

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

 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)

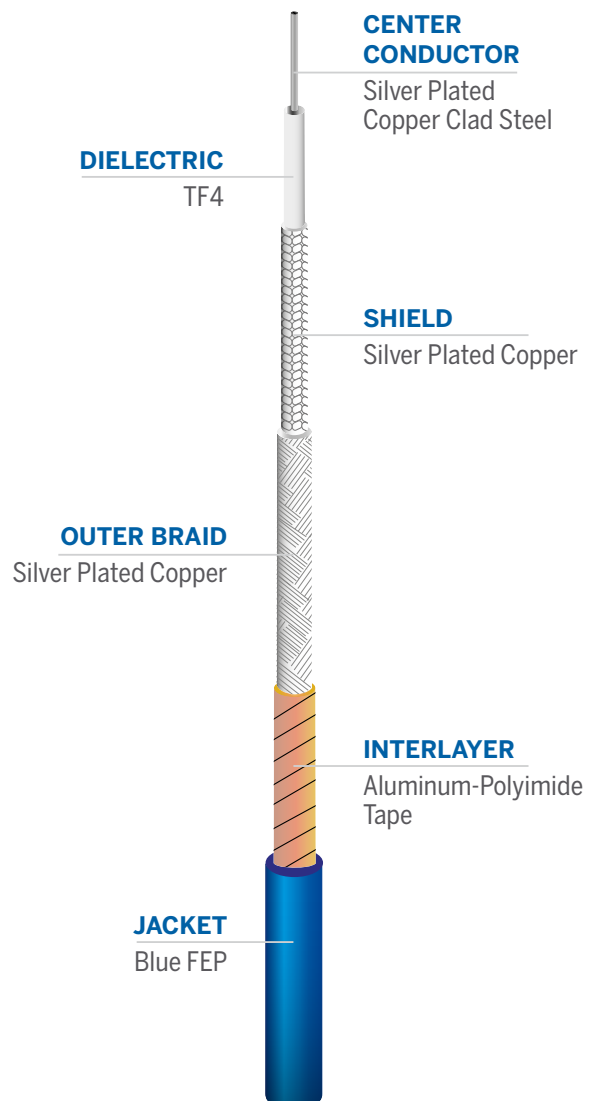
Calculation

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

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

- Connector A Connector B - Length / 3 dig in / cm

Code	Part-Number	Stock Code	Description
MSMPFR	EZ-047-MSMPF-RA	3190-68917	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-LW-SS	3190-6878	SMA male stainless
SMPF	EZ-PT047-SMPF-DS	3190-6878	SMP female Straight
SMPSF	EZ-PT047-SMPSF-DS	3190-6898	SMPS female Straight



Global manufacturing
capability: US and Asia.



Assembled and tested assemblies
provide assured performance.

Rev. 2: 05/2023

Mouser Electronics

Authorized Distributor

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[Amphenol:](#)

[3190-6875](#) [3190-6880](#) [3190-6898](#)