Description

The SMP interface is a subminiature interface in the same scale as MMCX but offers a frequency range of DC to 40GHz. It can be provided with push-on or snap-on coupling mechanism style. In its snap-on style, the interface is available in two levels of detent, limited detent and full detent, each with different mating force.

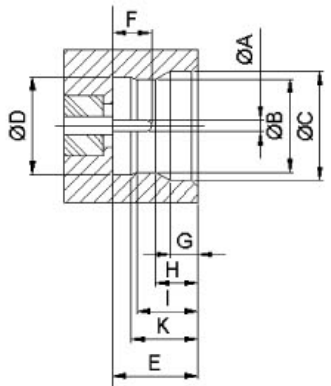
The main application of SMP is PC board to board interconnection, where a jack-to-jack adaptor called bullet links the two PCBs, the flexible link allows 0.5mm of radial and 0.25mm of axial float.

Zeeteq SMP connectors comply with MIL-STD-348A.

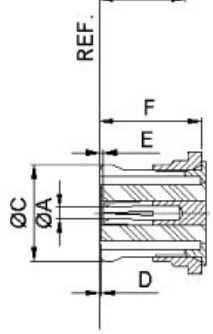
Configuration

Interface Scheme

Plug



Jack



Interface Dimensions

	Plug		Jack		
	min.	max.	min.	max.	
A	0.36	0.41	-	-	A
B	see below		-	-	B
C	3.53	3.68	-	3.34	C
D	3.13	3.23	0.00	-	D
E	2.78	2.88	0.00	0.20	E
F	1.14	1.40	3.35	-	F
G	0.84	0.94	-	-	G
H	1.40	1.45	-	-	H
I	see below		-	-	I
K	see below		-	-	K

		Smooth bore	Limited detent	Full detent
B	min.	3.13	3.00	2.90
	max.	3.23	3.10	3.00
I	min.	-	1.98	1.98
	max.	-	2.08	2.08
K	min.	-	1.98	2.19
	max.	-	2.08	2.29

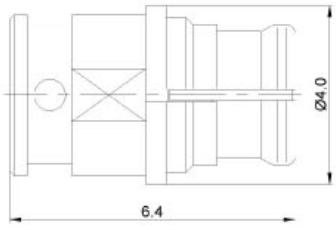
SPECIFICATION

ELECTRICAL DATA	
Impedance	50Ω
Frequency range for interface	DC-40GHz
VSWR(typical value)	≤1.5
Dielectric withstanding voltage(sea level, in Vrms,50Hz)	≥500
Working voltage(at sea level, in Vrms,50Hz)	≤335
Insulation resistance	≥5000MΩ
Contact resistance -center contact -outer contact	 ≤6mΩ ≤2mΩ

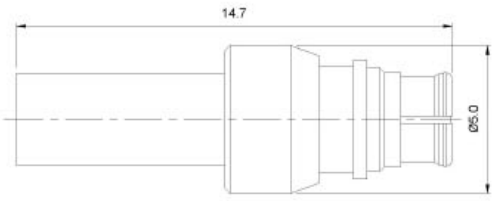
MECHANICAL DATA	
Engagement force -full detent -limited detent -smooth bore	 ≤68N ≤45N ≤9N
Disengagement force -full detent -limited detent -smooth bore	 ≥22N ≥9N ≥2.2N
Contact captivation	≥7N
Durability(matings) -full detent -limited detent smooth bore	 ≥100 ≥500 ≥1000

ENVIRONMENTAL DATA	
Temperature range	-65°C- +155°C
Thermal shock	MIL-STD-202,Method 107, Condition B
Moisture resistance	MIL-STD-202,Method 106
Corrosion	MIL-STD-202,Method 101, Condition B
Vibration	MIL-STD-202,Method 204, Condition B
Shock	MIL-STD-202,Method 213, Condition A

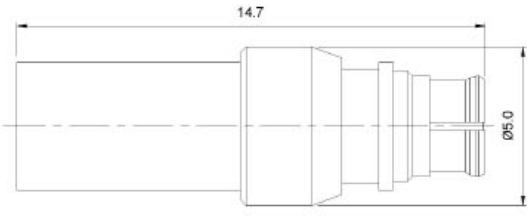
PLUG STRAIGHT CABLE CONNECTORS



Part number	Cable code	Cable	Center contact	Outer contact	Body plating
5113.SMP.JSC.01.111	01	UT47	solder	solder	gold
5114.SMP.JSC.02.111	02	UT85 RG405	solder	solder	gold

