

PT | High Performance Temperature Phase Stable Low Loss Coax Cable

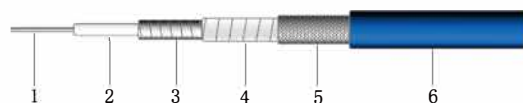


» Product features

- Light weight and flexible
- Great temperature phase stability
- Low loss
- High power handling capacity
- Long bending life
- Economical

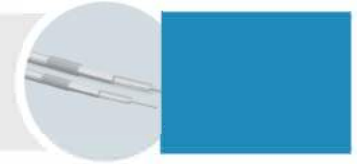
PT series temperature phase stable cables is great in mechanical and electrical characters. In some special applications, a harsh requirement on the temperature phase stability of cable assembly is essential. However, when the status of the facility itself or the environment varies, the dielectric constant changes along with the thermal expansion, consequently, the electrical length of cable assemblies will differ. To create value for customer, Focsuimple developed PT series, the Flexible Temperature-Phase Stable Low Loss Cable.

PT | Specification

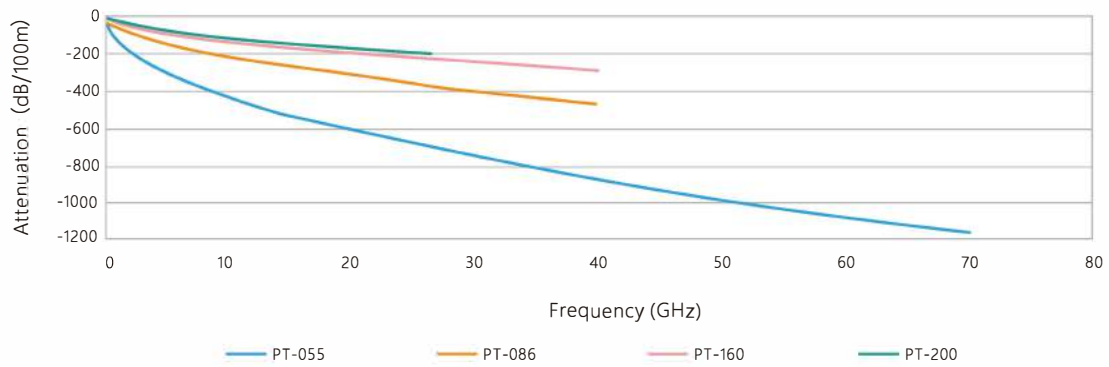


- | | | | |
|--------------------|----------|----------------|--------------------------------|
| 1 Center Conductor | SPC | 4 Interlayer | High Temperature Aluminum Foil |
| 2 Dielectric | PTFE | 5 Outer Shield | SPC Wire |
| 3 Outer Conductor | SPC Tape | 6 Jacket | FEP |

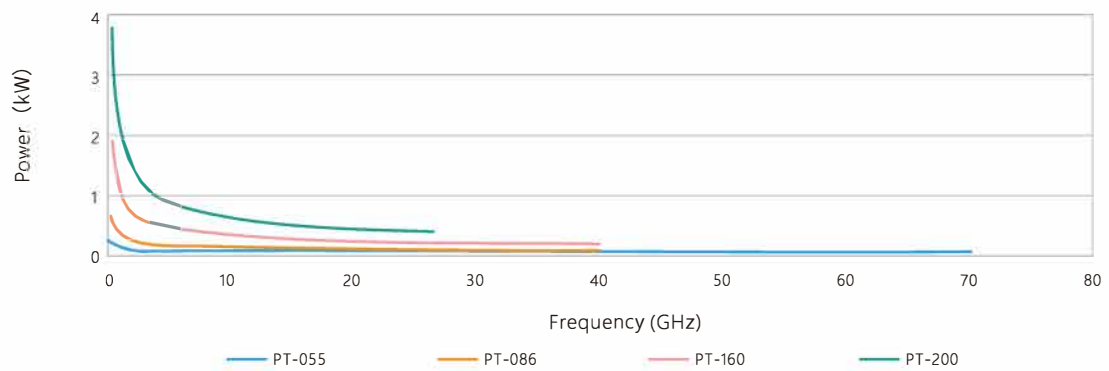
	PT-055			PT-086			PT-160			PT-200		
Physical & Mechanical Specifications												
Dimensions	mm	Inch		mm	Inch		mm	Inch		mm	Inch	
Jacket	1.40	0.055		2.20	0.087		4.00	0.158		5.00	0.197	
Bend Radius: Installation	7	0.280		15	0.591		24	0.950		25	0.790	
Bend Radius: Repeated	14	0.56		22	0.87		48	1.90		50	1.97	
Weight	5.6 g/m	0.004 lbs/ft		13 g/m	0.009 lbs/ft		40 g/m	0.027 lbs/ft		57 g/m	0.038 lbs/ft	
Temperature Range	-55~+165°C (-67~+329°F)											
Electrical Specifications												
Operating Frequency	70 GHz			40 GHz			40 GHz			26.5 GHz		
MaxAmplitudeStability(±dB)	±0.15			±0.15			±0.15			±0.15		
Impedance	50Ω											
Shielding Effectiveness	>90 dB											
Velocity of Propagation	80%			82%			82%			82%		
Attenuation & Power Handling	Attenuation (+25°C Ambient) & Power Handling(+40°C Ambient; Sea Level; VSWR1:1)											
Frequency (MHZ)	dB/ m	dB/Ft	kW	dB/m	dB/ Ft	kW	dB/m	dB/ Ft	kW	dB/ m	dB/ Ft	kW
1000	1.357	0.414	0.061	0.663	0.202	0.163	0.388	0.118	0.509	0.325	0.099	1.006
2000	1.923	0.586	0.043	0.946	0.288	0.114	0.558	0.170	0.355	0.468	0.143	0.698
4000	2.726	0.831	0.030	1.356	0.413	0.079	0.806	0.246	0.246	0.679	0.207	0.481
8000	3.869	1.180	0.021	1.953	0.595	0.055	1.173	0.358	0.169	0.995	0.303	0.329
10000	4.332	1.321	0.019	2.200	0.671	0.049	1.327	0.405	0.149	1.128	0.344	0.290
18000	5.839	1.780	0.014	3.021	0.921	0.036	1.847	0.563	0.107	1.581	0.482	0.207
20000	6.161	1.878	0.013	3.200	0.976	0.034	1.962	0.598	0.101	1.681	0.513	0.194
26500	7.113	2.168	0.012	3.737	1.139	0.029	2.309	0.704	0.086	1.986	0.606	0.165
40000	8.782	2.678	0.009	4.704	1.434	0.023	2.944	0.898	0.067			
50000	9.850	3.003	0.008									
67000	11.456	3.493	0.007									
70000	11.718	3.573	0.007									
Attenuation at Frequency	dB/m= $\frac{K1*\sqrt{FMHz}+K2*FMHz}{100}$											
K1	4.2735000			2.0475000			1.1823955			0.9810220		
K2	0.0005880			0.0015225			0.0014490			0.0014692		



