

# SPO-305

High Performance Microwave Coax Cable

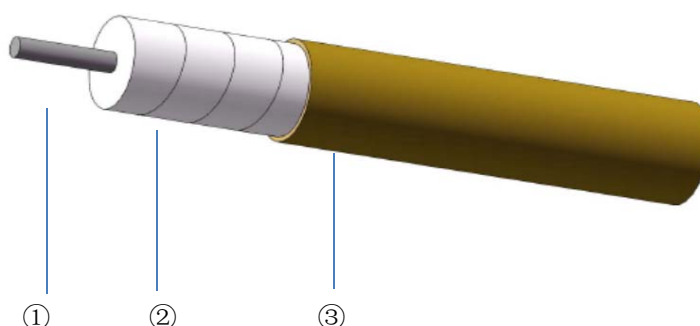
## Product Description

Superlink SPO series is an optimized version of traditional semi-rigid cable. It offers a lower loss, less weight and wider temperature range due to it adopts advanced PTFE wrapped dielectric to replace the solid PTFE dielectric. Meanwhile it has superior shielding effectiveness and corrosion resistance. It is applied to interconnection between cards, satellite communication, feed network, etc.

## Feature & Benefit

- LD PTFE Tape
- Ultra low loss,excellent size stable vs.temp

## Product Structure

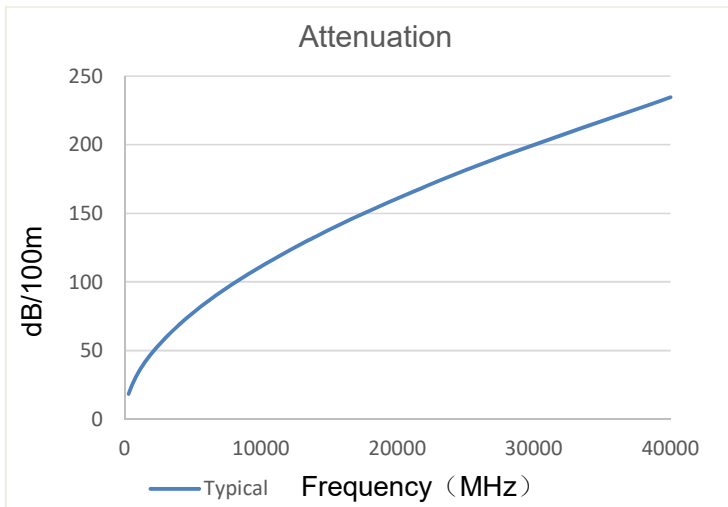


|           | ①Center Conductor | ②Dielectric | ③Outer Conductor     |
|-----------|-------------------|-------------|----------------------|
| Material  | SPC               | LD PTFE     | Seamless Copper Tube |
| Size (mm) | 0.91±0.02         | 2.70±0.05   | 3.05±0.06            |

## Specifications

|                              |          |
|------------------------------|----------|
| Impedance                    | 50Ω      |
| Operation Frequency          | 40GHz    |
| Velocity of Propagation      | 76%      |
| Shielding Effectiveness      | 165dB    |
| Voltage Withstand            | 1000V,DC |
| Bend Radius:installation     | 10.5mm   |
| Weight                       | 35g/m    |
| Temp, Operating&Installation | -55~250℃ |
| Temp,Storage                 | -65~250℃ |

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



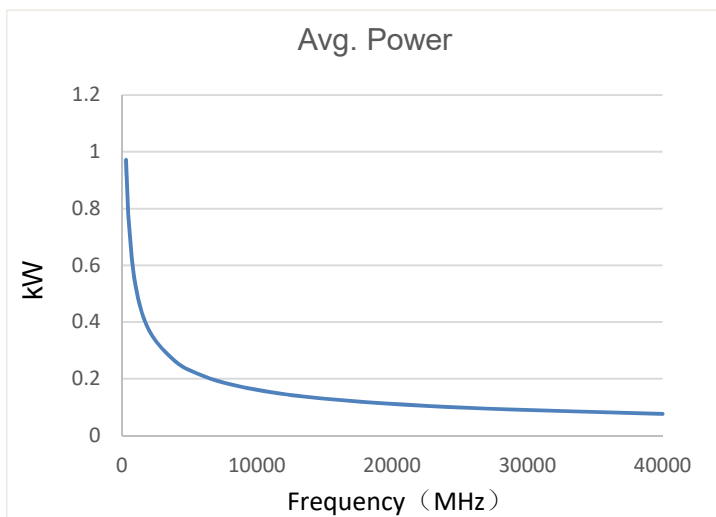
| Frequency(MHz) | Attenuation (dB/100m) |
|----------------|-----------------------|
| 300            | 18.5                  |
| 500            | 23.9                  |
| 1000           | 34.0                  |
| 2000           | 48.4                  |
| 4000           | 69.1                  |
| 6000           | 85.3                  |
| 8000           | 99.1                  |
| 10000          | 111.4                 |
| 12000          | 122.7                 |
| 14000          | 133.1                 |
| 18000          | 152.2                 |
| 26500          | 187.4                 |
| 40000          | 234.6                 |

$$K1= 1.055000$$

$$K2= 0.000590$$

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

## Power (40°C VSWR=1.0 Sea Level)



| Frequency(MHz) | Avg.Power (kW) |
|----------------|----------------|
| 300            | 0.972          |
| 500            | 0.751          |
| 1000           | 0.528          |
| 2000           | 0.371          |
| 4000           | 0.260          |
| 6000           | 0.210          |
| 8000           | 0.181          |
| 10000          | 0.161          |
| 12000          | 0.146          |
| 14000          | 0.135          |
| 18000          | 0.118          |
| 26500          | 0.096          |
| 40000          | 0.076          |

Ver A-1