



0471 Series Operating Up to 110 GHz



Center Conductor
Silver Plated
Copper

Dielectric
PTFE

Foil
Silver Plated
Copper

Braid
Silver Plated
Copper

Outer Jacket
FEP
(1.45mm 0.057")

0471

Electrical Characteristics

| | |
|-------------------------------------|------------|
| Impedance | 50 +/- 2Ω |
| Cut Off Frequency (cable only, max) | 115 GHz |
| Capacitance | 29 pF/ft. |
| Velocity of Propagation | 71% |
| Time Delay | 1.4 ns/ft. |
| Shielding Effectiveness up to 18GHz | >90 dB |
| Power Handling | See Chart |

Mechanical Characteristics:

| | |
|---------------------------------|----------------------|
| Weight | 0.075 oz/ft (6.9g/m) |
| Minimum Bend Radius inches (mm) | 0.0625" (1.6mm) |

Environmental Characteristics:

| | |
|--|----------------------|
| Operating Temperature Range ¹ | -65°C to +165°C |
| RoHS (2002/95/EC) | Available on request |

¹+200°C available on request

VSWR for assemblies with two straight connectors 1.35:1 to 18 GHz



0471 Series (Continued)

Attenuation (max)

| GHz | 0471 | | Power(W) @ 20°C @ Sea Level |
|------|--------|-------|--------------------------------|
| | dB/ft. | dB/m | |
| 0.04 | 0.22 | 0.72 | 50.0 |
| 1 | 0.43 | 1.41 | 32.0 |
| 2 | 0.51 | 1.67 | 25.0 |
| 4 | 0.74 | 2.43 | 15.0 |
| 6 | 0.92 | 3.02 | 12.0 |
| 8 | 1.07 | 3.51 | 10.0 |
| 10 | 1.29 | 4.23 | 9.0 |
| 12 | 1.30 | 4.26 | 8.0 |
| 14 | 1.50 | 4.92 | 7.5 |
| 16 | 1.60 | 5.25 | 7.0 |
| 18 | 1.76 | 5.77 | 6.5 |
| 20 | 1.86 | 6.10 | 6.0 |
| 22 | 1.96 | 6.43 | 5.6 |
| 24 | 2.06 | 6.76 | 5.3 |
| 26 | 2.16 | 7.08 | 5.0 |
| 28 | 2.26 | 7.41 | 4.8 |
| 30 | 2.31 | 7.58 | 4.6 |
| 32 | 2.41 | 7.90 | 4.4 |
| 34 | 2.51 | 8.23 | 4.0 |
| 36 | 2.61 | 8.56 | 3.8 |
| 38 | 2.71 | 8.89 | 3.6 |
| 40 | 2.73 | 8.95 | 3.4 |
| 50 | 3.02 | 9.90 | 3.2 |
| 60 | 3.38 | 11.07 | 3.0 |
| 80 | 4.04 | 13.25 | 2.4 |
| 90 | 4.35 | 14.27 | 2.3 |
| 100 | 4.65 | 15.27 | 2.1 |
| 110 | 4.95 | 16.23 | 2.0 |

