

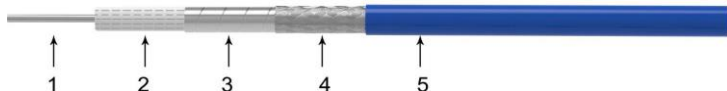
Temperature Phase Stable Flexible Cable

PT220

Features & Benefits

- Excellent phase and insertion loss stability vs temperature
- Low loss operating to 40GHz
- Available with 2.92mm, SMP, SSMP cable assemblies
- No PTFE "Knee"
- Small bending radii and low profile for easy routing

Cable Construction



No.	Construction	Size (mm)	Materials
1	Center conductor	0.51	Silver Plated Copper
2	Dielectric	1.40	PFA Fluoropolymer
3	Outer conductor	1.56	Silver plated copper tape wrap
4	Outer shield	1.87	Silver plated copper braiding
5	Jacket	2.20	FEP



Electrical

Frequency	DC-40 GHz
Impedance	50 Ω
Velocity of Propagation	82%
Shielding Effectiveness	>90 dB
Withstanding Voltage	400 V
*Mechanical Phase Stability	<±6°
Amplitude Stability vs Shaking	<±0.15dB
Temp Phase Stability	<300ppm(-40°C to +60°C)

* Wrap the cable 360 degree around a 22mm radius mandrel.

Mechanical & Environmental

Min. Bending Radius Static	15mm
Min. Bending Radius Repeated	22mm
Weight	13g/m
Temperature(Operation)	-50~150 °C
Temperature(Storage)	-60~160 °C

Attenuation(Typical@25 °C & VSWR=1.0) & Power(VSWR=1.0; 40 °C; Sea level)

Frequency MHz	300	1000	2000	4000	6000	8000	10000	12000	14000	18000	26500	40000
dB/100 Meter	35.9	66.3	94.6	135.6	167.7	195.3	220.0	242.6	263.6	302.1	373.6	470.4
Avg. Power kW	0.300	0.163	0.114	0.079	0.064	0.055	0.049	0.044	0.041	0.036	0.029	0.023
Attenuation at any frequency = [2.0475×SQRT(FMHz)]+[0.001522×FMHz]												

Available connectors

Cable P/N	Connectors	Gender	Orientation	Mounting	Max Freq.(GHz)	VSWR Max
PT220	SMA	Male	Straight	Standard	26.5	1.3
PT220	SMA	Female	Straight	Standard	18	1.3
PT220	SMA	Male	Right Angle	Standard	18	1.35
PT220	2.92mm	F/M	Straight	Standard	40	1.3
PT220	SMP	Female	Straight	Standard	40	1.4
PT220	SMP	Female	Right Angle	Standard	26.5	1.45
PT220	SSMP	Female	Straight	Standard	40	1.4

Other connectors available upon request.

Typical Test Plot for Temperature Phase Stability

