



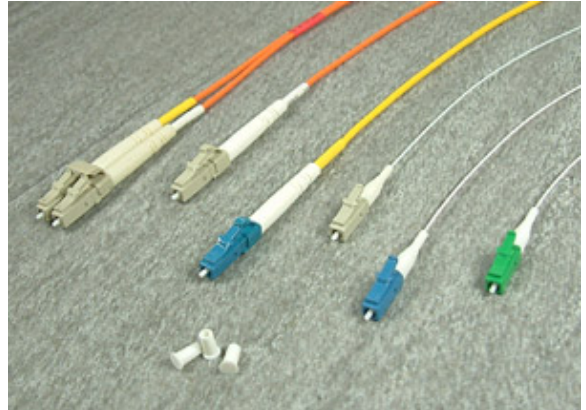
## LC FIBER OPTIC PATCH CORDS

### Description

The LC connectors used are small form-factor fiber optic connectors resembling miniature SC connectors with high quality 1.25mm zirconia ferrules and push-pull latching mechanism. They are fully compatible with existing LC 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, G655, 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.



### Features

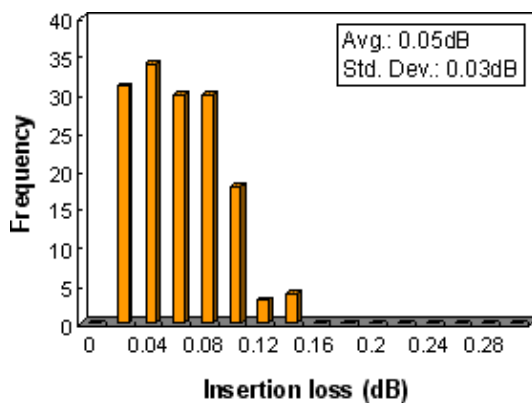
- Small form factor design
- Pull-proof
- Non-optical disconnect performance
- High quality zirconia ferrules
- Materials meet RoHS requirements
- Riser, Plenum, and LSZH cables available

### Applications

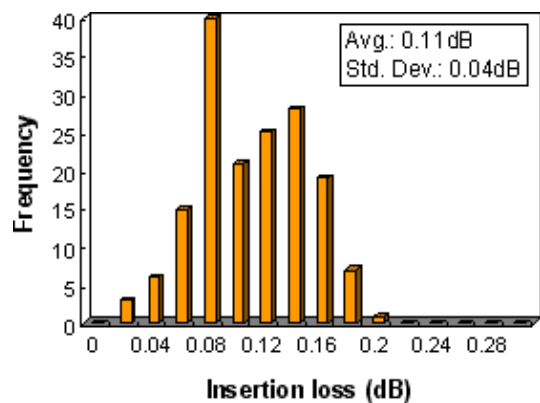
- Telecommunication
- Computer networks
- CATV networks
- Active device termination
- Instrumentation

### Optical Performance Distribution

Insertion Loss, MM 62.5/125um



Insertion Loss, SM 9/125um PC



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

## Specifications

Characteristics	Unit	Value/Performance			Comments		
		SM		MM			
		PC	APC				
<b>Basic</b>							
Insertion Loss (IL)	dB	≤0.3			IEC 61300-3-4		
Return Loss (RL)	dB	SPC≥45 UPC≥50	≥60	≥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	5-12	NA	Telcordia GR326(4.4.5)		
Apex Offset	um	≤50		NA	Telcordia GR325(4.4.5)		
Fiber Protrusion	nm	≤50	≤100	NA	Telcordia GR326(4.4.5)		
Fiber Under Cut	nm	≤125@ R=7-10	≤100	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), 0.6kg, ±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), 2.3kg at 90°, 6.8kg at 0°, for 2mm or larger cable		
Coupling strength	dB	ΔIL≤0.2			IEC 61300-2-6, 4.2kg, 2min		
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>							
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	G655 SM	Std. 50um	62.5um	OM2	OM3
Max. Attenuation	dB/km (nm)	0.4/0.3 (1310/1550)	0.3 (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)	2.6-6.0 (1550nm)	-	-	-	-