

SPB-370

High Performance Microwave Coax Cable

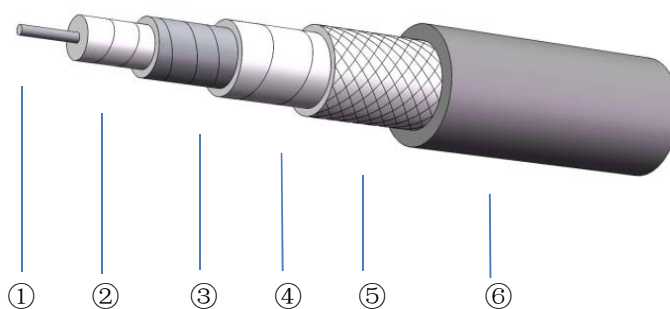
Product Description

Superlink SPB series coaxial cable is constructed with low density PTFE dielectric and silver plated copper foil and has very low loss. It keeps a high phase stability and amplitude stability while bending. Performance hardly vary in broad frequency range. It can be applied to most of harsh conditions which require strict standard like military radar, electronic warfare and airborne equipment.

Feature & Benefit

- 82%Vp PTFE Tape+SPC Foil
- Multi-layer protection,Ultra low loss
- Excellent Temp Phase Stable

Product Structure

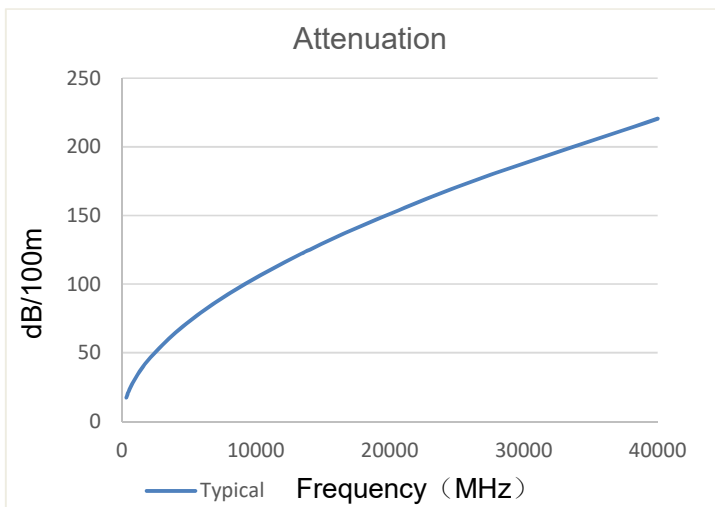


| | ①Center Conductor | ②Dielectric | ③Outer Conductor | ④Inner Layer | ⑤Outer shield | ⑥Jacket |
|-----------|-------------------|-------------|------------------|--------------|---------------|-----------|
| Material | SPC | LD PTFE | SPC | PET | SPC | FEP |
| Size (mm) | 1.02±0.03 | 2.80±0.05 | 3.00±0.05 | 3.05±0.05 | 3.40±0.05 | 3.70±0.15 |

Specifications

| | |
|------------------------------|---------------|
| Impedance | 50Ω |
| Operation Frequency | 40GHz |
| Velocity of Propagation | 82% |
| Shielding Effectiveness | 90dB |
| Voltage Withstand | 900V,DC |
| Time Delay | 4.06ns/m |
| Phase Stability(Bending) | ±8° 40GHz |
| Amplitude Stability | ±0.15dB 40GHz |
| Bend Radius:repeated | 37mm |
| Bend Radius:installation | 18mm |
| Weight | 33g/m |
| Temp, Operating&Installation | -55~165°C |
| Temp,Storage | -65~165°C |

Attenuation (Typical@25°C VSWR=1.0)



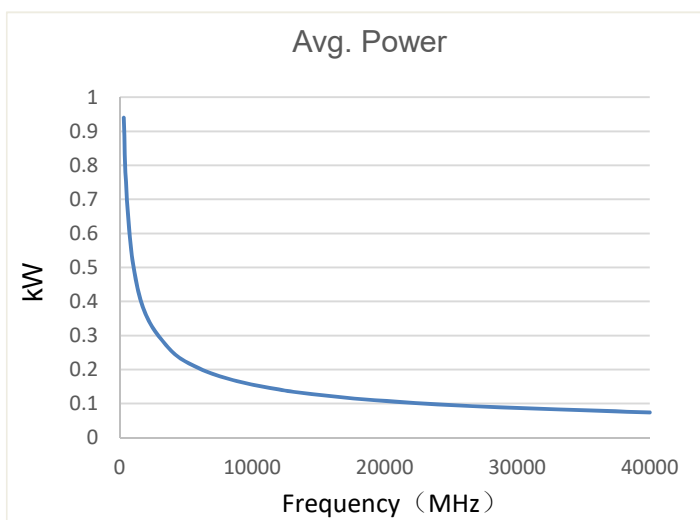
| Frequency(MHz) | Attenuation (dB/100m) |
|----------------|-----------------------|
| 300 | 17.3 |
| 500 | 22.4 |
| 1000 | 31.9 |
| 2000 | 45.5 |
| 4000 | 64.9 |
| 6000 | 80.1 |
| 8000 | 93.1 |
| 10000 | 104.7 |
| 12000 | 115.3 |
| 14000 | 125.1 |
| 18000 | 143.0 |
| 26500 | 176.1 |
| 40000 | 220.5 |

$$K1=1.0994853$$

$$K2=0.0006019$$

$$\text{Attenuation}=K1*\sqrt{F}+K2*F$$

Power (40°C VSWR=1.0 Sea Level)



| Frequency(MHz) | Avg.Power (kW) |
|----------------|----------------|
| 300 | 0.940 |
| 500 | 0.726 |
| 1000 | 0.511 |
| 2000 | 0.359 |
| 4000 | 0.251 |
| 6000 | 0.203 |
| 8000 | 0.175 |
| 10000 | 0.156 |
| 12000 | 0.141 |
| 14000 | 0.130 |
| 18000 | 0.114 |
| 26500 | 0.093 |
| 40000 | 0.074 |

Ver A-1