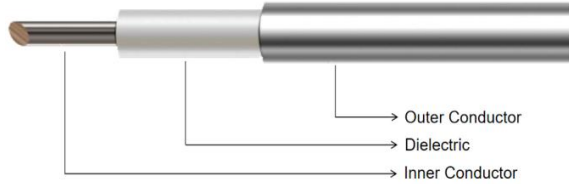


## FS250SR

18GHz, 50 Ohm,  $\Phi$ 6.35mm, Tri-metal plated seamless copper tube, Semi-rigid cable

### Structure:



### Structure Details

| Cable Type      | Dia.(mm) | Material                              |
|-----------------|----------|---------------------------------------|
| Inner Conductor | 1.63     | Silver plated Copper                  |
| Dielectric      | 5.28     | PTFE                                  |
| Outer Conductor | 6.35     | Tri-metal plated seamless copper tube |

### Electrical Specifications:

Operating Freq.: 18 GHz

Cut-off Freq.: 24 GHz

Impedance: 50  $\Omega$

Velocity of Propagation: 70%

Shielding Effectiveness: >165 dB

Dielectric Withstanding Voltage: 500 V DC

### Mechanical Specifications:

Static Bending Radius: 30 mm

Weight: 146 g/m

### Environmental Specifications:

Temperature: -55~+125  $^{\circ}$ C

### Typical Attenuation(dB/100m) and Power handling (W)

| Freq.(GHz)                 | 1    | 2    | 3    | 6    | 8    | 10   | 12.4  | 18    |
|----------------------------|------|------|------|------|------|------|-------|-------|
| Attenuation <sup>1</sup>   | 22.5 | 34.1 | 44.0 | 69.1 | 84.0 | 98.1 | 114.2 | 149.7 |
| Avg. Power <sup>2</sup>    | 1455 | 959  | 745  | 474  | 390  | 334  | 287   | 219   |
| K1: 0.587270, K2: 0.003937 |      |      |      |      |      |      |       |       |

1: Typical value@+25  $^{\circ}$ C,VSWR=1.0;

2: Typical value@+40  $^{\circ}$ C,atmospheric pressure;

3: Typical Cable Attenuation Calculation Formula:  $K1*\sqrt{F(\text{MHz})} + K2*F(\text{MHz})$ ;

4: Typical Connector Attenuation Calculation Formula:  $0.03*\sqrt{F(\text{GHz})}$  .

### Cable Assemblies Naming Rule:

PN: Cable-Freq.-Conn.1-Conn.2-Length(m)

Eg.: FS250SR-18-SM-SF-1 means FS250SR cable, DC-18GHz, SMA(m)-SMA(f), 1m.

Add "R" for right-angle or "H" for bulkhead after the connector code (e.g., SMR, SFH)

| Connectors Options | Frequency (Max) | VSWR (Max) | Body Material*      |
|--------------------|-----------------|------------|---------------------|
| SMA (S)            | 18GHz           | 1.25:1     | Nickel Plated Brass |
| TNC (T)            | 18GHz           | 1.25:1     | Nickel Plated Brass |
| N (N)              | 18GHz           | 1.25:1     | Nickel Plated Brass |
| BNC (B)            | 4GHz            | 1.30:1     | Nickel Plated Brass |

\*Connector material is subject to availability; please confirm material when placing your order.