# RF50-1/2-F

## Structural Parameters

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| --- | --- | --- |
| Part Name | Material | Diameter（mm） |
| Inner conductor | Copper Clad Aluminum  Smooth solid tube | 4.8±0.05 |
| Dielectric | Foamed Polyethylene | 12.3±0.2 |
| Outer conductor | Corrugated Copper Tube  SIN wave style | 13.8±0.2 |
| Jacket | PE. Halogen Free. UV Protection | 15.7±0.2 |

## Technical Specifications

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| --- | --- |
| Max Operation Frequency | ≥ 8.8Ghz |
| Impedance | 50Ω |
| Return Loss (dB) | 0 - 2700 MHz: ≥ 23 |
| Capacitance | 76 pF/m |
| Inductance | 0.19 µH/m ± 1% |
| Insulation Resistance | ≥ 10000 MΩ.km |
| Velocity | 88% |
| Peak Power Rating | 40 KW |
| RF Peak Voltage | 1.95 KV |
| Insulation Voltage | 6 KV |
| Inner Conductor DC Resistance | ≤1.48 Ω/KM |
| Outer Conductor DC Resistance | ≤2.3 Ω/KM |
| Jacket Spark | 8.0 KV |
| Shielding Effectiveness | ＞120 dB |
| Operating Temperature | -55~+85 °C |
| Application | Indoor or Outdoor (IP68) |
| Attenuation(dB/100m) | 5.22@800MHz  5.70@900MHz  9.23@1800MHz  9.9@2000MHz  10.55@2100MHz  11.17@2400MHz  11.48@2500MHz  12.07@2700MHz  12.93@3000MHz  19.82@5800MHz |
| Power Rating (kW) | ≥ [1.11@900Mhz](mailto:1.11@900Mhz)  ≥ [0.77@1800Mhz](mailto:0.77@1800Mhz)  ≥ [0.71@2100Mhz](mailto:0.71@2100Mhz)  ≥ [0.62@2700Mhz](mailto:0.62@2700Mhz) |

## Mechanical Specifications

|  |  |
| --- | --- |
| Tensile strength | 1130N |
| No.of Bends | 15 |
| Min single bending radius | ≤70mm |
| Min Repeated bending radius | ≤125mm |
| Weight(kg/km) | ≥200 |
| Maximum clamp spacing(m) | ≥0.6 |
| Bending moment(Nm) | ≥3.8 |

## Drawing

