1550nm	C-15-002-TD-SXXXX C-15-002-RD-SXXXX C-15-002-PD-SXXXX/XXX-X	*1550nm 2.5Gbps Laser Diode Module*

Features

- Laser diode with multi-quantum-well structure
- Un-cooled operation at –40~+85℃
- High temperature operation without active cooling
- Hermetically sealed active component
- Built-in InGaAs monitor photodiode
- Complies with Bellcore TA-NWT-000983

Packaging

- TOSA
- FC/ST/SC receptacle package with 2-hole flange
- Fiber pigtailed with optional FC/ST/SC/MU connector

Application

- Design for 2.5G high speed optic networks

Note:

1. Pin assignment can be customized.
2. Specifications subject to change without notice.

Handling Precautions

This device is susceptible to damage as a result of electrostatic discharge (ESD). A static free environment is highly recommended. Follow guidelines according to proper ESD procedures.

Absolute Maximum Ratings(Tc=25℃)

Parameter	Symbol	Value	Unit
Fiber Output Power L/M/H/2	P_f	0.6(L)/1(M)/2(H)/2.6(2)	mW
LD Reverse Voltage	V_{RLD}	2	V
PD Reverse Voltage	V_{RPD}	10	V
PD Forward Current	I_{FPD}	2.0	mA
Operating Temperature	T_{opr}	-40~+85	℃
Storage Temperature	T_{stg}	-40~+85	℃
Soldering temperature(<10sec)	Stemp	260	℃

(All optical data refer to a coupled 9/125μm SM fiber)

Optical and Electrical Characteristics(Tc=25℃)

Parameter		Symbo	Min.	Typ.	Max.	Unit	Test condition
Threshold Current		I_{th}	-	10	15	mA	CW
Fiber Output Power L M H 2		P_f	 0.2 0.5 1 2	 - - 1.6 2.5	 0.5 1 - -	mW	CW, I_{th}+25 mA , kink free
Peak Wavelength		λ	1530	1550	1570	nm	CW, P_f=P_f(Min)
Spectrum Width (RMS)		Δ λ	-	-	3	nm	CW, P_f=P_f(Min)
Forward Voltage		V_F	-	1.2	1.5	V	CW, P_f=P_f(Min)
Rise/Fall Time		t_r / t_f	-	-	150	ps	I_{bias}=I_{th} ,10~90%
Tracking Error	Receptacle	$\Delta P_f/P_f$	-	±1.0	-	dB	APC, -40~+85℃
	TOSA		-	±1.0	-		
	Pigtail		-	-	±1.0		
PD Monitor Current		I_m	100	-	-	μA	CW, P_f=P_f(Min),V_{RPD}=2V
PD Dark Current		I_{DARK}	-	-	0.1	μA	V_{RPD}=5V
PD Capacitance		C_t	-	6	15	pF	V_{RPD}=5V,f=1MHz

Ordering Information

C-15-002-XD-SXXXX/XXX-X

- Wavelength: 15=1550nm
- Package: T=TOSA, R=Receptacle, P=Pigtail
- Pin Assignment: D =DType
- Connector: FC/ST/SC/MU/LC/-
- Fiber Output Power: L/M/H/2
- "I" = Isolator, "-" = No isolator
- - = PC Fiber, APC = APC Fiber
- Flange type (-;O;V;K)

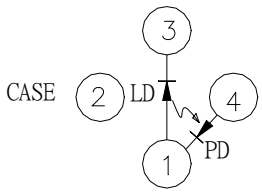
2.5Gbps LD Module-receptacle

Part Number：C-15-002-RD-SXXXX

LD Pin Assignment

Units in mm

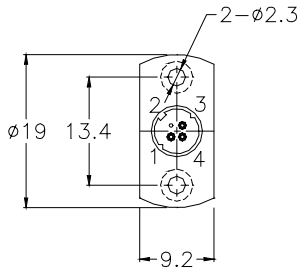
D Type

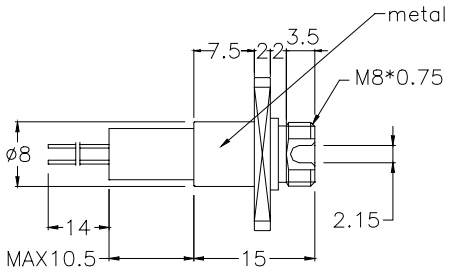


Pin 1 : Laser Anode and Monitor Diode Cathode
Pin 2 : Case Gnd
Pin 3 : Laser Cathode
Pin 4 : Monitor Diode Anode

