



25Gbps 1310nm DFB Laser Diode, TO-56 (Ball Lens) C13D-5B-C25G

Data Sheet



Features

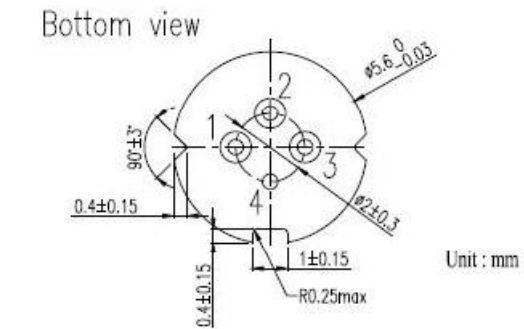
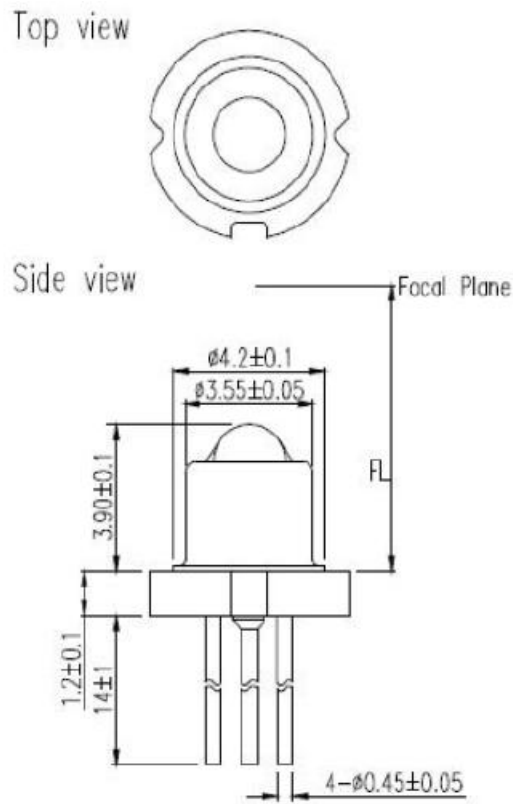
- 1310nm DFB laser diode
- Low threshold current and low operation current
- -40 to 85°C operating temperature
- Packaged in TO-56 with 2.0mm ball lens cap
- Isolation pinout
- Support from DC to 25.78 Gbps data operation

Specifications

Absolute Maximum Ratings				
Parameters	Symbol	Value	Unit	Conditions
Storage temperature	Tstg	-40~+85	°C	
Operating case temperature	Top	-40~+85	°C	
Lead solder temperature	Stemp	260	°C	10 seconds
Forward current (LD)	I _{FLD}	100	mA	
Reverse voltage (LD)	V _{RLD}	2	V	
Forward current (PD)	I _{RPD}	2	mA	
Reverse voltage (PD)	V _{RPD}	20	V	

Electro-Optical Characteristics (CW @ T _C = 25°C unless otherwise noted)						
Parameters	Symbol	Min.	Typ.	Max.	Unit	Conditions
Threshold current	I _{th}		6	10	mA	CW
			18	25	mA	CW, T _C =85°C
Forward voltage	V _f		1.4	2.0	V	CW, I _F =I _{th} +30mA
Slope efficiency	η	0.2	0.3		mW/mA	CW, I _F =I _{th} +30mA
Peak wavelength	λ _p	1300		1320	nm	CW, T _C =-40~85°C
Side-mode suppression rate	SMSR	35			dB	CW, I _F =I _{th} +30mA
PD Monitor current	I _m	50		1000	uA	CW, I _F =I _{th} +30mA, V _R =1V
PD dark current	I _d			0.1	uA	V _R =5V
PD capacitance	C _{PD}		4.5	5.5	pF	V _R =5V@1MHz
Focal length	FL	6.2	6.5	6.8	mm	CW, I _F =I _{th} +30mA, SMF

Outline Dimensions (unit: mm)



Pin Configuration

Pin Number	Function
1	LD Cathode
2	PD Cathode
3	LD Anode
4	PD Anode

Additional Notes

- Avoid eye or skin exposure to laser radiations.
- The device is sensitive to electro-static discharge (ESD). The device should be handled with ESD proof tools. To assemble the device on PCB, proper grounding is required to prevent ESD.
- Specifications are subject to change without notice.