

SPECIFICATION OF N MALE CONNECTOR FOR 1/2" SUPERFLEXIBLE CABLE

Telecommunication Technology & Engineering Accessories

Rev.V1.1

N Male For 1/2" SF Cable RF Connector is in accordance with IEC60169-16: 1982

Male interface screw thread: 5/8-24UNEF-2B

1>.Electrical Characteristics:

Model	N/M-1/2"SF	
Impedance(Ω)	50 Ω	
Frequency range	0~3 GHz	
Insertion loss (900MHz)	≤ 0.10 dB	
Intermodulation (PIM 3)	≤ -160 dBc@2x20W (≤ -165 dBc@2x20W Typical)	
Insulation resistance	≥ 5000 m Ω	
Contact resistance	Inner conductor	≤ 1.00 m Ω
	Outer conductor	≤ 0.25 m Ω
Withstanding voltage AC(V/min)	2500V	
VSWR	≤ 1.10 (0~2700MHz)	
Durability	500 Times	

Note: When results tested by different analyzers are different should adopt the HP testing device as criteria.

2>.Working environment:

Working temperature : -40~+85° C

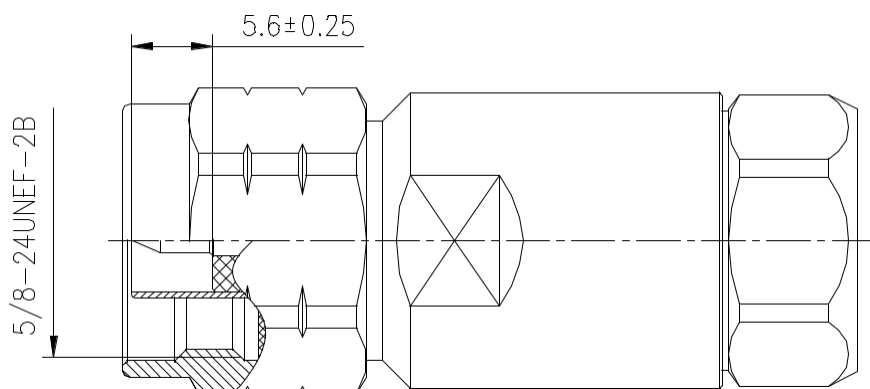
Relative moisture : 90%~95% (Temperature: 40 \pm 2°C)

Water-proof : IP 67

3>.Material and plating:

Name of part	Material	Plating	Thickness of plating
Outer Contact	Brass (HPb59-1)	Alloy plated	$\geq 3 \mu$
Center Contact	Bronze(QSn6.5-0.1)	Silver plated	3~6 μ
Plug Contact	Bronze(QSn6.5-0.1)	Silver plated	3~6 μ
Connecting Nut	Brass (HPb59-1)	Nickel plated	2~3 μ
Gasket	Rubber		
Insulator	PTEF (SFX-1-1)		

4>.Product dimensions:



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● 1/2" SUPERFLEXIBLE COAXIAL CABLE

MODEL: RF-50-1/2"SF
(HRCAY-50-9)

Structure Dimension:

Item	Diameter	Material
Inner Conductor	3.6 mm	Copper clad aluminum wire
Insulator	9.0 mm	Foamed polyethylene
Outer Conductor	12.1 mm	Helical corrugated copper tube
Jacket	14.0 mm	Polyethylene *

Mechanical Characteristics:

Item	Specification	Remarks
Static Minimum Bending Radius	15 mm	Single bend
Dynamic Minimum Bending Radius	30 mm	Repeat for 15 times
Tensile Strength	1000 N	
Cable Weight	240kg/km	

Electrical Characteristics:

Item	Specification	Remarks
Characteristic Impedance	50±1Ω	
Velocity	82%	Nominal value
Minimum Insulation Resistance	5000MΩ.km	DC 500V 1 minute
Capacitance	80pf/m	Nominal value
Dielectric Strength	DC3000V	1 minute
Inner Conductor DC Resistance	2.9Ω/km	At 20°C
Outer Conductor DC Resistance	3.4Ω/km	At 20°C
Peak Power Rating	15.6kW	
RF Peak Voltage	1400V	
VSWR Typical Value	1.15	10M-3000MHz
	1.08	800M-1000MHz
	1.08	1700M-2000MHz
	1.08	2100M-2400MHz

Attenuation & Average Power Rating (dB/100m,KW):

Frequency MHz	Attenuation	Average Power	Frequency MHz	Attenuation	Average Power
10	0.83	8.4	1800	15.54	0.557
100	3.10	2.6	1900	16.04	0.537
150	3.87	2.1	2000	16.52	0.525
200	4.53	1.81	2100	17.00	0.507
300	5.67	1.46	2200	17.47	0.498
450	7.09	1.18	2400	18.78	0.460
500	7.52	1.12	2500	18.84	0.459
700	9.02	0.96	2700	19.72	0.440
800	9.78	0.869	3000	21.00	0.417
900	10.45	0.815	4000	25.94	0.333
1000	11.09	0.770	5000	30.00	0.288
1500	13.98	0.616	6000	33.85	0.255
1700	15.03	0.575	8000	41.10	0.210

* The jacket can customize with Low Smoke Halogen Free.

