

PhaseTrack® 150

Phase Stable Cable



PT-150 is a phase stable and low-loss coaxial cable. It uses Times Microwave Systems' proprietary TF4® dielectric technology, which provides excellent phase stability over wide range of temperatures for assemblies. Originally designed for space satellite programs, this high-performance cable has many applications across multiple markets.

Features

- Excellent phase stability over temperature
- PTFE Knee is nonexistent
- Low insertion loss
- Vapor seal layer to prevent contamination

Specifications

Ω Impedance
50 Ohms

Op Temp
-85 to +302°F
-65 to +150°C

Units

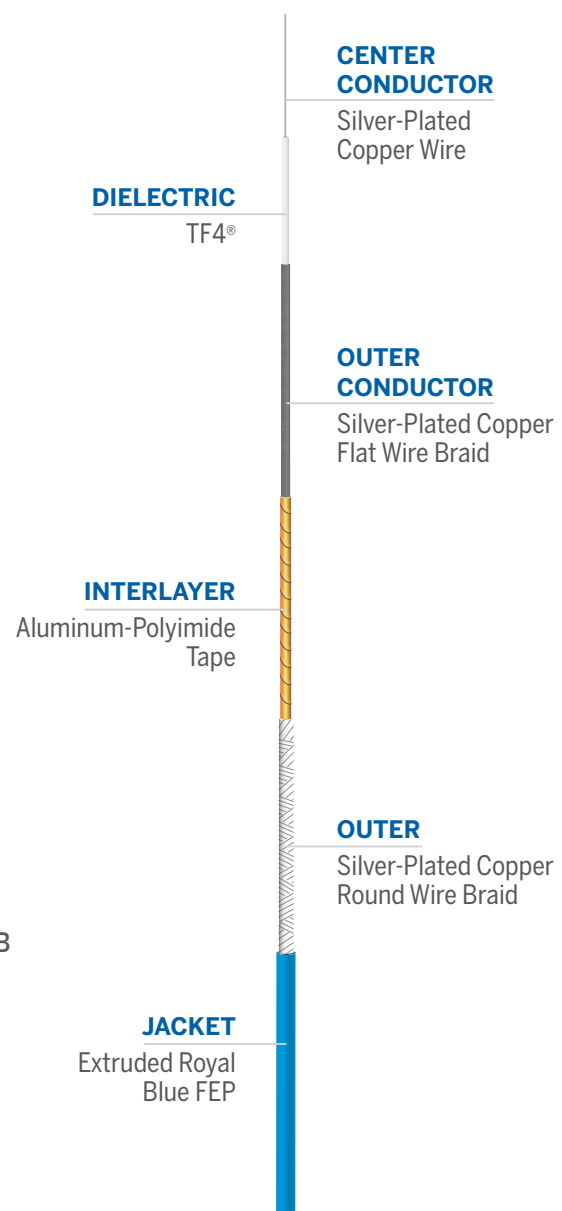
	Units	
Maximum Diameter	in (mm)	0.148 (3.76)
Weight	lb/ft (kg/m)	0.027 (0.04)
Maximum Cutoff Frequency	GHz	50
Minimum Bend Radius	in (mm)	0.75 (19.1)
Velocity of Propagation	%	81
Capacitance	pF/ft (pF/m)	25.20 (88.3)
Time Delay	ns/ft (ns/m)	1.26 (4.1)
Shielding Effectiveness	dB	-90

Calculation

$$IL = \underbrace{(K1 \times v(f) + K2 \times f)}_{\substack{\text{Cable Insertion Loss} \\ f = \text{Frequency (MHz)}}} \times \underbrace{\text{Cable Length}}_{\substack{\text{Use K values with} \\ \text{matching length unit}}} + \text{Connector A Loss} + \text{Connector B Loss}$$

