

# YSPTC-510C

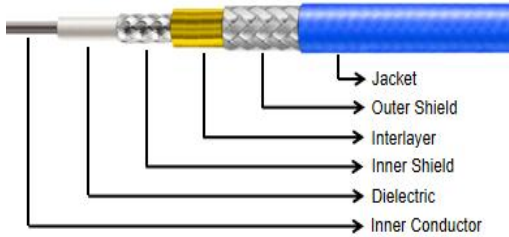
26.5 GHz, φ5.10 mm Precision Test Cable Assembly

## Key Features

- Excellent Phase Stability
- Low Insertion Loss
- High Flexibility
- Precision RF Performance
- Wide Frequency Coverage

## Applications

- RF Test Systems
- Microwave Measurements
- Phased Array Radar
- Aerospace & Avionics
- Laboratory Applications

Cable Construction									
				Cable Type	Dia.(mm)	Material			
				Inner Conductor	φ1.44	Silver plated Copper			
				Dielectric	φ3.85	Low Density PTFE			
				Inner Shield	φ4.05	Silver Plated Copper Strip			
				Interlayer	φ4.30	Low Density PTFE			
				Outer Shield	φ4.65	Silver Plated Copper Braid			
				Jacket	φ5.10	FEP			
Electrical Specifications					Mechanical Specifications				
Operating Freq.		26.5 GHz			Static Bending Radius		25.5 mm		
Cut-off Freq.		29 GHz			Dynamic Bending Radius		51 mm		
Impedance		50 Ω			Weight		55 g/m		
Velocity of Propagation		82%			Environmental Specifications				
Shielding Effectiveness		>90 dB			Operating Temperature		-55 to +165°C		
Dielectric Withstanding Voltage		1500 VDC							
Attenuation (dB/100 M, Typical at +25°C) & Power Handling (W, Typical at +40°C)									
Freq.(GHz)	1	2	3	6	8	10	12.4	18	26.5
Attenuation	27.1	38.9	48.1	69.6	81.3	91.9	103.5	127.4	158.8
Avg. Power	821	573	463	320	274	242	215	175	140
Typical Cable Attenuation Calculation Formula: $K1*\sqrt{F(\text{MHz})} + K2*F(\text{MHz})$ $K1=0.828800, K2=0.000900$									
Connectors Options									
Connectors	Freq.(Max)	VSWR (Max)			Connectors	Freq.(Max)	VSWR (Max)		
2.92 mm (K)	40 GHz	1.30:1			TNC(T)	12 GHz	1.25:1		
3.5 mm (3)	27 GHz	1.30:1			BNC(B)	4 GHz	1.30:1		
SMA (S)	27 GHz	1.25:1			N(N)	18 GHz	1.25:1		

## Cable Assemblies Naming Rule:

PN: Cable-Length(M)-Connector 1-Connector 2

Eg.: YSPTC-510C-1M-SM-SF means YSPTC-510C cable, L=1M, SMA(M)-SMA(F).

Add "R" for Right-Angle Connector, Add "H" for Bulkhead Connector (e.g., SMR, SFH).