



## ST FIBER OPTIC PATCH CORDS

### Description

The ST\* connectors used in our patch cords employ half-twist bayonet locking mechanism and high quality 2.5mm zirconia ferrules. They are fully compatible with existing ST type hardware.

In addition to basic testing, some mechanical and environmental tests per IEC or Telcordia are also performed periodically to guarantee the best quality. For standard patch cords, sampling check is performed on ferrule geometry to ensure high percentage of polished connectors meeting GR-326 requirements. For premium grade, ferrule geometry is tested on all patch cords to meet these GR-326 requirements.

Other than standard single mode and multimode fibers, OM2, and OM3 fibers are also available upon request. Flame retardant grade cable sheathing options are offered. Riser rated cable will be provided as standard. LSZH and Plenum can be provided upon request.

\*ST is a trademark of Lucent Technologies



### Features

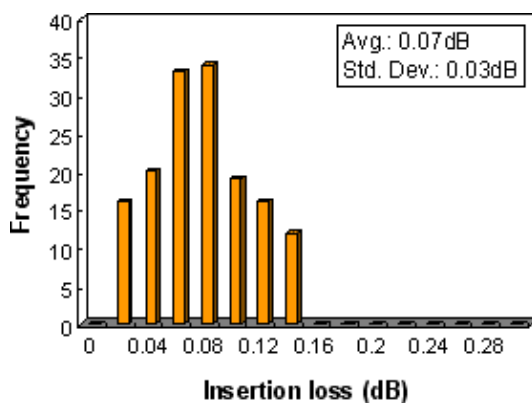
- ST compatible bayonet coupling
- Metal body and zirconia ferrule
- Low insertion loss and high return loss
- Materials meet RoHS requirements
- Riser, Plenum, and LSZH cables available

### Applications

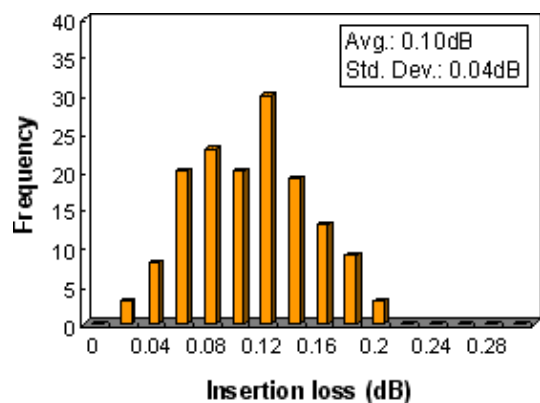
- Local Area Networks
- Fast Ethernet
- Fiber Channel
- ATM Networks
- Instrumentation

### Optical Performance Distribution

Insertion Loss, MM 62.5/125um



Insertion Loss, SM 9/125um



\* Typical performance charts and actual data may vary from lot to lot.

## Specifications

Characteristics	Unit	Value/Performance			Comments	
		SM		MM		
		SPC	UPC			
<b>Basic</b>						
Insertion Loss (IL)	dB	≤0.3			IEC 61300-3-4	
Return Loss (RL)	dB	≥45	≥50	≥23	IEC 61300-3-6	
Endurance	dB	ΔIL≤0.2			IEC 61300-2-2, coupling and uncoupling 500 cycles, clean every 25 cycles	
Operating Temperature	°C	-20 ~ +70				
Storage Temperature	°C	-40 ~ +70				
<b>Ferrule end-face geometry</b>						
Radius of Curvature (R)	mm	7-25	NA	Telcordia GR326(4.4.5)		
Apex Offset	um	≤50	NA	Telcordia GR325(4.4.5)		
Fiber Protrusion	nm	≤50	NA	Telcordia GR326(4.4.5)		
Fiber Under Cut	nm	≤125 @R=7-10	NA	Telcordia GR326(4.4.5). For PC, Under Cut ≤-0.02R <sup>3</sup> +1.3R <sup>2</sup> -31R+325 when R=10-25mm		
<b>Mechanical</b>						
Drop	dB	ΔIL≤0.2			IEC 61300-2-12, 1.5m, 5 drops, no damage	
Vibration	dB	ΔIL≤0.2			IEC 61300-2-1, 10-55Hz, 0.75mm amplitude, 0.5 hrs/axis	
Flex	dB	ΔIL≤0.2			Telcordia GR326(4.4.3.2), 0.9kg, ±90°, 100cycles, for 2mm or larger cable	
Twist	dB	ΔIL≤0.2			Telcordia GR326(4.4.3.3), 1.35kg load, ±2.5 turns, 10 cycles, for 2mm or larger cable	
Pull Proof	dB	ΔIL≤0.2			Telcordia GR326(4.4.3.4), 3.4kg at 90°, 6.8kg at 0°, for 2mm or larger cable	
Static Bending	dB	ΔIL≤0.2			IEC 794-1-2, 60mm diameter 10 turns	
Crushing	dB	ΔIL≤0.2			IEC 794-1-2, 102kg for 2mm or larger cable, 10.2kg for 900m cable	
<b>Environmental</b>						
Salt mist		No sign of corrosion			IEC 61300-2-26, 5% NaCl, 30°C, 7 days	
Cold	dB	ΔIL≤0.2			IEC 61300-2-17, -20°C, 96 hrs	
Dry Heat	dB	ΔIL≤0.2			IEC 61300-2-18, 70°C, 96 hrs	
Damp Heat	dB	ΔIL≤0.2			IEC 61300-2-19, 40°C, 95%RH, 96 hrs	
<b>Transmission</b>						
Characteristics	Unit	G652 SM	Std. 50um	62.5um	OM2	OM3
Max. Attenuation	dB/km (nm)	0.4/0.3 (1310/1550)	2.8 (850)	3.0 (850)	2.8 (850)	2.8 (850)
Min. Bandwidth	MHz•km (nm)	-	500/500 (850/1300)	200/200 (850/1300)	750 (850)	2000 (850)
Dispersion Coefficient	ps/ nm <sup>2</sup> •km	≤3.0 (1310nm)	-	-	-	-