

Phaseline Series High Performance Phase Stable Test Cable

PL50/2.4mm Male /2.4mm Male/DC-50 GHz

Model: PL50-2.4M2.4M-L

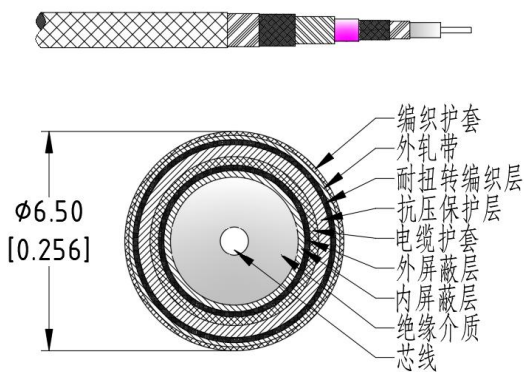
Features:

- Max Frequency 50 GHz
- VSWR max of 1.30
- Velocity of Propagation of 76%

Applications:

- Test & Measurement equipment
- Manufacturing lab
- WAN system equipment

Cable Cross Section:



Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency Range	DC		50	GHz
VSWR		1.20	1.25	:1
Velocity of propagation		76%		
Shielding Effectiveness	90			dB
Capacitance			87	pF/m
Phase Stability Vs. Flexure@50GHz		± 4		$^{\circ}$
Amplitude Stability Vs. Flexure@50GHz		± 0.03		dB

Environmental And Physical Characteristics:

Description	Parameter	Units
Cable Diameter	6.5	mm
Cable Jacket	PTFE	
Min. Bending Radius	51	mm
Typical Flex life	50000	
Operating Temperature	-55 to +150	$^{\circ}\text{C}$
Storage Temperature	-55 to +165	$^{\circ}\text{C}$

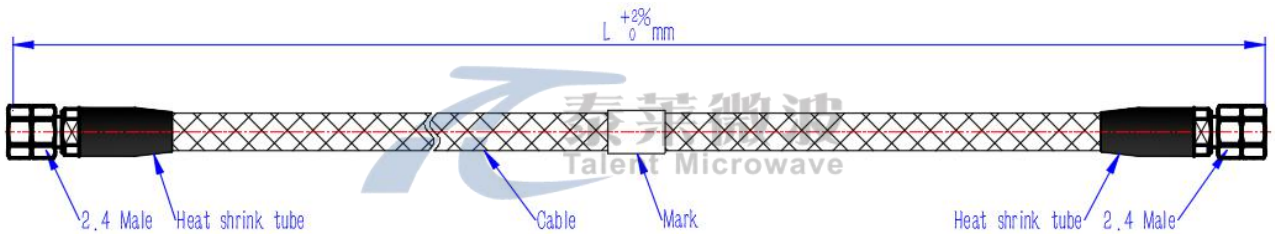
Cable Performance By Frequency

Frequency	2 GHz	4 GHz	6 GHz	8 GHz	12 GHz	16 GHz	18 GHz	26.5 GHz	40GHz	50GHz
Insertion Loss (dB/m Max.)	0.62	0.88	1.09	1.26	1.55	1.80	1.92	2.35	2.92	3.29
RF Power CW (W Max.)	230	162	132	114	92	79	75	61	49	44

Connectors:

Description	Connector 1	Connector 2
Type	2.4mm Straight Male	2.4mm Straight Male
Contact Material And Plating	Beryllium Copper,Gold	Beryllium Copper,Gold
Dielectric Type	PEI	PEI
Body Material And Plating	Passivated Stainless Steel	Passivated Stainless Steel
Insertion Loss (dB Max)	$0.05 \cdot \sqrt{f_{\text{GHz}}}$	$0.05 \cdot \sqrt{f_{\text{GHz}}}$

Outline Drawing:



Ordering Information:

Base Number	Length (Unit meters)	Phase/delay Matched
PL50-2.4M2.4M	-L	LEAVE BLANK (NOT REQUIRED) -XXPS ($\leq \pm XX$ PS) -XX° ($\pm XX^\circ$)

Typical Performance Data:

Model: PL50-2.4M2.4M-1m

Frequency	2 GHz		6 GHz		12 GHz		18 GHz		26.5 GHz		40GHz		50GHz	
	Typ	Max	Typ	Max	Typ	Max	Typ	Max	Typ	Max	Typ	Max	Typ	Max
Insertion Loss	0.69	0.76	1.21	1.33	1.73	1.90	2.13	2.24	2.61	2.86	3.23	3.55	3.64	3.99
VSWR	1.02	1.05	1.03	1.05	1.05	1.10	1.10	1.15	1.10	1.15	1.15	1.20	1.20	1.25

