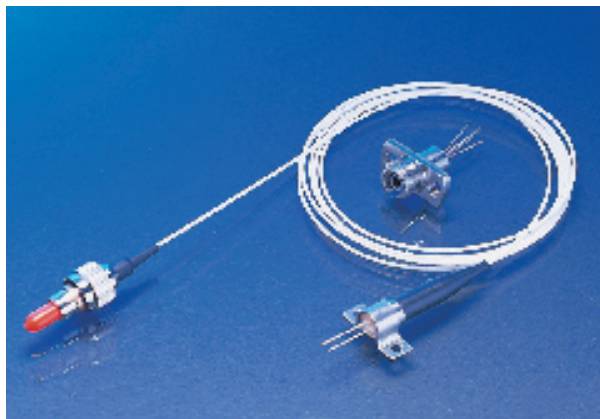


C-13-001-T/R/PX-SXXXX/XXX-X



Features

- Laser diode with multi-quantum-well structure
- Un-cooled operation at -40 to +85°C
- Built-in InGaAs monitor photodiode
- Hermetically sealed active component
- Complies with Bellcore TA-NWT-0009853
- TOSA package
- FC/ST/SC receptacle package with 2-hole flange
- Fiber pigtailed package with optional FC/ST/SC/MU/LC connector
- Design for fiber-optics networks application

Absolute Maximum Rating (Tc=25°C)

Parameter	Symbol	Value	Unit
Fiber Output Power L/M/H/2	P_f	1(L)/1.5(M)/2.5(H)3(2)	mW
Reverse Voltage	V_{RLD}	2	V
PD Reverse Voltage	V_{RPD}	10	V
PD Forward Current	I_{FPD}	1.0	mA
Operating Temperature	T_{opr}	-40 to +85	°C
Storage Temperature	T_{stg}	-40 to +85	°C

Optical and Electrical Characteristics(Tc=25°C)

Parameter	Symbol	Min	Typical	Max	Unit	Test Condition
Threshold Current	I_{th}	-	10	15	mA	CW
Fiber Output Power	P_f	0.2 0.5 1 2	- - 1.6 2.5	0.5 1.0 - -	mW	CW, $I_{th}+20$ mA, kink free
Peak Wavelength	λ	1290	1310	1330	nm	CW, $P_f=P_f(\text{Min})$
Spectrum Width (RMS)	$\Delta\lambda$	-	2	5	nm	CW, $P_f=P_f(\text{Min})$
Forward Voltage	V_F	-	1.2	1.5	V	CW, $P_f=P_f(\text{Min})$
Rise/Fall Time	t_r/t_f	-	-	0.3	ns	$I_{bias}=I_{th}$, 10% to 90%
Tracking Error	$\Delta P_f/P_f$	-	-	± 1.5	dB	APC, 0 to +70°C
PD Monitor Current	I_m	100	-	-	μA	CW, $P_f=P_f(\text{Min})$, $V_{RPD}=2V$
PD Dark Current	I_{DARK}	-	-	0.1	μA	$V_{RPD}=5V$
PD Capacitance	C_t	-	6	15	pF	$V_{RPD}=5V$, $f=1\text{MHz}$

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

C-13-001-T/R/PX-SXXXX/XXX-X

Ordering Information

C-13-001-XX-SXXXX/XXX-X

Wavelength
13=1310nm

Package
T=TOSA
R=Receptacle
P=Pigtail

Pin Assignment
“_” = A Type
B = B Type
D = D Type

Connector
FC/ST/SC/MU/LC/-

Fiber Output Power
L/M/H/2

- : PC Fiber
APC : APC Fiber

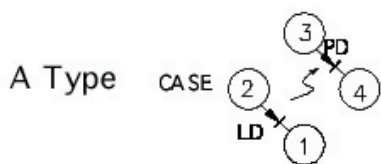
Flange type (-;O;V;K)

