

## Test Cables

### Coax Test Cables for:

- High Volume Production Test Stations
- Research & Development Labs
- Environmental & Temperature Test Chambers
- Replacement for OEM Test Port Cables
- Field RF Testing
- Cellular Infrastructure Site Testing



SilverLine™ Test Cables are cost effective, durable, high-performance cable assemblies designed for use in a broad range of test and interconnect applications. Fabricated from rugged, solid PTFE dielectric cable with stainless steel connectors and a proven strain relief system, these cables provide long life and excellent stability in applications where they are repeatedly flexed and mated/unmated. SilverLine™ test cables are ideal for use in production, field and laboratory test environments. They are also economical enough to be used as interconnects in test systems.

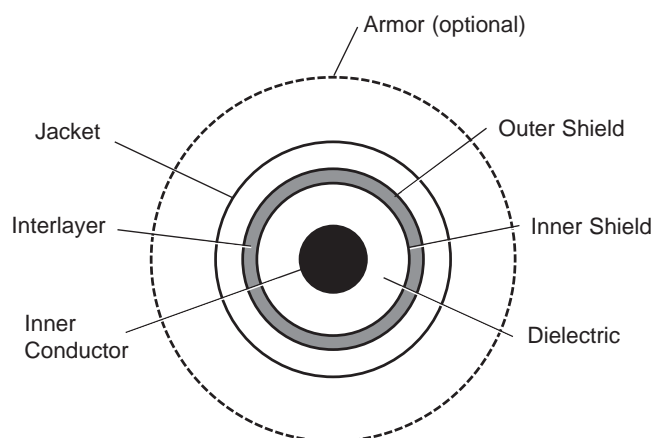
#### Features & Benefits:

- Phase & Loss Stable
- Long Flex Life
- Triple Shielded Cable
- High Mating Cycle, Stainless Steel Connectors
- Rugged, Solder/Solder Attachment
- Redundant, Long Life Strain Relief System

#### Time's **Silverline™** 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.*

# SilverLine™ Specifications:



## Cable Construction

**Inner Conductor:** Solid Silver Plated Copper Clad Steel

**Dielectric:** Solid PTFE

**Shield:** Silver-Plated Copper Flat Ribbon Braid  
Aluminum-Polyimide Tape Interlayer  
36 GA Silver-Plated Copper Braid (90%k)

**Jacket:** Clear FEP

**Armor (Optional):** Steel wire reinforced, thick wall, high flex life clear PVC

## Connectors

- Passivated stainless steel finish
- Captive contact
- Thick wall interface (SMA)
- Gold plated beryllium copper center contacts
- PTFE dielectric
- Type N OneTurn™ (1 full rotation to mate)
- High temperature 7mm
- Knurl/hex coupling nut (Type N and TNC)
- Precision grade 7-16

## Connector Attachment/Strain Relief

- Rugged Solder Pin/Solder Braid connector attachment
- Redundant triple layer strain relief system

