

PhaseTrack® 047

Low-Loss Micro Coaxial



PT-047 is a low-loss, highly flexible, foam-core micro coaxial cable. Originally designed for space satellite programs, this high-performance cable has many applications across multiple markets. It has a broad frequency range and strong durability making it ideal for medical, test equipment, and many other RF applications.

Features:

- High performance in a compact size
- Extremely rugged and low loss
- Broad frequency range up to 70 GHz
- Flex tested to over a million cycles
- In-the-box flexible alternative to 047 Semi-Rigid

Specifications

Ω Impedance
50 Ohms

Op Temp
-85 to 302°F
-65 to 150°C

Units

| | | |
|--------------------------|--------------|---------------|
| Maximum Outer Diameter | in (mm) | 0.065 (1.651) |
| Maximum Weight/1000 Feet | lb (kg) | 5.60 (2.54) |
| Static Bend Radius | in (mm) | 0.25 (6.35) |
| Dynamic Bend Radius | in (mm) | 0.75 (19.05) |
| Velocity of Propagation | % | 77 |
| Max. Frequency | GHz | 70 |
| Capacitance | pF/ft (pF/m) | 26.9 (88.25) |

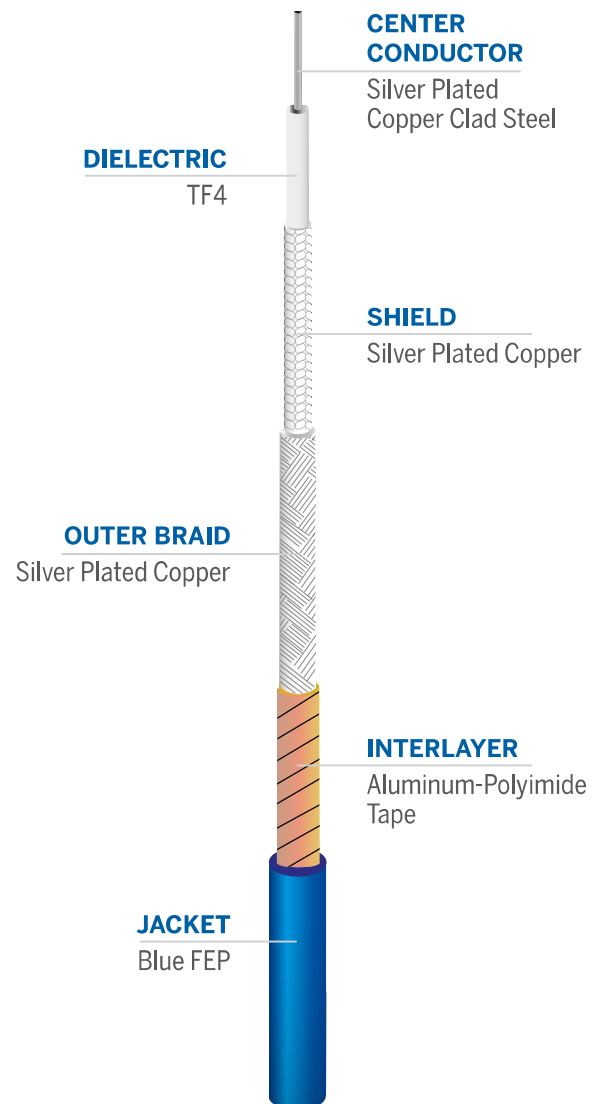
Calculation

$$IL = (K1 \times V(f) + K2 \times f) \times \text{Cable Length}$$

Cable Insertion Loss
f = Frequency (MHz)

Use **K** values with matching length unit

| K values | dB/ft | dB/m |
|-----------|----------|----------|
| K1 | 0.011767 | 0.038607 |
| K2 | 0.000008 | 0.00025 |



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Ordering Guide

PT047 -XXX XXX- XX.X CM
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 - Connector A Connector B - Length / 3 dig in / cm

| Code | Part-Number | Stock Code | Description |
|--------|----------------------|------------|-------------------------|
| MSMPFR | EZ-047-MSMPF-DS | 3190-6817 | SMPM female Right Angle |
| 185M | EZ-PT047-185M-SS | 3190-6875 | 1.85 male |
| 24M | EZ-PT047-24M-SS | 3190-6876 | 2.4 male |
| MSMPF | EZ-PT047-MSMPF-DS | 3190-6880 | SMPM female Straight |
| KM | EZ-PT047-KM-SS | 3190-6877 | 2.92 male Straight |
| SM | EZ-PT047-SM-SS | 3190-6878 | SMA male stainless |
| SMPF | EZ-PT047-SMPF-DS | 3190-6879 | SMP female Straight |
| SMPSF | EZ-PT047-SMPSF-DS | 3190-6898 | SMPS female straight |
| SMPSFR | EZ-PT047-SMPSF-RA-DS | 3190-6906 | SMPS female right angle |



Global manufacturing capability: US and Asia.



Assembled and tested assemblies provide assured performance.

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