“I” = Isolator
“-” = No Isolator

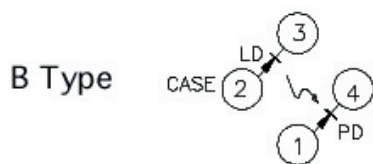
Packaging Dimensions

LD Pin Assignment

Units in mm



P in1 :Laser Cathode
P in2 :Laser Anode and Case Gnd
P in3 :Monitor Diode Anode
P in4 :Monitor Diode Cathode



P in1 :Monitor Diode Anode
P in2 :Laser Anode and Case Gnd
P in3 :Laser Cathode
P in4 :Monitor Diode Cathode



P in1 :Laser Anode and Monitor Diode Cathode
P in2 :Case Gnd
P in3 :Laser Cathode
P in4 :Monitor Diode Anode

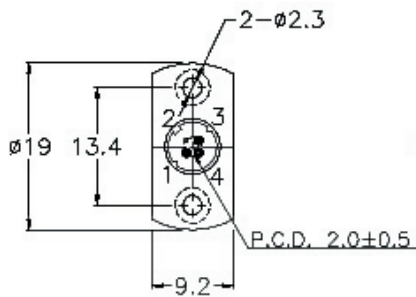
C-13-001-T/R/PX-SXXXX/XXX-X

Packaging Dimensions

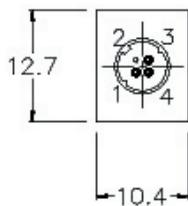
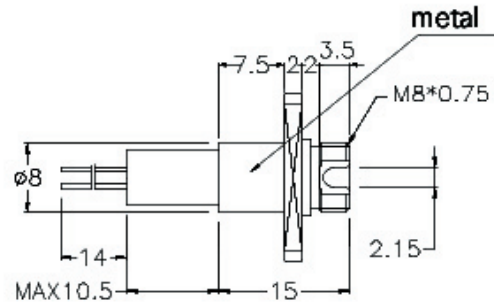
LD Module-Receptacle

Part Number: C-13-001-RX-SXXXX

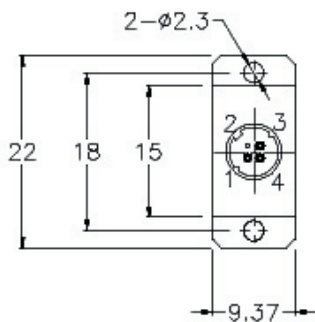
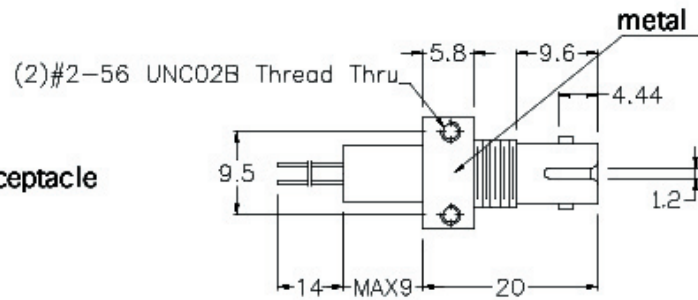
Units in mm



