

Fibre Optic Patchleads – Custom made to any length



Features:

- Low loss
- Easy installation
- Sorted Premium grade Zirconia ferrule
- Single mode or Multimode (50/125um or 62.5/125um)
- Jacket packaging: 900um, 2mm or 3mm
- Optical test based on RIFOCS testing equipments
- Comes with Optional DORC Test report

FOS Standard Patch cord provides a broad selection of single fibre connectors as well as cable choice for your special patching need. Our production line equips with state of the art manufacturing facilities as well as sophisticated testing equipments. Our connectors feature durable construction to ensure reliable mating time after time. Ultra high performance ferrules are carefully selected from premium grade zirconia ferrules which feature ultra low concentricity; this ensures the finished patch cord can be used as a reference for measuring purpose..

ConnectorType	Singlemode		Multimode
	UPC	APC	PC
Insertion Loss	< 0.3dB	< 0.3dB	< 0.1dB
Return Loss	> 50dB	> 65dB	> 35dB
Core/Cladding size	9/125um		50/125 or 62.5/125um
Cable count	Simplex(1F) or Duplex(2F)		
Jacket Diameter	900um, 2mm or 3mm		
Jacket material	PVC or LSZH		
Operating Temperature	-20 to +85C		

*includes FC, SC, ST, LC, MU

ConnectorType	Singlemode		Multimode
	UPC	APC	PC
Insertion Loss	< 0.4dB	N.A	< 0.4dB
Return Loss	> 50dB	N.A	> 35dB
Core/Cladding size	9/125um		50/125 or 62.5/125um
Cable count	Duplex (2F)		
Jacket Diameter	2mm or 3mm		
Jacket material	PVC or LSZH		
Operating Temperature	-20 to +85C		

*includes MTRJ, FDDI, ESCON connectors

FOS LSZH Patchcord Fire Performances

Flame retardant	IEC 60332-1
Fire retardant	IEC 60332-3
Low smoke opacity	IEC 1034 1/2
Halogen free	IEC 60754-1/2

Connector Surface Inspection

Westover Optical connector microscope (400x) is employed to ensure the scratch free surface of the finishing connector. This is also important to ensure the Spotless core of the connector prior shipment.



Optical Inspection

Optical inspection is vital for patch cord performance. Light source is launched to the patch cord (Device Under Test, DUT) for the actual Insertion Loss (IL) and Back reflection (BR) measurements. Back reflection is a parameter that measures how much light is back reflected at the connector. Each connector is tested individually for the IL and BR measurement. RIFOCS Modular series test equipment is employed for Insertion Loss (IL) and Back reflection (BR) measurements.



Geometric Inspection

In order to ensure proper physical contact between connectors under mating, geometric requirement is important for the quality control. This ensures reliable mating and avoids damaging the core when mated to other connectors. Non contact optical interferometer (DORC) is employed for geometric inspection of optical connector.

Quality Control Report

Sample ID:	35	PASS		
Sample Name & Type:	SC APIC-DIC1	Actual Contact Measurement Comments:		
Measurement Time & Date:	10:47:45 AM 05/23/02	2K-1 3mm Airy Beam		
Fitting Regions Used:	D=250µm, E=140µm, F=50µm, Ae=1000µm	X/R: No		
Measurement Parameter	Pass/Fail Limits		Measured Value	Passed or Failed
Radius of Curvature	7.00	15.00	9.52 mm	Pass
Fiber Height (Spherical Fit)	(eq)-125.00	100.0	-10.0 mm	Pass
Fiber Height (Planar Fit)	-10.0	300.0	201.8 mm	Pass
Apex Offset	0.00	100.00	70.53 µm	Pass
Beating			349.000 deg	
Angle			-0.081 deg	Pass
Tilt Offset			8.000 deg	
Actual Angle	7.700	8.300	7.919 deg	Pass
Ray Error	-0.500	0.500	0.417 deg	Pass
Fiber Roughness (Rq)	0	50	3 nm	Pass
Fiber Roughness (Ra)	0	50	3 nm	Pass
Ferrule Roughness (Rq)	0	50	12 nm	Pass
Ferrule Roughness (Ra)	0	50	11 nm	Pass
Diameter	123.0	135.0	131.8 µm	Pass
Comments:				

