## Loopback (MTP/MPO/SC/LC)



The loopback is both ends of fiber in a duplex connector or a multi-fiber connector, then the optical signal in the same connector, don't change signals or repeated back to its itself. It can provide an effective solution, test the emission ability of the network equipment and receive sensitivity, especially in 40/100G network communication through back signal positioning can be all kinds of potential phenomenon, so as to achieve optical fiber network in pairs on a single element or interface and effective test and evaluation of the Internet.

#### **Product Features:**

- Duplex connector or multi fiber connector
- MPO or MTP connector (for multi-fiber connector)
- Standard loss or low loss (for multi-fiber connector)
- PC or APC polish
- Cable form or housing form
- Available in G.652, G.657, OM1, OM2, OM3, OM4 fiber
- Option for LSZH, OFNR or OFNP cable jacket
- Option for A, B or C polarity or Customized (for multi-fiber connector)
- Customized length available (multi-fiber connector≥15cm; duplex connector≥7.5cm)
- 100% factory terminated and tested

#### **Product Applications:**

- System loop test
- Optical loop test
- Aging and test of the system

#### Standards:

- TIA/EIA-568.3-D
- ISO/IEC 11801
- IEC-61754 Series
- EIA/TIA-604 Series
- GR-326-CORE/GR-1435-CORE
- RoHS

#### **General Specifications:**

Construction	Description			
Fiber Count	2 fibers for duplex type; 2-24 fibers for multi-fiber connector			
Fiber Mode	Singlemode:	G.652/G.657 (9/125um)		
	Multimode:	OM1 (62.5/125um) OM2, OM3, OM4 (50/125um)		
Fiber Brand	Corning SMF-28® Ultra Optical Fiber Corning ClearCurve® Multimode Fiber			
Cable Jacket Ratings	Low Smoke Zero Halogen (LSZH)			
	Riser (OFNR)			
	Plenum (OFNP)			



MTP Loopback with housing and pull-tab

# Loopback





Cable Jacket Color	•	2: Orange ; OM4: Aqua/	Magenta			
	or Customi					
Connector Type	SC, LC, MPO, MTP					
Connector Color		SM (APC)	SM (PC)	OM3	OM4	
(SC/LC)		Green	Blue	Aqua	Magenta/Aqua	Customized
		SM (APC)	SM (PC)	OM3	OM4	
Connector Color (MTP/MPO)	Low Loss	Yellow	Yellow	Aqua	Magenta/Aqua	Customized
	Standard	Green	Blue	Aqua	Magenta/Aqua	
Loopback Housing Color	Black					
Operating Temperature	-20°C to + 70°C					
Storage Temperature	-40°C to + 85°C					

### **Technical Specifications:**

<b>Optical Properties</b>	Singlemode	Multimode		
Incontion Loss (dD) (CC LC at	APC $\leq$ 0.30 (Typical: $\leq$ 0.15)	APC $\leq$ 0.30 (Typical: $\leq$ 0.10)		
Insertion Loss (dB) (SC, LC etc.)	UPC $\leq$ 0.20 (Typical: $\leq$ 0.1)	$PC \le 0.20$ (Typical: $\le 0.1$ )		
Incortion Loss (dD) (MTD/MDO)	Low loss $\leq 0.35$ (Typical: $\leq 0.25$ )	Low loss $\leq$ 0.35 (Typical: $\leq$ 0.2)		
Insertion Loss (dB) (MTP/MPO)	Standard Loss $\leq 0.75$ (Typical: $\leq 0.4$ )	Standard Loss $\leq$ 0.6 (Typical: $\leq$ 0.35)		
Return Loss (dB)	$PC \ge 50; APC \ge 60$	$PC \ge 20; APC \ge 40$		
Durability	$\leq$ 0.2 dB typical change, 50 matings			
Wavelength (nm)	1310/1550	850/1300		
Fiber Attenuation (dB/km)	≤ 0.35 at 1310nm, ≤ 0.2 at 1550nm	≤ 3.0 at 850nm, ≤ 1.0 at 1300nm		
Transmission Distance		OM4: 150m at 40/100G, 550m at 10G		
		OM3: 100m at 40/100G, 300m at 10G		





MPO Loopback



MTP/LC/SC Loopback



SC Loopback with housing



LC Loopback with housing