

## MECHANICAL:

SHELL: Aluminum Alloy

FINISH: Olive-Drab; Cadmium Plating (B); Electroless Nickel Plating (F);

INSERT INTERFACE: Plastic

GASKET: Silicon Rubber Elastomer

CONTACT MATERIAL: Copper Alloy

PLATING: Gold Plating Over Nickel

OPERATING LIFE: 500 Cycles Min.

SHOCK: 2940m/s<sup>2</sup> for 3ms

VIBRATION: Sine 294m/s<sup>2</sup> 10~2000Hz

CONTACT RETENTION FORCE:

MINIMUM VALUES:

#22D:44N #16:111N #8 COAXIAL:111N

#20:67N #12:111N #8 TRI-COAXIAL:111N

FINISH MARKING	FINISH	SALT SPRAY
A	Black Anticathode	48h
B	Black Nickel Plate	48h
N	Nickel Plate	48h
W	Nickel Plate Followed By Olive- Drab Cadmium Plate	500h
S	Stainless Steel Passivation	1000h

## ELECTRICAL:

### DIELECTRIC WITHSTANDING VOLTAGE (VRMS)(MATED)

Ratings	Sea level	21000m
M	1300	800
N	1000	600
1	1800	1000
2	2300	1000

CONTACT RESISTANCE: 5000 MΩ (500V DC) MAX.

DIELECTRIC STRENGTH:

#22D : 14.6mΩ #20 : 7.3mΩ

#16 : 3.8mΩ #12 : 1.8mΩ

CONTACT CURRENT RATINGS:

#22D:5A #20:7.5A #16:13A #12:23A

SHELL-TO-SHELL CONDUCTIVITY:

Olive-Drab Cadmium Plating : 2.5 mV,

Electroless Nickel Plating : 1 mV

SHIELDING: 100MHz 90dB ,1GHz 85dB, 10 GHz 65dB

OPERATING FREQUENCY:0~1GHz Characteristic Resistance :50Ω

VOLTAGE STANDING WAVE RATIO <1.3

#8 TRI-COAXIAL CONTACTS: Frequency 0 ~ 20 MHz

VOLTAGE RATING: 500V AC Max; 125V AC @ 21000 M

VOLTAGE DROP:

Inner and Middle Contact: < 75mV at 12 A

External Contact : < 75mV at 12A

## ENVIRONMENTAL:

TEMPERATURE RANGE:

Cadmium Plating (B) :-65°C~+175°C

Electroless Nickel (F) :-65°C~+200°C

SALT SPRAY: Finish B withstands 500 hours ; Finish F withstands 48hours

THERMAL SHOCK: After cycling connector between -65 C and +175 C, it will meet the electrical and mechanical requirements.

FLUID IMMERSION: Connectors resist specified immersions in MIL-PRF-7808, MIL-PRF-23699, MIL-PRF-5606 M2-V Chevron Oil, Coolanol 25, MIL-DTL-83133 ( JP-8), MIL-DTL 5624 (JP-4, JP-5), SAE-AMS1424 Type 1, and other solvents and cleaning agents.

Rev	Drawn	Approved	Checked	Date	
0	B.S.	S.M.	S.M.	01/22/09	<b>SMP TECHNOLOGY, INC.</b>
					High Density Miniature Circular Electrical Connector
TOL. DEC. .X +/- .XX +/- .XXX +/- ANGLE +/- UNIT: mm					MIL-DTL-38999-1 Pg: 1