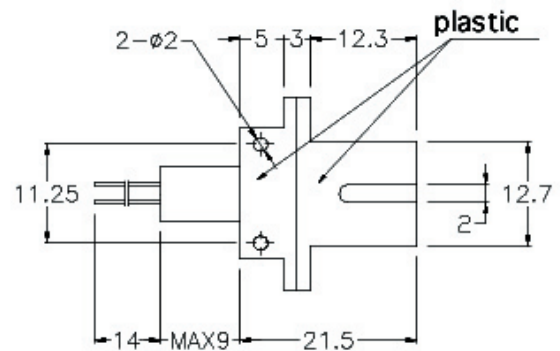
FC Receptacle



ST Receptacle



SC Receptacle



Packaging Dimensions

LD Module-TOSA

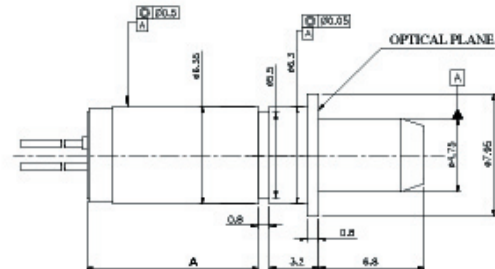
Part Number: C-13-001-TX-SSCXX

Units in mm

P.C.D. 2.0 ± 0.5



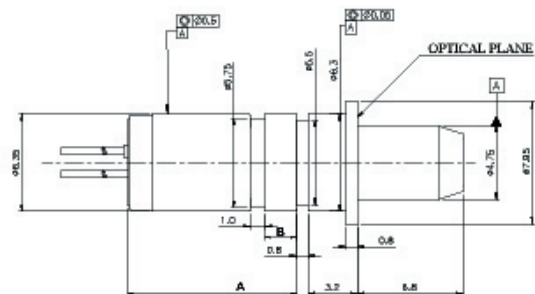
SC TOSA (L&M Power)
C-13-001-TX-SSCXX



DIMENSION A: 7.77~8.37mm



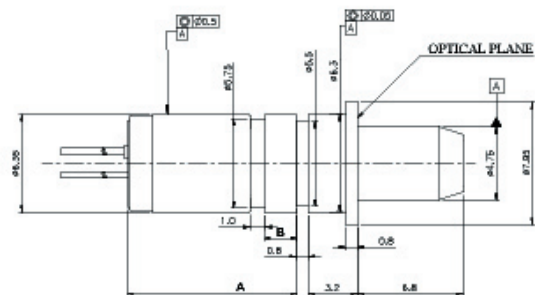
SC TOSA (L&M Power with Isolator)
C-13-001-TX-SSCXI



DIMENSION A: 8.07~9.07mm
B: 1.0~2.0mm



SC TOSA (H&2 Power)
C-13-001-TX-SSCXX



DIMENSION A: 9.7~11mm
B: 2.0~3.3mm

C-13-001-T/R/PX-SXXXX/XXX-X

Packaging Dimensions

LD Module-TOSA

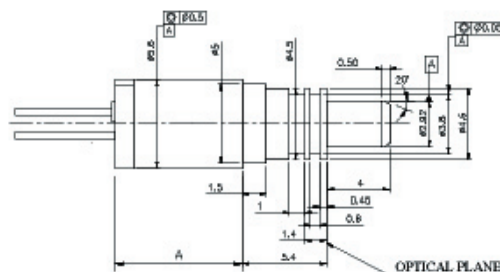
Part Number: C-13-001-TX-S LCXX

Units in mm

P.C.D. 2.0 ± 0.5



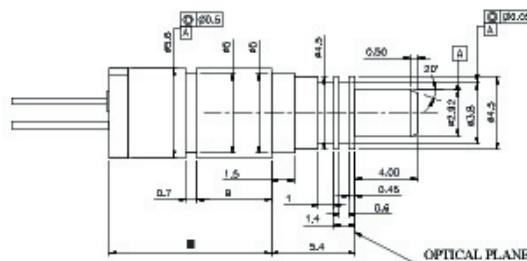
LC TOSA (L&M Power)
C-13-001-TX-SLCX



DIMENSION A: 7.77~8.37mm



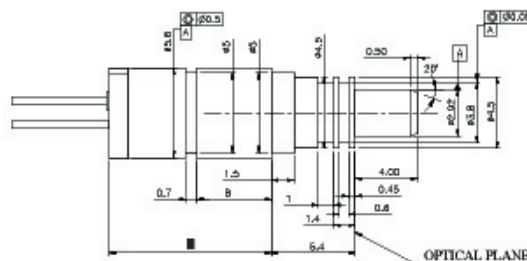
LC TOSA (L&M Power with Isolator)
C-13-001-TX-SLCXI



