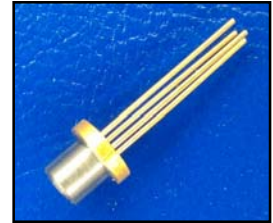


TME-1B89-307

10Gbps 1330nm DFB Laser Diode

FEATURES:

- Industry standard TO-56 package with Aspherical lens cap
- 1330nm typical emission wavelength
- Low threshold current and low operation current.
- Support from DC to 10.3125Gbps data rate operation.
- Isolation pinout.



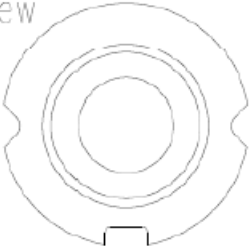
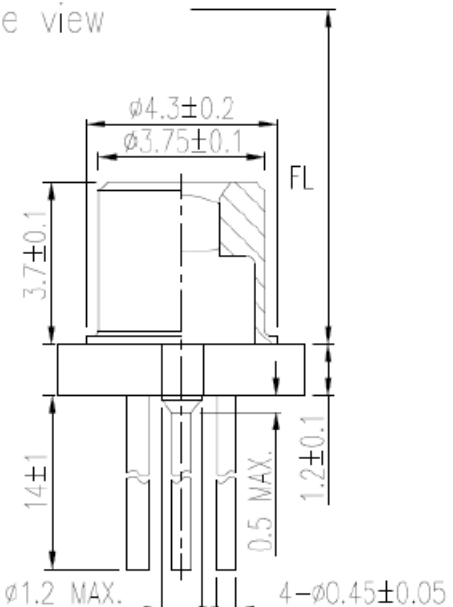
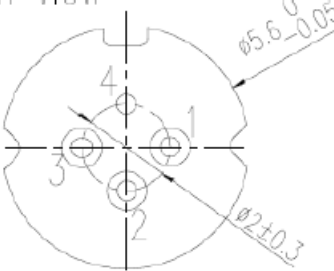
ELECTRO-OPTICAL CHARACTERISTICS : (Tc=25°C, unless otherwise stated)

PARAMETERS	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITIONS
Threshold Current	I_{th}		7	15	mA	CW
			18	25		CW, T _C = 85°C
Forward Voltage	V_f	1.0	1.2	1.4	V	CW, I _F = I _{th} + 20mA
Slope Efficiency	η	0.32	0.44		mW/mA	CW, I _F = I _{th} + 20mA
Peak Wavelength	λ_p	1320	1330	1340	nm	CW, I _F = I _{th} + 20mA, T _C = -40°C ~ 85°C
Side Mode Suppression Ratio	SMSR	35			dB	CW, I _F = I _{th} + 25mA
Rise / Fall Time (20%~80%)	T _r / T _f		45	50	ps	10.3125Gbps I _F = I _{th} + 20mA
PD Monitor Current	I _m	100		1000	uA	CW, I _F = I _{th} + 20mA, V _R = 1V
PD Dark Current	I _d			0.1	uA	V _R = 5V
PD Capacitance	C _{PD}		6	10	pF	V _R = 5V @1MHz
Focal Length	FL	7.2	7.5	7.8	mm	CW, I _F = I _{th} + 20mA, SMF

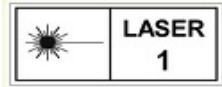
ABSOLUTE MAXIMUM RATINGS :

PARAMETERS	MIN	MAX	UNIT	CONDITIONS
Storage Temperature	-40	95	°C	
Operating Temperature	-40	85	°C	
Lead Solder Temperature		260	°C	10 seconds
LD Reverse Voltage		2	V	
PD Reverse Voltage		20	V	
PD forward Current		2	mA	

OUTLINE DIMENSIONS: (unit : mm)

Outline Dimensions	TME-1B89-307	
Top view  Side view  Bottom view  Rev: F	Focal Length : 7.5 ± 0.3 mm	
	Pin Out (Bottom View)	1: LD Cathode 2: PD Cathode 3: LD Anode 4: PD Anode

The DFB Laser is a class 1 laser in the safety standard IEC60825-1:2014.



TrueLight reserves the right to make changes due to the improvement of process and package technology.

