

# YSPTC-245C

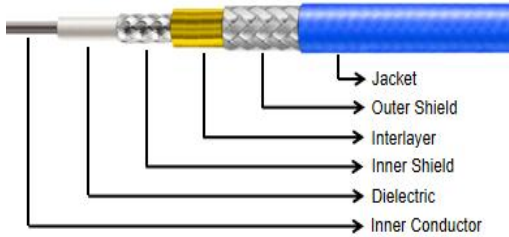
67 GHz, φ2.45 mm Precision Test Cable Assembly

## 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	φ0.50	Silver plated Copper							
				Dielectric	φ1.38	Low Density PTFE							
				Inner Shield	φ1.54	Silver Plated Copper Strip							
				Interlayer	φ1.82	Low Density PTFE							
				Outer Shield	φ2.17	Silver Plated Copper Braid							
				Jacket	φ2.45	FEP							
Electrical Specifications					Mechanical Specifications								
Operating Freq.		67 GHz			Static Bending Radius				12.5 mm				
Cut-off Freq.		82 GHz			Dynamic Bending Radius				24.5 mm				
Impedance		50 Ω			Weight				16 g/m				
Velocity of Propagation		81%			Environmental Specifications								
Shielding Effectiveness		>90 dB			Operating Temperature				-55 to +165°C				
Dielectric Withstanding Voltage		800 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	40	67		
Attenuation	63.7	90.8	111.9	160.4	186.5	209.8	235.2	287.1	354.0	444.0	593.2		
Avg. Power	110	77	63	44	38	33	30	24	20	16	12		
Typical Cable Attenuation Calculation Formula: $K1*\sqrt{F(\text{MHz})} + K2*F(\text{MHz})$													
K1=1.975832, K2=0.01221													
Connectors Options													
Connectors	Freq.(Max)	VSWR (Max)		Connectors	Freq.(Max)	VSWR (Max)							
1.85 mm(v)	67 GHz	1.30:1		SSMA (M)	40 GHz	1.30:1							
2.4 mm (2)	50 GHz	1.30:1		SMP (P)	40 GHz	1.30:1							
2.92 mm (K)	40 GHz	1.30:1		SSMP (M)	65 GHz	1.30:1							
3.5 mm (3)	27 GHz	1.30:1		N(N)	18 GHz	1.25:1							
SMA (S)	27 GHz	1.25:1		MCX(C)	6 GHz	1.30:1							

## Cable Assemblies Naming Rule:

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

Eg.: YSPTC-245C-1M-SM-SF means YSPTC-245C cable, L=1M, SMA(M)-SMA(F).

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