

ESCON FIBER OPTIC PATCH CORDS

## Description

The ESCON\* architecture was developed to improve connectivity between mainframe, its peripherals, and other networks. The connector system is a retractable shroud duplex meeting IBM\* requirements.

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

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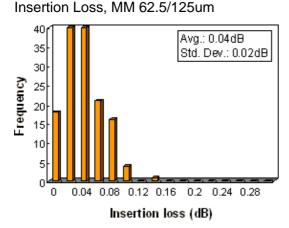
#### **Features**

- Push-pull latching mechanism
- Polarized housing with retractable shroud
- Compatible with IBM ESCON architecture
- Materials meet RoHS requirements
- Riser, Plenum, and LSZH cables available

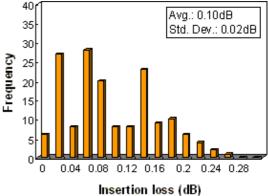
## **Applications**

- IBM networks
- Peripheral control
- Storage devices
- Workstations

## **Optical Performance Distribution**



Insertion Loss, SM 9/125um PC



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

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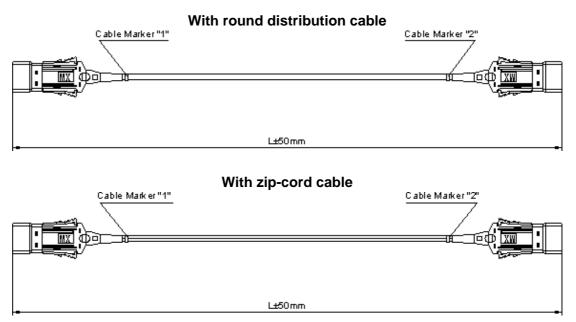
## **Specifications**

Characteristics	Unit	Value/Performance		Comme	ents		
		SM	MM				
		SPC UPC	;				
Basic							
Insertion Loss (IL)	dB	_≤0.3		IEC 61300-3-4			
Return Loss (RL)	dB	<u>≥</u> 45 <u>≥</u> 50	≥23	IEC 613	300-3-6		
Endurance	dB	∆IL <u>&lt;</u> 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					
Ferrule end-face geom	etry						
Radius of Curvature (R)	mm	10-25 NA		Telcordia GR326(4.4.5)			
Apex Offset	um	<u>&lt;</u> 50	NA	Telcord	Telcordia GR325(4.4.5)		
Fiber Protrusion	nm	<u>&lt;</u> 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 $\leq$ -0.02R <sup>3</sup> +1.3R <sup>2</sup> -31R+325 when R=10-25mm			
Mechanical				1			
Drop	dB	∆IL <u>&lt;</u> 0.2		IEC 61300-2-12, 1.5m, 5 drops, no damage			
Vibration	dB	 ∆IL <u>&lt;</u> 0.2		IEC 61300-2-1, 10-55Hz, 0.75mm amplitude, 0.5 hrs/axis			
Flex	dB	∆IL <u>&lt;</u> 0.2		Telcordia GR326(4.4.3.2), 0.9kg, $\pm$ 90°, 100cycles, for 2mm or larger cable			
Twist	dB	∆IL <u>&lt;</u> 0.2		Telcordia GR326(4.4.3.3), 1.35kg load, <u>+</u> 2.5 turns, 10 cycles, for 2mm or larger cable			
Pull Proof	dB	∆IL <u>&lt;</u> 0.2		Telcordia GR326(4.4.3.4), 3.4kg at 90°, 6.8kg at 0°, for 2mm or larger cable			
Coupling strength	dB	∆IL <u>&lt;</u> 0.2		IEC 61300-2-6, 4.2kg, 2min			
Static Bending	dB	∆IL <u>&lt;</u> 0.2		IEC 794-1-2, 60mm diameter 10 turns			
Crushing	dB	∆IL <u>&lt;</u> 0.2		IEC 794-1-2, 102kg for 2mm or larger cable, 10.2kg for 900m cable			
Environmental				•			
Cold	dB	∆IL <u>&lt;</u> 0.2		IEC 61300-2-17, -20°C, 96 hrs			
Dry Heat	dB	∆IL <u>&lt;</u> 0.2		IEC 61300-2-18, 70°C, 96 hrs			
Damp Heat	dB	∆IL <u>&lt;</u> 0.2		IEC 61300-2-19, 40°C, 95%RH, 96 hrs			
Transmission							
Characteristics	Unit	G652 SM	Std	50um	62.5um	OM2	OM3
Max. Attenuation	dB/km (nm)	0.4/0.3 (1310/1550		2.8 350)	3.0 (850)	2.8 (850)	2.8 (850)
Min. Bandwidth	MHz∙km (nm)	-		0/500 )/1300)	200/200 (850/1300)	750 (850)	2000 (850)
Dispersion Coefficient	ps/ nm²∙km	<u>≤</u> 3.0 (1310nm)		-	-	-	-

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## **Dimensional Drawing**



## **Ordering Information**

# Part Number: PC-ESC P ESC P X K R 4.8-6 1 2 3 4 5 6 7 8 9

1 Connector #1	ESC=ESCON, S=SC, F=FC, T=ST, L=LC, MR=MTRJ, etc.
2 Finish 1 or Gender 1	S=SPC, U=UPC, A=APC, P=PC; for MTRJ, F=Female, M=Male
3 Connector #2	P=Pigtail (no connector at this end), ESC=ESCON, T=ST, MR=MTRJ, etc.
Finish 2 or Gender 2	S=SPC, U=UPC, A=APC, P=PC; for MTRJ, F=Female, M=Male, T=Pigtail
5 Cable Type	D=Duplex Straight, X=Duplex Reverse
6 Fiber	R=SM(G652), K=62.5um, C=50um, B=OM2, A=OM3
7 Cable Jacket	R=Riser, P=Plenum, L=LSZH
8 Cable Diameter	4.8=Ø4.8mm, 3.0=Ø3.0mm, etc.
9 Cable Length	Length in meter, i.e. 6=6m



Products manufactured in

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