

# SPB-450-L

High Performance Microwave Coax Cable

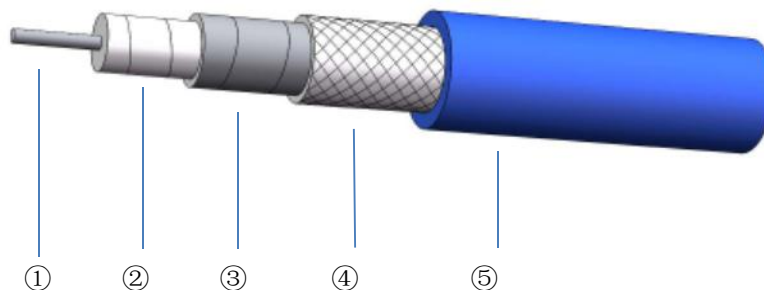
## Product Description

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

- Excellent Phase Stability
- 85%VP
- Ultra Light Weight

## Product Structure



	①Center Conductor	②Dielectric	③Outer Conductor	④Outer shield	⑤Jacket
Material	SPCCA	LD PTFE	SPC	SPC	FEP
Size (mm)	1.40±0.03	3.70±0.06	3.90±0.10	4.10±0.05	4.50±0.15

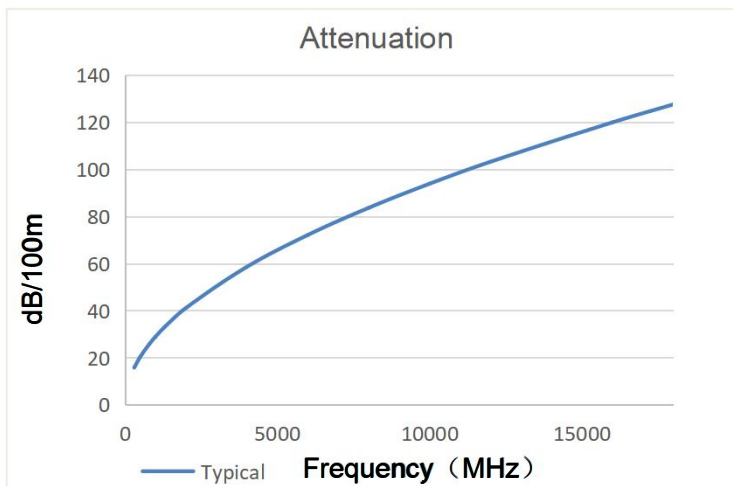
## Specifications

Impedance	50Ω
Operation Frequency	18GHz
Velocity of Propagation	83%
Shielding Effectiveness	90dB
Voltage Withstand	1500V,DC
Time Delay	4.02ns/m
Phase Stability(Bending)	±1.5° 1.3GHz
Phase Stability(Tem)	600PPM (-55~85℃)
Amplitude Stability	±0.1dB 18GHz
Bend Radius:repeated	50mm
Bend Radius:installation	20mm
Weight	33g/m
Temp, Operating&Installation	-55~165℃
Temp, Storage	-65~165℃

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## Attenuation (Typical@25°C VSWR=1.0)



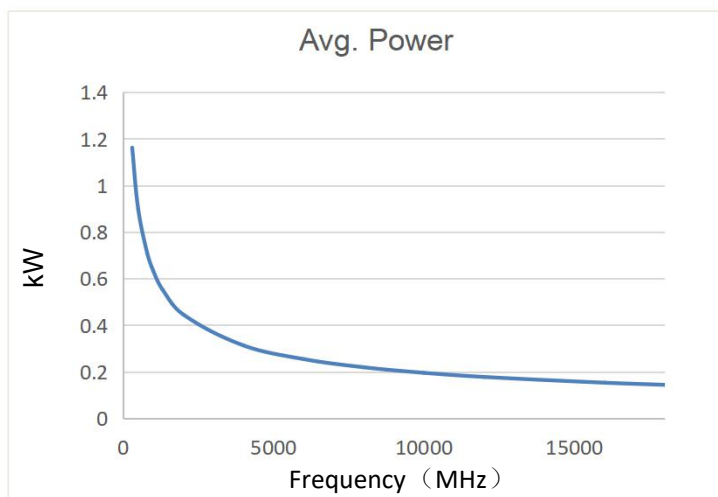
Frequency(MHz)	Attenuation (dB/100m)
300	15.8
500	20.4
800	25.8
1000	28.9
1300	33.0
2000	41.1
4000	58.6
6000	72.1
8000	83.6
10000	93.9
12000	103.2
16000	119.9
18000	127.5

$$K1= 0.904000$$

$$K2= 0.000348$$

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

## Power (40°C VSWR=1.0 Sea Level)



Frequency(MHz)	Avg.Power (kW)
300	1.162
500	0.898
800	0.709
1000	0.633
1300	0.554
2000	0.445
4000	0.313
6000	0.254
8000	0.219
10000	0.195
12000	0.177
16000	0.153
18000	0.144

Ver A-1