4.3/10 Male – 4.3/10 Male Superflex RF Jumper Cable

Specification

- Product Name: 1/2” Superflex RF Jumper Cable
- Model Number: RFJ-D430XMM (X:Length Meter)
- Connector Type: 4.3-10 Male to 4.3-10 Male
- Compliance Standards: IEC60169, VG95250, EN122190, GJB681-89, GJB360A-96, IEC 60169-54

1. Main Parameter

1.1 RF coaxial connector:

1.1.1 Connector Materials and Plating

- Inner conductor: Bronze, plated with silver, plating thickness: ≥0.003mm
- Outer conductor: Brass, plated with ternary alloy, plating thickness≥0.003mm
- Fastener: Brass; Insulation dielectric: PTFE.

1.1.2 Connector Electrical Spec

- Characteristics impedance: 50Ω
- Frequency range: DC-6GHz
- VSWR: ≤1.15 (DC-3GHz)
- Insulator resistance: ≥5GΩ
- Center conductor resistance: ≤1.0mΩ; Outer conductor resistance: ≤0.2mΩ
- Test voltage (at sea level): ≥2500 V rms
- PIM(IM3): ≤-160dBc@2x43dBm

1.1.3 Connector Mechanical Feature

- Mating cycles: ≥500 cycles
- Coupling nut retention: 500N
- Recommended torque: 5 N.m
- Termination cable retention: ≥300N

1.2 RF coaxial cable: 1/2” Super Flexible RF Cable

1.2.1 Materials

- Inner conductor: aluminum wire covered with copper (Φ3.55mm±0.04)
- Insulation dielectric: polyethylene foamed PE (Φ9.2mm±0.20)
- Outer conductor: Helically corrugated copper (Φ12.0mm±0.2)
- Cable jacket: PE or fire retardant PE (Φ13.60mm±0.20)

1.2.2 Feature

- Characteristics impedance: 50Ω
- Capacitance: 82 PF/m
- Propagation velocity: 83%
- Min. single bending radius: 50mm
- Tensile strength: 800N
- Insulation resistance: ≥5GΩ
- Shielding attenuation: ≥120dB
- VSWR: ≤1.15 (0.01-3GHz)

1.3 Jumper cable

1.3.1 Cable Component Size:

- Total length of cable assemblies:
  1000mm±10
  2000mm±20
  3000mm±25
  5000mm±40

1.3.2 Electrical feature

- Frequency Band: 700-2700MHz
- Characteristics Impedance: 50Ω±1
- Operating Voltage: 1500V
- VSWR: ≤1.1 (DC-3GHz), ≤1.15 (3-6GHz)
- Insulation voltage: ≥2500V
- Insulation resistance: ≥5GΩ (500V DC)
- PIM(IM3): ≤-160dBc@2x20W, manufacturing 100% QC test 900MHz, 1800MHz.

- Insertion Loss:

Frequency	1 Meter	2 Meter	3 Meter	5 Meter
800-960MHz	≤0.13dB	≤0.24dB	≤0.34dB	≤0.52dB
1710-1880MHz	≤0.18dB	≤0.34dB	≤0.50dB	≤0.78dB
1920-2200MHz	≤0.24dB	≤0.40dB	≤0.56dB	≤0.90dB
2500-2690MHz	≤0.28dB	≤0.48dB	≤0.68dB	≤1.0dB
5800-5900MHz	≤0.30dB	≤0.62dB	≤0.94dB	≤1.58dB

1.3.3 Environment feature

- Operating temperature range: -45℃ to +85℃
- Storage temperature range: -70℃ to +85℃
- Thermal shock: IEC 60068-2-14 Test Na
- Corrosion resistance: IEC 60068-2-11 Test Ka
- Vibration: IEC 60068-2-6 Test Fc
- Shock: IEC 60068-2-27 Test Ea
- Moisture resistance: IEC 60068-2-3 Test Ca
- Degree of protection (mated pair): IEC 60529, IP67