

# PhaseTrack® 210

## Phase Stable Cable



PT-210 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

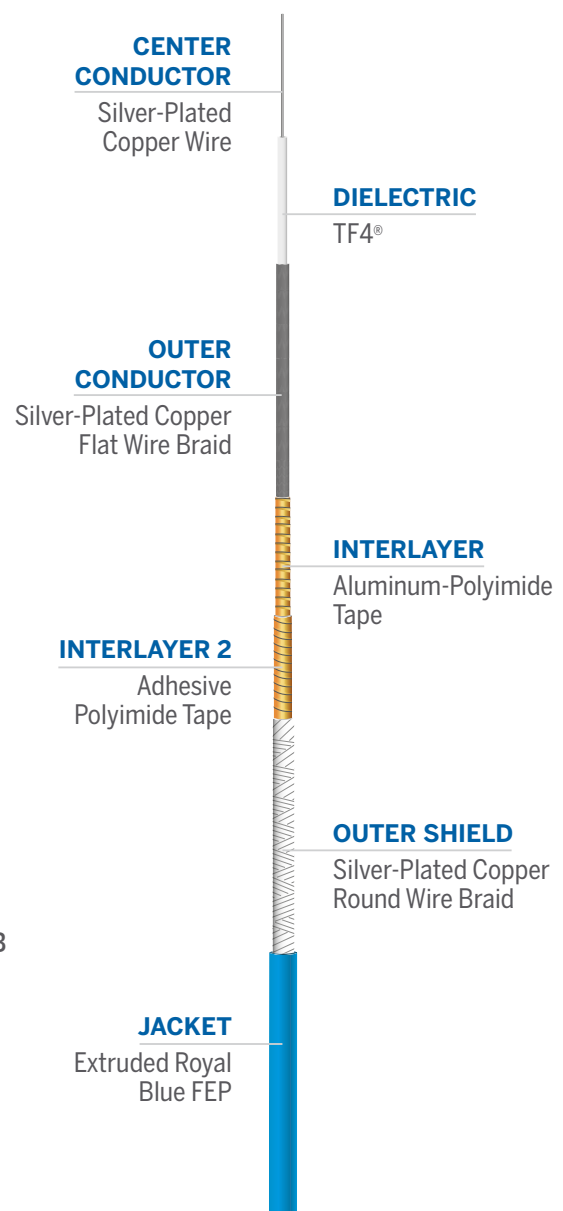
	Units	
Maximum Diameter	in (mm)	0.224 (5.69)
Weight	lb/ft (kg/m)	0.046 (0.07)
Maximum Cutoff Frequency	GHz	26.5
Minimum Bend Radius	in (mm)	1.13 (28.6)
Velocity of Propagation	%	83
Capacitance	pF/ft (pF/m)	24.40 (88.3)
Time Delay	ns/ft (ns/m)	1.23 (4.1)
Shielding Effectiveness	dB	-90

### Calculation

$$IL = (K1 \times v(f) + K2 \times f) \times \text{Cable Length} + \text{Connector A Loss} + \text{Connector B Loss}$$

Cable Insertion Loss  
 f = Frequency (MHz)  
 Use K values with matching length unit

K values	dB/ft	dB/m
K1	0.0025970	0.008520
K2	0.0000094	0.000031



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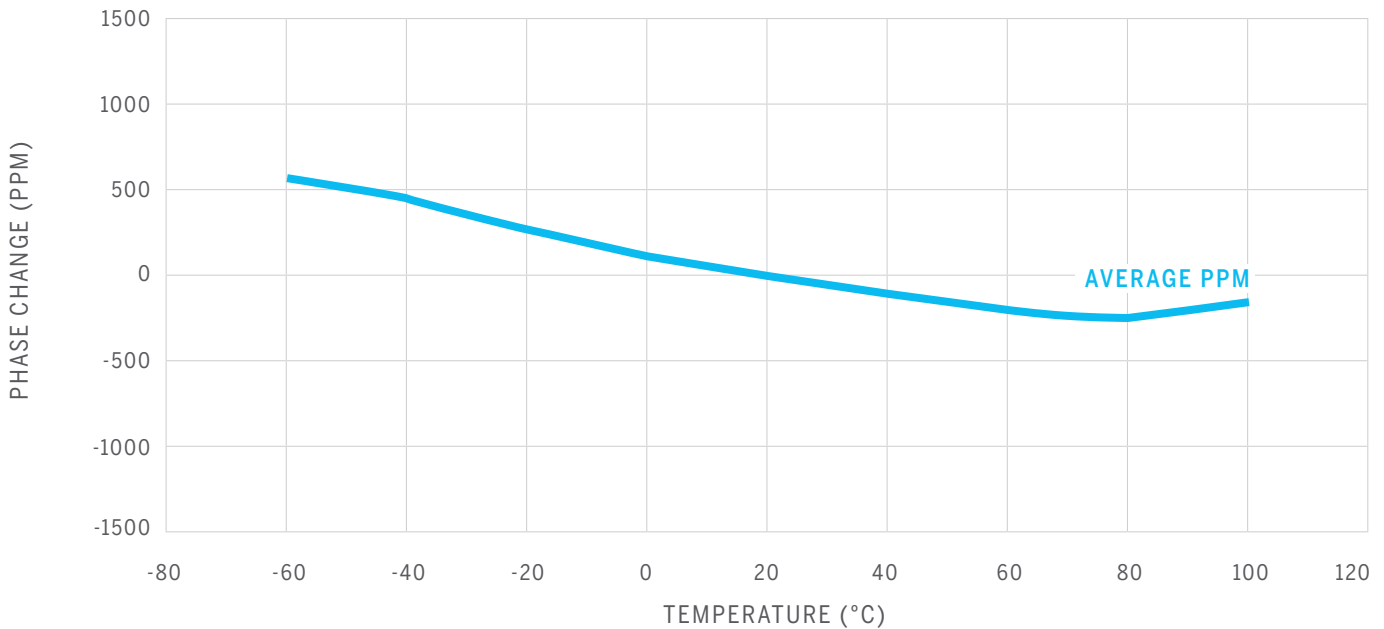
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## Connectors

	Gender	Description	Stock Code	Connector Code	Max. Frequency (GHz)	Connector Loss (dB)
2.92mm	Male	Straight Plug	47493	KM	40	0.1 x vf(GHz)
Type N	Male	Straight Plug	3190-2792	NM	18	0.1 x vf(GHz)
SMA	Female	Straight Bulkhead Jack	47273	SFBH	18	0.1 x vf(GHz)
		Straight Flange Jacket	47228	SFFL	18	0.1 x vf(GHz)
	Male	Straight Plug	47131	SM	18	0.1 x vf(GHz)
		Right Angle Plug	3190-3074	SMR	18	0.1 x vf(GHz)
SMP	Female	Straight Plug	47187	SMPF	40	0.1 x vf(GHz)

## Phase Change VS Temperature (PPM)



## Ordering Guide

**PT210**

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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**Times Microwave Systems**

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[www.timesmicrowave.com](http://www.timesmicrowave.com)

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