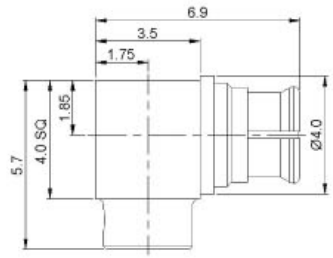


Part number	Cable code	Cable	Center contact	Outer contact	Body plating
5115.SMP.JSC.05.111	05	RG178 RG196	solder	crimp	gold

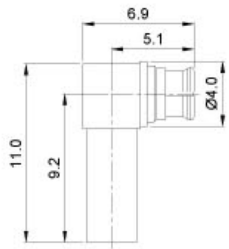


Part number	Cable code	Cable	Center contact	Outer contact	Body plating
5116.SMP.JSC.06.111	06	RG174 RG188 RG316	solder	crimp	gold
5117.SMP.JSC.07.111	07	RG316D	solder	crimp	gold

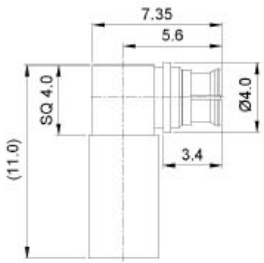
PLUG RIGHT ANGLE CABLE CONNECTORS



Part number	Cable code	Cable	Center contact	Outer contact	Body plating
5111.SMP.JRC.01.111	01	UT47	solder	solder	gold
5112.SMP.JRC.02.111	02	UT85 RG405	solder	solder	gold

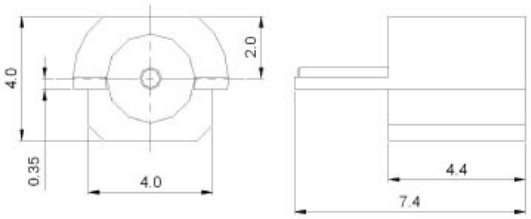


Part number	Cable code	Cable	Center contact	Outer contact	Body plating
5107.SMP.JRC.05.111	05	RG178 RG196	solder	crimp	gold

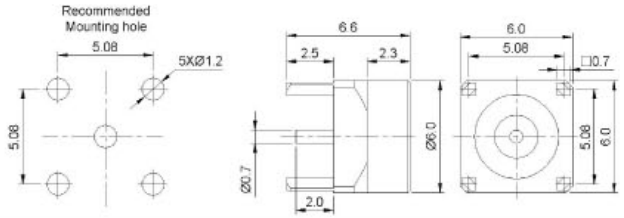


Part number	Cable code	Cable	Center contact	Outer contact	Body plating
5109.SMP.JRC.06.111	06	RG174 RG188 RG316	solder	crimp	gold
5110.SMP.JRC.07.111	07	RG316D	solder	crimp	gold

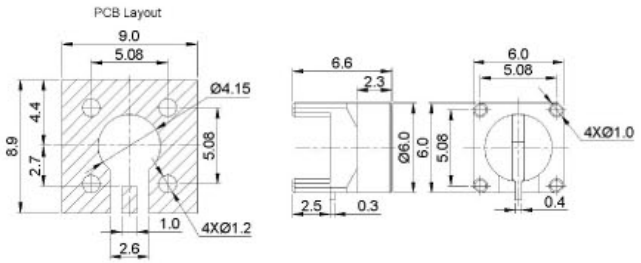
PCB MOUNT RECEPTACLES



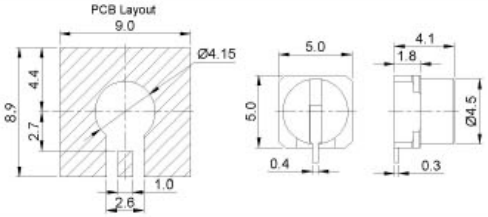
Part number	Center contact	Mating style	Body plating	Notes
5989.SMP.PSE.00.110	solder tab	limited	gold	flush dielectric, PCB edge mount



Part number	Center contact	Mating style	Body plating	Notes
5990.SMP.PST.00.110	solder tab	limited	gold	PCB through hole mount
5991.SMP.PST.00.110	solder tab	smooth	gold	PCB through hole mount



Part number	Center contact	Mating style	Body plating	Notes
5992.SMP.PST.00.110	surface tab	limited	gold	PCB through hole mount
5993.SMP.PST.00.110	surface tab	smooth	gold	PCB through hole mount



Part number	Center contact	Mating style	Body plating	Notes
5994.SMP.PSS.00.110	surface tab	limited	gold	PCB surface mount
5995.SMP.PSS.00.110	surface tab	smooth	gold	PCB surface mount