

C-153-001-E-XX



Features

- Uncooled laser diode with MQW structure
- 5mW CW operation at -40 to +85°C
- High temperature operation without active cooling
- Hermetically sealed active component
- Built-in InGaAs monitor photodiode
- Complies with Telcordia(Bellcore) GR-468-CORE
- TO-18 with a flat window cap, 2.1mm low profile flat window cap and ball lens cap
- RoHS compliance available

Absolute Maximum Rating (Tc=25°C)

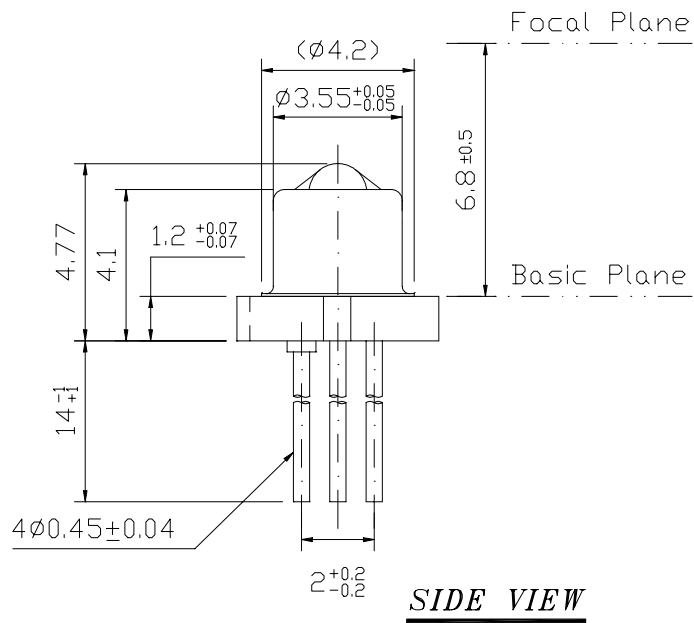
Parameter	Symbol	Value	Unit
Optical Output Power	P _o	6 (CW)	mW
LD Reverse Voltage	V _{RLD}	2	V
LD Forward Current	I _{FLD}	150	mA
PD Reverse Voltage	V _{RPD}	10	V
PD Forward Current	I _{FPD}	2	mA
Operating Temperature	T _{opr}	-40 to +85	°C
Storage Temperature	T _{stg}	-40 to +85	°C

Optical and Electrical Characteristics(Tc=25°C)

Parameter	Symbol	Min	Typical	Max	Unit	Test Condition
Slope Efficiency Flat window Ball lens cap	SE	0.2 0.15	0.3 0.18	-	mW/mA	CW, P _o =5mW
Threshold Current	I _{th}	-	10	15	mA	CW, P _o =5mW
Optical Output Power	P _o	5	-	-	mW	CW, kink free
Peak Wavelength	λ	1520	-	1548	nm	CW, P _o =5mW
Spectral Width	Δλ	-	2	5	nm	CW, P _o =5mW
Forward Voltage	V _F	-	1.2	1.5	V	CW, P _o =5mW
Beam Divergence Flat window cap	θ θ _⊥	- -	25 40	-	deg.	CW, P _o =5mW, FWHM
Rise/Fall Time	t _r /t _f	-	-	0.5	ns	10-90 %
PD Monitor Current	I _m	100	-	-	μA	CW, P _o =5mW, 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

TOP VIEW

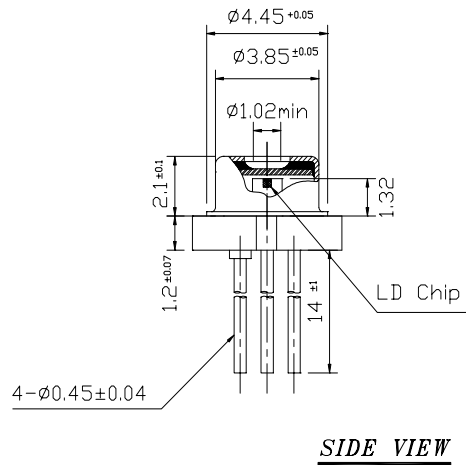
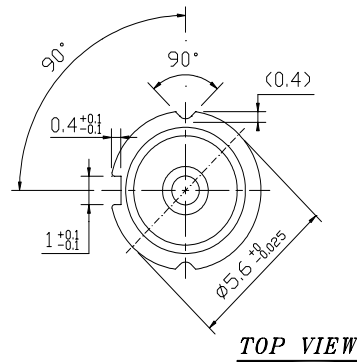




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C-153-001-E-XX

All dimensions in mm



Low profile flat window cap

LD Pin Assignment	
Model	PIN Assignment (Bottom View)
A Type	
B Type	
D Type	

C-153-001-E-XX

Ordering Information

Available Options:

C-153-001-E-XX
C-153-001-E-XX-G5
C-153-001-E-XX-GR

Note : XX=A,AB,AD,B,BB,BD,LA,LAB,LAD

C - 153 - 001 - E - X X - XX

Application

Wavelength

Data rate

Header

Cap

Pin out

RoHS compliance

C= Communicaton

153= 1530nm

001 = $\leq 1.25G$

E= TO-18

A= Flat window

B= Ball Lens

LA= Low profile flat window

No symbol= A

B= B

D= D

Blank = RoHS non-compliant product

G5 = RoHS 5/6-compliant product (lead exemption)

GR = Full RoHS compliant product (no exemption)

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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