

Duraline-TPS High-Performance Phase-Stable Test Cable Assembly



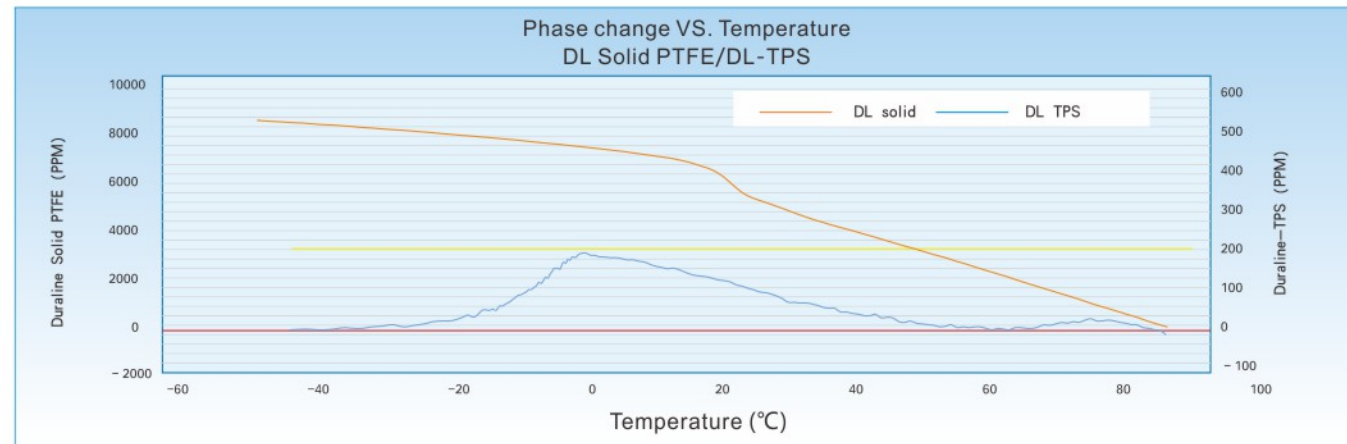
Typical Applications:

- * High Volume Production Test Stations
- * Environmental and Temperature Test Chambers
- * OEM Test Port Cables
- * RF Test Platform
- * Research & Development Labs
- * Field RF Testing

DuraLine-TPS is the newest design by SLK for the phase stability test cable assembly at the normal ambient temperature of -40°C to +85°C. DuraLine-TPS use the SPC ribbon braid and tri-shielding construction as the standard DuraLine test cable, but it features special dielectric material to make sure the phase stable vs. temperature.

DuraLine-TPS is also phase stable with repeatedly flexed with excellent VSWR and return loss performance. It's phase changing is less than 250PPM at -40°C to +85°C and is linearity to changes of temperature of 0°C to 45°C.

DuraLine-TPS test cable assemblies can be widely used in test systems, interconnection and phase-matching application that's sensitive to phase changes in temperature.



Feature & Benefits:

- * Good phase stable vs. temperature
- * Mechanical phase and amplitude stability
- * Long work life vs. bending
- * Tri-shielding construction
- * Connector with BeCu center conductor and stainless steel shell
- * High-strength PEI as connector insulator

Duraline-TPS Warranty

SLK provide 4 months of the warranty period for DuraLine from the date of its delivery. If problems occur by normal use during this 4 months, SLK will be responsible for the repairing and replacement.

Duraline-TPS

Physical & Mechanical Specifications		
Dimension	MM	Inch
Dcenter Conductor	1.05	0.041
Dielectric	2.98	0.117
Outer Conductor	3.18	0.125
Inter Layer	3.34	0.131
Shield	3.91	0.154
Jacket	4.85	0.191
Armor	10.8	0.425
Stainless Steel Armor	10.50	0.41
Armor Crush Resistance	1000N/25mm	
Bend Radius: Minimum	25.00	1.00
Connector Retention	>175 lbs	
Mating Life Cycle	>5000	
Length Tolerances	≤1M , +20mm ,	-0 ; >1M , +2%,-0
Temperature Range	Common Jacket	105°C
	High Temperature-Resistance Jacket	165°C
	PVC Armor	75°C
	Stainless Steel Armor	150°C

Electrical Specifications				
VSWR		6GHz	18GHz	26.5GHz
	N	1.15:1	1.30:1	-
	SMA	1.15:1	1.25:1	1.30:1
Impedance	50 Ohms			
Velocity of Propagation	76%			
Shielding Effectiveness	>90 dB			
Capacitance	27 pF/ft=88 pF/meter			
Mechanical Phase	Max:0.1°/GHz(next page for the detail)			
Mechanical Attenuation	Max: +/-0.05 dB(DC-26.5Ghz)			
Attenuations Max@25°C(cable only)				
Attenuation (GHz)		dB/100 m		dB/100 Ft
2		35.40		10.79
3		51.50		15.67
6		64.40		19.63
8		95.30		29.06
12		113.00		34.45
18		146.00		44.51
26.5		183.00		55.79
Attenuation at Frequency		234.00		71.34
K1	(A=K1*sqrt(FMHz)+K2*FMHz)			
K2	1.0440000			
	0.0024000			
Attenuations Max@25°C(cable only)				
Attenuation (GHz)	Watts (max.)			
1	522			
2	359			
6	194			
12	127			
18	101			
26.5	79			



Ordering Information

N= Unarmored
P= PVC Armored
S= Steel Armored
R= PUR Armored
T= High Temperature-Resistance Pipe
B= High Temperature-Resistance Pipe + Steel Armored

M: Meters
Example: 01.20M= 1.2Meters
F: Feet
Example: 07.50F= 7.5 Ft

DLX-TPSXX-XXXXXX-XX.XXX

Maximum Frequency
18 = 18.0 GHz
26 = 26.5 GHz

Connector Codes (2 or 3 Characters)
SM= SMA Male
SF= SMA Female
NM= Type N Male
N1T= Type N Male OneTurn
NF= Type N Female
TM= TNC Male
SMR= SMA Right Angle
NMR= Type N Male Right Angle
TMR= TNC Male Right Angle