition D

MATERIAL DATA			
CONNECTOR PART	STANDARDS	MATERIAL	PLATING
Bodies, cable connectors	QQ-C-530 / AISI	beryllium-copper, hardened / stainless steel	gold
Bodies, receptacles	AISI	stainless steel / copper alloy	passivated / gold
Centre contacts	QQ-C-530	beryllium-copper, hardened	gold
Support beads		PPO (polyphenylene oxide)	

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