

YSPTC-780C

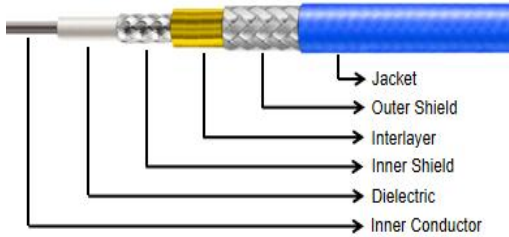
18 GHz, ϕ 7.80 mm Precision Test Cable Assembly

Key Features

- Excellent Phase Stability
- Low Insertion Loss
- High Flexibility
- Precision RF Performance
- Wide Frequency Coverage

Applications

- RF Test Systems
- Microwave Measurements
- Phased Array Radar
- Aerospace & Avionics
- Laboratory Applications

| Cable Construction | | | | | | | | | |
|---|-------------|------------|-----------------|------------------------------|----------------------------|------------|------|------|--|
|  | | | Cable Type | Dia.(mm) | Material | | | | |
| | | | Inner Conductor | ϕ 2.39 | Silver plated Copper | | | | |
| | | | Dielectric | ϕ 6.16 | Low Density PTFE | | | | |
| | | | Inner Shield | ϕ 6.40 | Silver Plated Copper Strip | | | | |
| | | | Interlayer | ϕ 6.70 | Low Density PTFE | | | | |
| | | | Outer Shield | ϕ 7.25 | Silver Plated Copper Braid | | | | |
| | | | Jacket | ϕ 7.80 | FEP | | | | |
| Electrical Specifications | | | | Mechanical Specifications | | | | | |
| Operating Freq. | 18 GHz | | | Static Bending Radius | 39 mm | | | | |
| Cut-off Freq. | 18 GHz | | | Dynamic Bending Radius | 78 mm | | | | |
| Impedance | 50 Ω | | | Weight | 123 g/m | | | | |
| Velocity of Propagation | 84% | | | Environmental Specifications | | | | | |
| Shielding Effectiveness | >90 dB | | | Temperature | -55 to +165°C | | | | |
| Dielectric Withstanding Voltage | 2500 VDC | | | | | | | | |
| Attenuation (dB/100 M, Typical at +25°C) & Power Handling (W, Typical at +40°C) | | | | | | | | | |
| Freq.(GHz) | 1 | 2 | 3 | 6 | 8 | 10 | 12.4 | 18 | |
| Attenuation | 16.7 | 23.8 | 29.3 | 42.1 | 48.9 | 55.0 | 61.7 | 75.3 | |
| Avg. Power | 1604 | 1125 | 913 | 637 | 548 | 487 | 435 | 356 | |
| Typical Cable Attenuation Calculation Formula: $K1*\sqrt{F}(\text{MHz}) + K2*F(\text{MHz})$ $K1=0.518300, K2=0.000320$ | | | | | | | | | |
| Connectors Options | | | | | | | | | |
| Connectors | Freq.(Max) | VSWR (Max) | | Connectors | Freq.(Max) | VSWR (Max) | | | |
| SMA (S) | 27 GHz | 1.25:1 | | N(N) | 18 GHz | 1.25:1 | | | |
| TNC(T) | 12 GHz | 1.25:1 | | SC(G) | 6 GHz | 1.25:1 | | | |
| | | | | | | | | | |

Cable Assemblies Naming Rule:

PN: Cable-Length(M)-Connector 1-Connector 2

Eg.: YSPTC-780C-1M-SM-SF means YSPTC-780C cable, L=1M, SMA(M)-SMA(F).

Add "R" for Right-Angle Connector, Add "H" for Bulkhead Connector (e.g., SMR, SFH).