K values **dB/ft** **dB/m**

K1	0.0041680	0.013675
K2	0.0000086	0.000028



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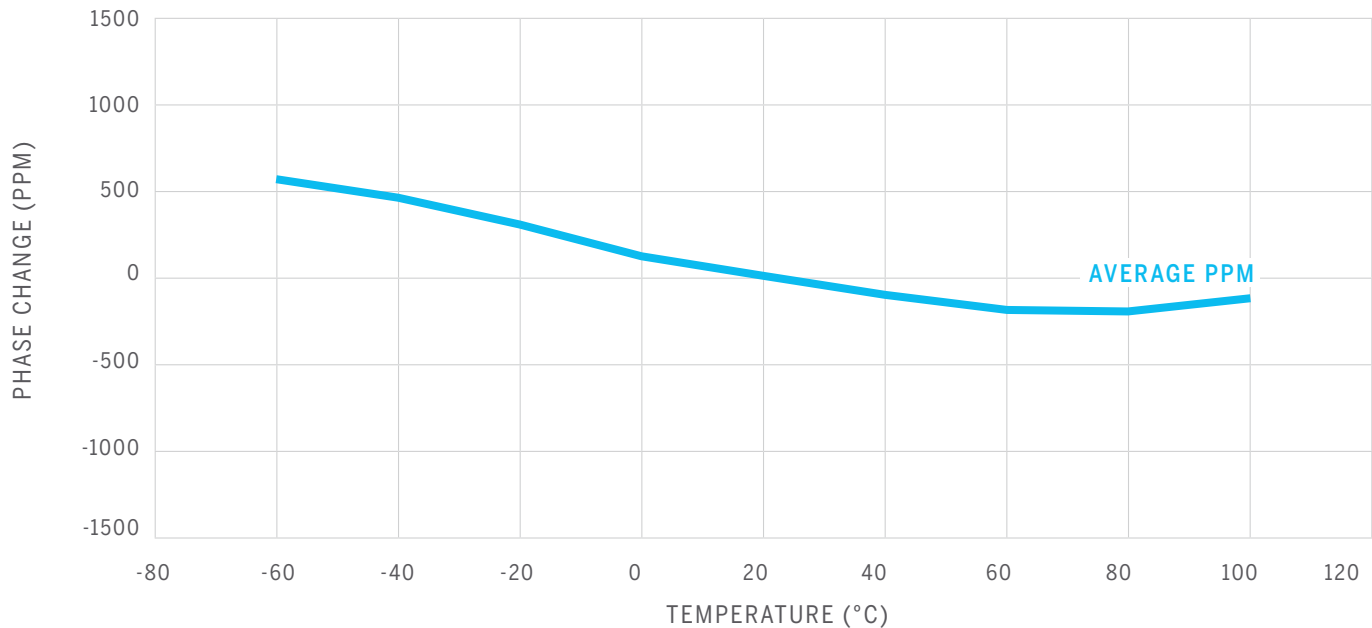
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Connectors

	Gender	Description	Stock Code	Connector Code	Max. Frequency (GHz)	Connector Loss (dB)
2.4mm	Female	Straight Bulkhead Jack	47465	24FBH	40	0.1 x vf(GHz)
	Male	Straight Plug	47350	24M	40	0.1 x vf(GHz)
2.92mm	Male	Straight Plug	47408	KM	40	0.1 x vf(GHz)
SMA	Female	Straight Bulkhead Jack	47345	SFBH	18	0.1 x vf(GHz)
	Male	Straight Plug	47288	SM	18	0.1 x vf(GHz)
		Right Angle Plug	47289	SMR	18	0.1 x vf(GHz)
SMP	Female	Straight Plug	3190-3261	SMPF	26.5	0.1 x vf(GHz)
		Right Angle Plug	3190-3259	SMPFR	26.5	0.1 x vf(GHz)

Phase Change VS Temperature (PPM)



Ordering Guide

PT150
Cable Code

-XXX
Connector A Code

XXX-
Connector B Code

XX.X
Length

X
Units of measure: I = Inches, F = Feet, M = Meters



Global manufacturing capability:
US, Asia, and India.



Assembled and tested assemblies
provide assured performance.

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