

# SilverLine<sup>®</sup>-TT (TempTrack)

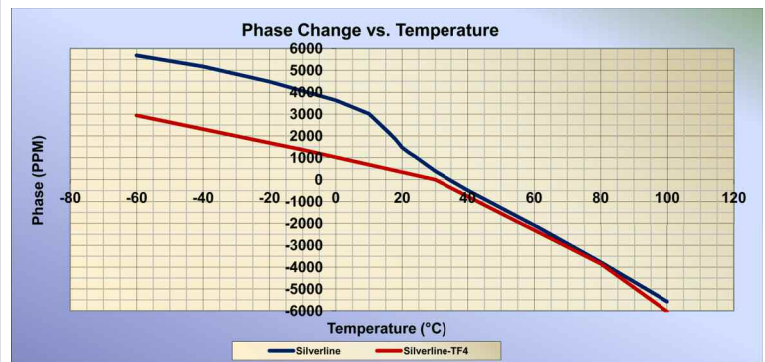
ISO 9001 Certified

## Coaxial Test Cables For:

- *RF Testing From 0° C to +30° C*
- *Phase Critical RF/Microwave Measurement*
- *Research and Development*



SilverLine<sup>®</sup>-TT features solid TF-4<sup>™</sup> dielectric. This proprietary dielectric exhibits smaller and more linear phase change at normal ambient temperatures of 0° C to + 30° C, when compared to solid PTFE. Although somewhat improved phase performance can be achieved using foam, taped or spline dielectrics, ruggedness is sacrificed and the phase performance achieved is not as good as the SilverLine<sup>®</sup>-TT. The graph below compares solid PTFE to solid TF-4<sup>™</sup>.



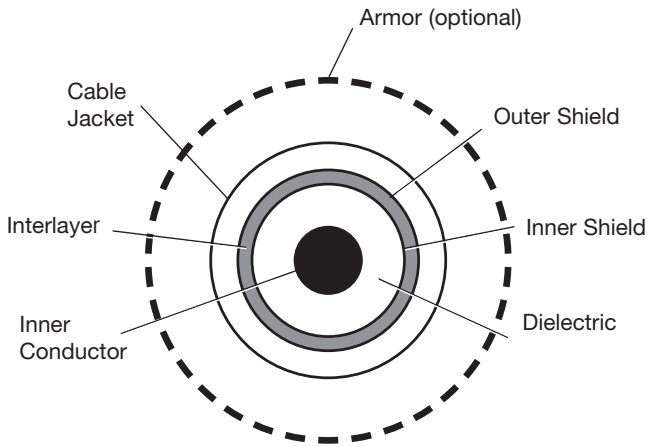
## Time's Silverline<sup>®</sup> Product Guarantee

Times will repair or replace your SilverLine test cable at its option if the connector attachment fails within four months of shipment. This guarantee excludes cable or connector interface damage from misuse or abuse.

## Features & Benefits

- *Less and Linear Phase Change From 0° C to + 30° C*
- Stainless Steel Connectors
- Ruggedized Cable/Connector Interface
- ROHS Compliant

# SilverLine®-TT



## Cable Construction

**Inner Conductor:** Solid silver plated copper

**Dielectric:** Solid TF-4™

**Shield:** Silver-plated copper flat ribbon braid aluminum-polyimide tape interlayer 36 GA silver-plated copper round braid (90%k)

**Jacket:** Clear FEP

**Armor:** Optional

**Steel Style:** 100% coverage, square locked, galvanized steel hose, high angle steel braid and high temp TPR jacket

## Connectors

- Stainless steel construction
- SMA and Type N OneTurn™ options

\* SMA and Type N mating life assumes the use of a calibrated torque wrench, interfaces are clean and within mil spec limits.

\*\*See SilverLine-VNA data sheet for flex test conditions. A brand new cable can have a break-in period of several hundred flexes.

Specifications subject to change without notice.

Mechanical Specifications		
Dimensions	in	mm
Outside Diameter	0.195	4.95
Armor (optional)	0.450	11.50
Minimum Bend Radius (unarmored)	1	25
Connector Retention	>175 lbs (unarmored) 300 lbs (armored)	
Crush Resistance (armored)	1500 lbs per linear inch	
Mating Life Cycle	>5000*	
Temperature Range (unarmored limited by strain relief)	Unarmored: - 67° / + 221° F (- 55° / +105° C)	

Electrical Specifications			
VSWR Max		6 Ghz	18 Ghz
	SMA, Type N, TNC, Swept r/a	1.25:1	1.30:1
	SMA r/a, Type N, r/a	1.30:1	1.35:1

Impedance	50 Ohms	
Velocity of Propagation	70%	
Shielding Effectiveness	>100 dB	
Capacitance	29.0 pf/ft (95.1 pf/m)	
Phase Stability ** (50,000 cycles)	+/-2° through 18 GHz	
Phase change from 0° to + 30° C	35 ppm/deg C	+/-10 ppm/deg C
Attenuation, max @77°F (25°C)		
	Frequency (Ghz)	dB/100 ft (dB/100 m)
	1	12 (40)
	2	18 (59)
	6	35 (115)
	12	53 (174)
	18	69 (226)

Cable Power Handling @77°F (25°C) sea level, watts, (max)		
	Frequency Ghz	
	1	444
	2	304
	6	163
	12	108
	18	86

## Ordering Information

U = unarmored  
SB = steel armor

SW suffix: Swept Right Angle

Feet 0.5 ft increments  
Meters 0.25m increments  
F = Feet, M = Meters

Connector Codes 2 or 3 Characters  
SM = SMA male  
SF = SMA female  
SMR = SMA right angle  
NM = Type N male  
NF = Type N female  
NMR = Type N right angle  
TM = TNC male  
TF = TNC female

First Connector  
↓  
Second Connector

Cable Type  
TT = Temp Track

Maximum Frequency  
06 = 6 Ghz  
18 = 18 Ghz

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