DIMENSION A: 8.07~9.07mm
B: 2.8~3.8mm



LC TOSA (H&2 Power)
C-13-001-TX-SLCXX



DIMENSION A: 9.7~11mm
B: 2.9~4.2mm

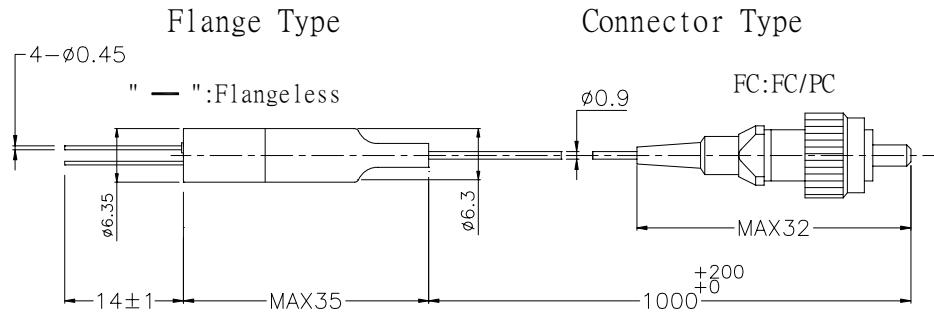
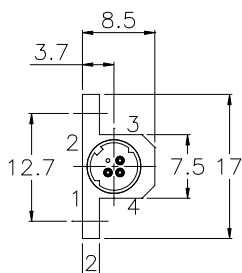
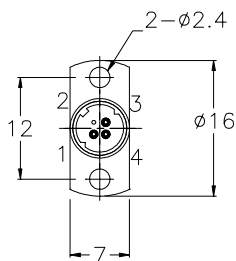
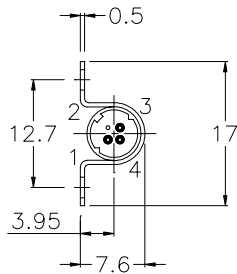
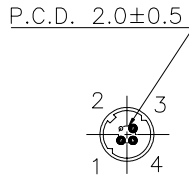
C-13-001-T/R/PX-SXXXX/XXX-X

Packaging Dimensions

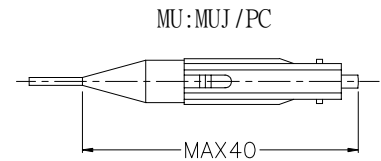
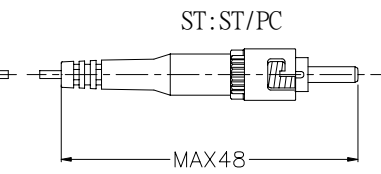
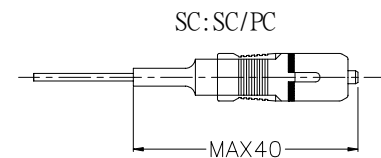
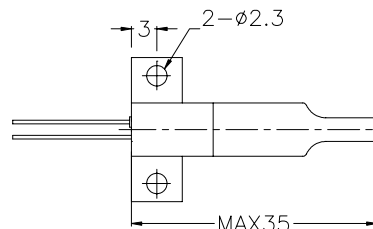
LD Module-Pigtailed

Part Number: C-13-001-PX-SXXXX/XXX-X

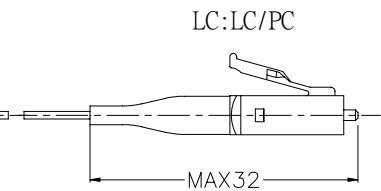
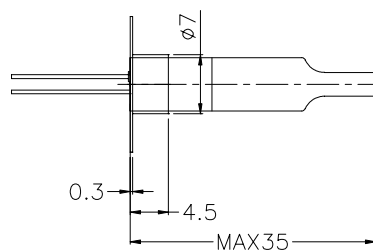
Units in mm



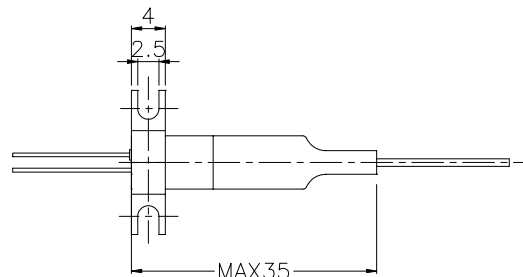
"O":Horizontal (Omega Housing)



"V":Vertical



"K":Horizontal (KX Housing)



Warnings

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.

Laser Safety: Radiation emitted by laser devices can be dangerous to human eyes. Avoid eye exposure to direct or indirect radiation.

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