



1550nm FP Laser Diode

(P/N.: FP1550-SM-5-01)

Features

- Single mode 1550nm FP laser diode packaged in a flat window TO-56 can with monitor PD.

Absolute Maximum Ratings

Parameter	Symbol	Min	Typ	Max	Unit
Operating Case Temperature	T_C	-40	-	85	°C
Storage Temperature	T_{STG}	-40	-	100	°C
Storage Relative Humidity	RH	-	-	85	%
Forward Current (laser)	I_{F-LD}	-	-	150	mA
Reverse Voltage (laser)	V_{R-LD}	-	-	2	V
Reverse Voltage (photodiode)	V_{R-PD}	-	-	15	V

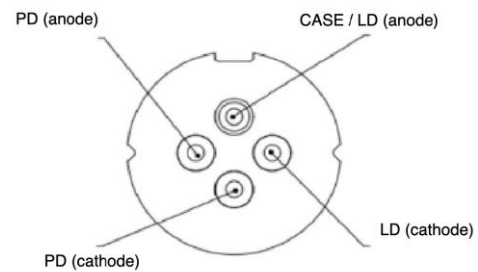
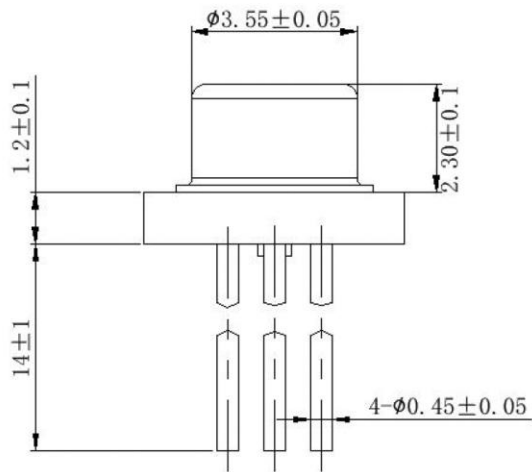
Opto-Electrical Characteristics

T=25°C

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Threshold Current	I_{th}	-	9	15	mA	CW
Forward voltage	V_F	-	1.2	1.5	V	$I = I_{th} + 20mA$
CW Output Power	P_{op}	3	5	-	mW	$I = I_{th} + 20mA$
Slope Efficiency	SE	0.15	0.2	-	W/A	$I = I_{th} + 20mA$
Peak Emission Wavelength	λ	1535	1550	1565	nm	$I = I_{th} + 20mA$
Spectral width	λ_{FWHM}	-	-	3.5	nm	$I = I_{th} + 20mA$
Dark current	I_{PD}	-	-	100	nA	$V_R = -5V$
Monitor current	I_m	100	-	1000	μA	$I = I_{th} + 20mA$
Beam Divergence (Horizontal)	$\Theta //$	-	25	-	°	
Beam Divergence (Vertical)	$\Theta \perp$	-	45	-	°	



Dimensional outline (units = mm)



Bottom view