

## **Test Reference Cables**

**Test Reference Leads** 



Optec's test reference leads are terminated with optimized end-face geometry and enhanced optical performance to ensure accurate physical contact of fiber connectors during test. The connectors are manufactured with precision mounting and polishing techniques which ensure excellent mating characteristics and repeatability.

All our test reference leads are made to conform IEC, EIA/TIA or Telcordia performance requirements. Available with different connector choices include MTP/MPO, FC, SC, LC, & ST high performance connector to suit majority of testing applications.

## **Features and Applications**

Optimized geometry control over fiber endface Enhance testing efficiency by improved accuracy and reliability of measurement

Conforms and exceeds industry standards 100% Factory tested with stringent controls processes to comply Telcordia GR-326-CORE with low insertion loss **Suitable for use with majority of testing applications**For optical network testing, termination house testing, test laboratory, instrumentals testing

Available in singlemode & multimode with choices of different structures

Satisfies client's needs in different testing requirements

# **Optical Specifications**

#### Single-fiber Reference End

Parameter		UPC Polish Spec		Unit
		Min	Max	Onit
IL	1310/1550 nm	0	0.1	dB
RL	1310/1550 nm	N/A	-55.0	dB
Radius of Curvature		10	25	mm
Fiber Height (Spherical Fit)		-50.0	+50	nm
Apex Offset		0.00	35.0	um
Bearing (Fiber offset)		± 45°		deg.
Fiber core to ferrule concentricity		≦0.6		Um
Angle		-0.200	0.200	deg.
Key		-0.200	0.200	Deg.
Fiber Roughness (Rq)		0	50	nm
Fiber Roughness (Ra)		0	50	nm
Ferrule Roughness (Rq)		0	50	nm
Ferrule Roughness (Ra)		0	50	nm
Diameter		125.0	130.0	um

#### MTP/MPO Reference End

Parameter	Singlemode Requirement	
RX = X Radius of Curvature	≧ 2000 mm	
RY = Y Radius of Curvature	≧ 50 mm	
GX = X Endface Angle (also Y for flat polished connectors)	0.15° ≦GX ≦0.15°	
GY = Y Endface Angle	7.85° ≦ GX ≦ 8.15°	
H = Fiber Protrusion Height	1200 nm ≤ H ≤ 2200 nm	
HA = Fiber Protrusion Differential Total	≦ 250 nm	
HB = Fiber Protrusion Differential Adjacent	≦ 150 nm	
CD = Core Dip	N/A	
Maximum Co-planarity	N/A	
Flatness Deviation	N/A	
Minimum Valid Pixels Ration	N/A	

The above optical specification are for reference only, it can be fully customized with customer specified requirement. Please contact us for more information now. <a href="mailto:sales@optec.com.hk">sales@optec.com.hk</a>

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# **Test Reference Cables**

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# **Ordering Information**



# 1 Reference End

F = FC S = SC L = LC

L = LCST = ST

M = MTP-Male
P = MPO-Male
See notes (1) & (2)

## 2 Equipment End

F = FC S = SC L = LC

ST = ST M = MTP-Male

F = MTP-Female P = MPO-Male E = MPO-Female

See notes (1) & (2)

#### Fiber Type

SM = OS2 Singlemode M1 = OM1 (62.5/125)

M2 = OM2 (50/125)

M3 = OM3 (50/125) M4 = OM4 (50/125)

See notes (1) & (2)

### 4 Cable Type

SX = Simplex

12 = 12-Fiber (for MTP or MPO)

24 = 24-Fiber (for MTP or MPO)

### Jacket Material

OR = Riser OFNR

LZ = Low Smoke Zero Halogen

### 6 Cable Color

Y = Yellow (for Singlemode)

O = Orange (for OM1, OM2)

A = Aqua (for OM3) V = Violet (for OM4)

See notes (3)

7 Overall Cable Length XX = 01~99

(please specify)

8 Unit of Measure

F = Feet M = Meter

#### **NOTES**

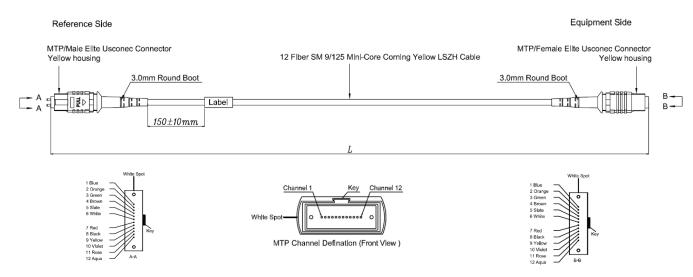
- (1) If Singlemode is chosen, MTP/MPO endface polishing will be APC
- (2) If Multimode is chosen, MTP/MPO endface polishing will be Flat
- (3) Cables of other structures are available, please contact our sales team for more information

# **Assembly Structure Illustration**

Example: Ordering code: TL-M-F-SM-12-LZ-Y-05-M

Item Description: Test Reference Lead MTP-Male to MTP-Female, Singlemode,

12-Fiber, LSZH, Yellow, 5 Meters



Optec Technology Limited.

Unit 1701, 17/F., North Tower, World Finance Centre, 19 Canton Road, Kowloon, Hong Kong. Tel: +852-2301-8148 | www.optec.com.hk | sales@optec.com.hk