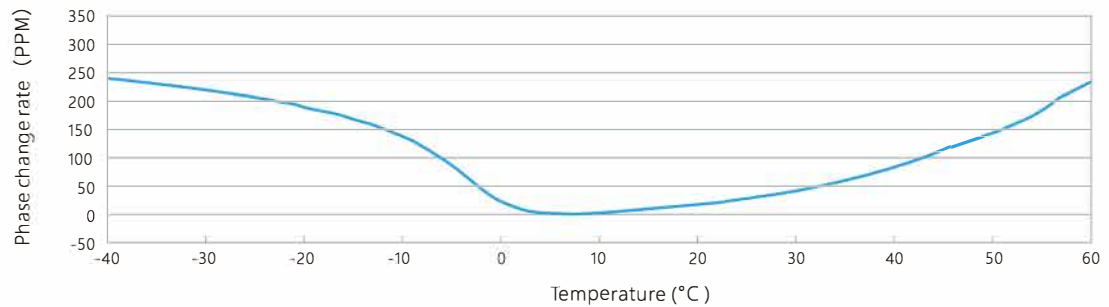
Frequency & Attenuation

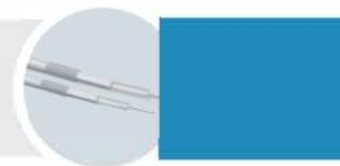


Frequency & Power

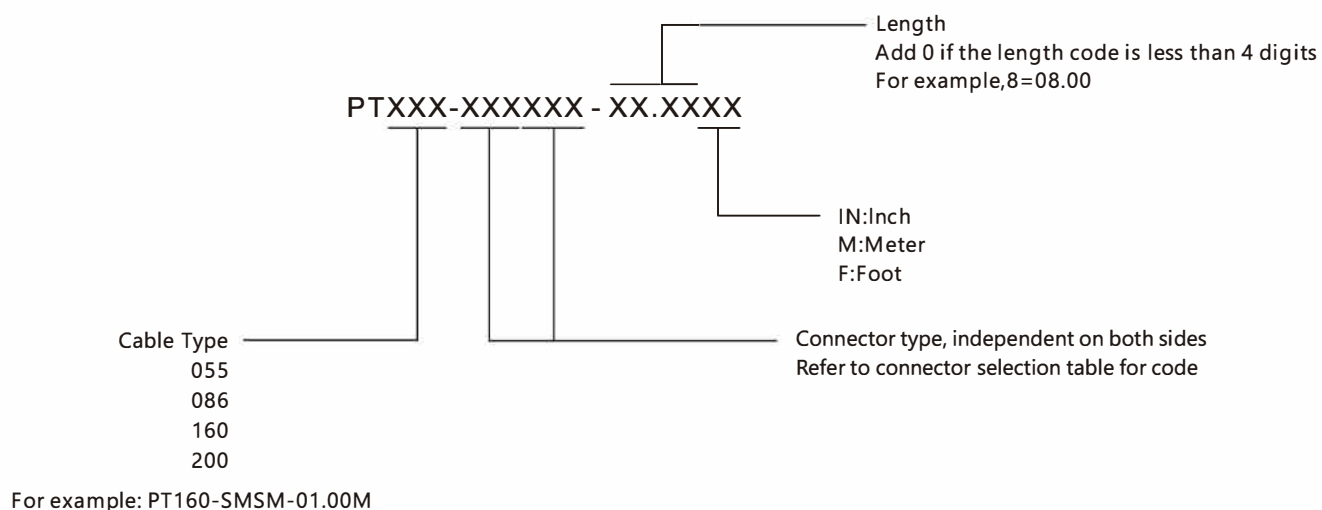


Temperature Phase (PPM)





Assembly Selection Information



Optional Connectors

Connector Code	Connection Type	Operating Frequency (GHz)	PT-055	PT-086	PT-160	PT-200	Typical VSWR	Max VSWR
18M	1.85mm MALE	67GHz	○				1.30	1.35
29M	2.92mm MALE	40GHz		○	○		1.25	1.30
35M	3.5mm MALE	26.5GHz		○			1.25	1.30
SM	SMA Male	18GHz	○	○	○	○	1.25	1.30
SF	SMA Female	18GHz	○				1.25	1.30

Note:

● = stocked and ○ = designed but not stocked.