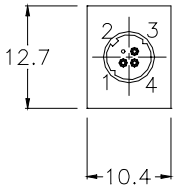
Connector Type

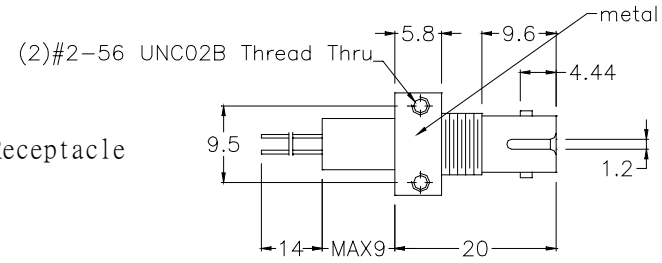
FC Receptacle



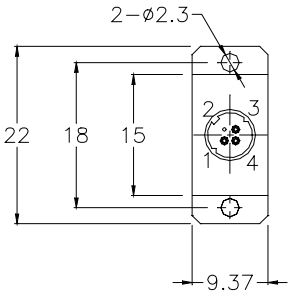


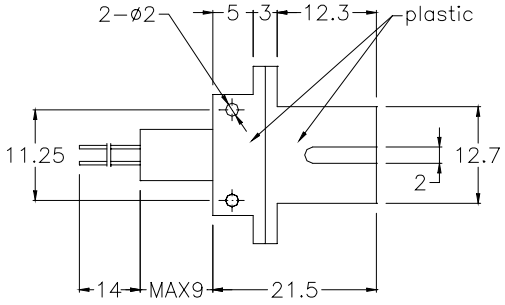
ST Receptacle





SC Receptacle



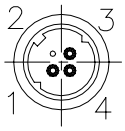


2.5Gbps LD Module-TOSA

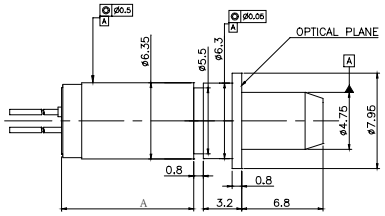
Part Number：C-15-002-TD-SXXXX

Packaging Dimension

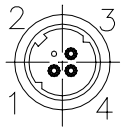
Units in mm



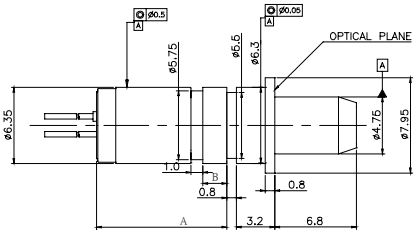
SC TOSA (L&M Power)
C-15-002-TD-SSCXX



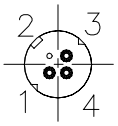
DIMENSION A (L&M POWER):7.9~8.6mm



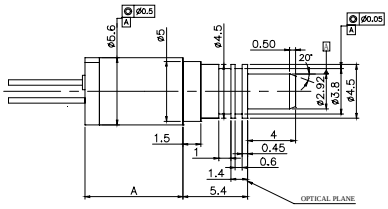
SC TOSA (H&2 Power)
C-15-002-TD-SSCXX



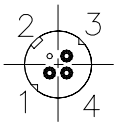
DIMENSION (H&2 POWER) A: Max 10.7mm
B: Max 2.5 mm



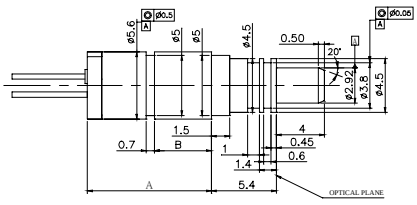
LC TOSA (L&M Power)
C-15-002-TD-SLCXX



DIMENSION A (L&M POWER):7.9~8.6mm

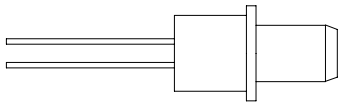


LC TOSA (H&2 Power)
C-15-002-TD-SLCXX



DIMENSION (H&2 POWER) A: Max 10.7mm
B: Max 5.1 mm

Customer Specified
TOSA



2.5Gbps LD Module-pigtailed

Part Number：C-15-002-PD-SXXXX/XXX-X

Packaging Dimension

Units in mm