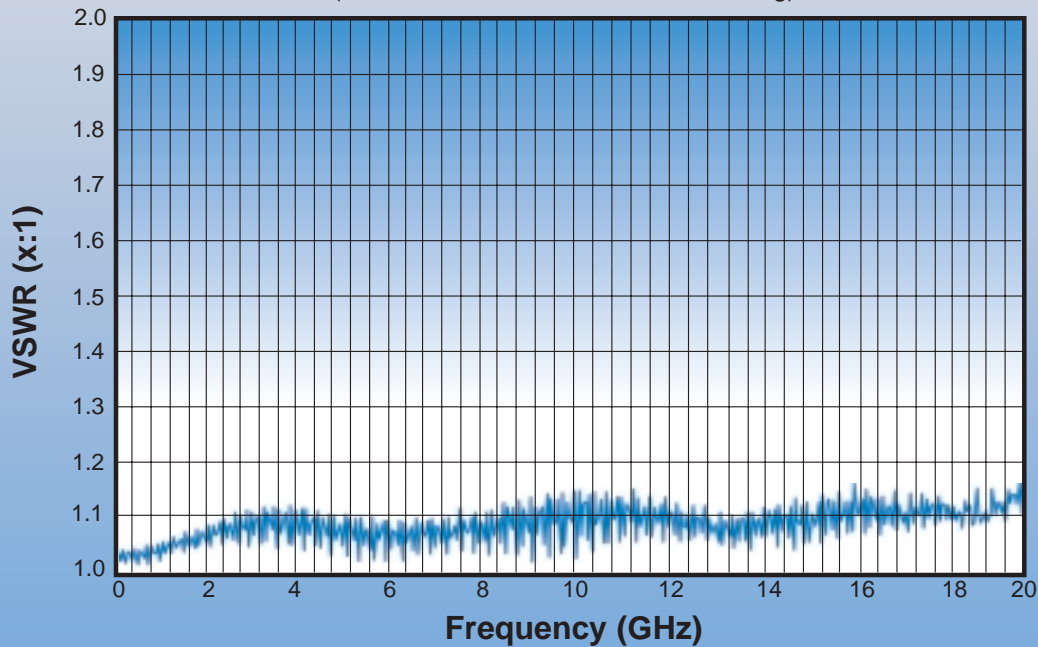
SilverLine				
Physical & Mechanical Specifications				
Dimensions	in	mm		
Inner Conductor	0.037	0.94		
Dielectric	0.116	2.95		
Inner Shield	0.126	3.20		
Interlayer	0.132	3.35		
Outer Shield	0.154	3.91		
Jacket	0.195	4.95		
Armor (optional)	0.450	11.50		
Bend Radius: minimum	1	25		
Connector Retention	> 80 lbs.			
Mating Life Cycle	> 5000*			
Length Tolerances	< 2 ft. or 0.75m, -0, +0.50" (12.7mm) > 2 ft. or 0.75m, -0, +2% of length			
Temperature Range	-67°/+221°F		-55°/+105°C	
Electrical Specifications				
Impedance	50 ohms			
Velocity of Propagation	70 %			
Shielding Effectiveness	>100 dB			
Capacitance	29.4 pf/ft = 96.4 pf/meter			
VSWR Max		6 GHz	18 GHz	26.5 GHz
	7-16 DIN	1.25:1		
	SMA, Type N & TNC	1.20:1	1.30:1	1.35:1(SMA)
	7mm	1.25:1	1.35:1	
Phase Stability (ten, 4" radius, 180° reverse bends)	DC to 10 GHz: +/- 1.1° 10 to 18 GHz: +/- 2.0°			
Attenuation @ +77°F (+25°C)				
Attenuation Max (GHz)	dB/100 ft		dB/100 m	
1	12.2		40.0	
2	18.0		59.0	
6	34.2		112	
12	52.5		172	
18	68.4		224	
26.5	88.7		290	
Attenuation at Frequency	(A=K1 √ FMHz + K2 FMHz)			
K1	0.348			
K2	0.0012			
Power Handling @ +104°F (+40°C) (Sea Level)				
Power Handling (GHz)	Watts (max.)			
0.4	912			
1	569			
2	340			
6	180			
12	151			
18	120			
26.5	60			

\*Assumes use of calibrated torque wrench, proper care and cleaning of interface and mated connector is within mil spec limits. Specifications subject to change without notice.

## SilverLine Test Cable

### Typical VSWR vs Frequency

(18 GHz SMA Male/SMA Male, 3 ft long)



## Ordering Information

**Length**

Feet: 0.50 ft Increments  
Example: -04.50F = 4.50 ft

Meters: 0.25 m increments  
Example: -00.75M = 0.75 m

F = Feet M = Meters

**SLXXX-XXXXXX-XX.XXX**

**U = Unarmored**  
**A = Armored**

**Frequency Range**

06 = 6.0 GHz  
18 = 18.0 GHz  
26 = 26.5 GHz (SMA's and 3.5mm Only)

**Connector Codes (use 2 or 3 Characters)**

SM	=	SMA Male
SF	=	SMA Female (available soon)
SMR	=	SMA Right Angle (available soon)
3M	=	3.5mm Male
3F	=	3.5mm Female
3RF	=	3.5mm Ruggedized Female
NM	=	Type N Male
N1T	=	Type N Male <b>OneTurn™</b>
NF	=	Type N Female
70M	=	7mm
76M	=	7-16 DIN Male
76F	=	7-16 DIN Female
TM	=	ETNC Male
TF	=	ETNC Female

*Some connector combinations and/or lengths may be unavailable. Please contact your Times Distributor.*

*Specifications subject to change without notice.*

### *About **TIMES MICROWAVE SYSTEMS***

Times Microwave Systems, a Smiths Group PLC Company, was founded in 1948 and was formerly known as Times Wire and Cable Company. Times Microwave Systems specializes in the design and manufacture of high performance flexible, semi-flexible and semi-rigid coaxial cable, connectors and cable assemblies. Times Microwave Systems, with over 50 years of leadership in the defense microwave systems arena, offers high tech solutions for today's most challenging applications.



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