

TME-1B89-309

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.



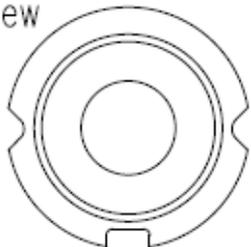
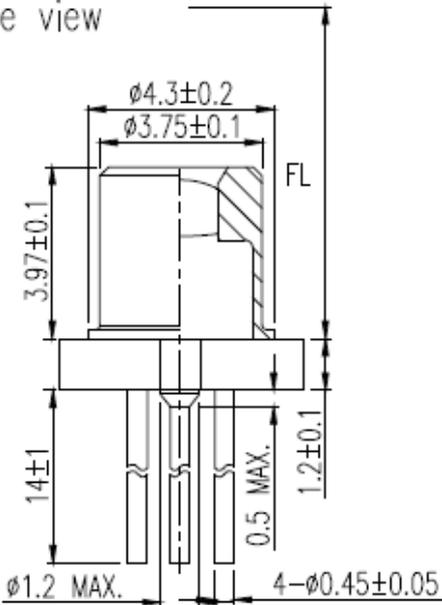
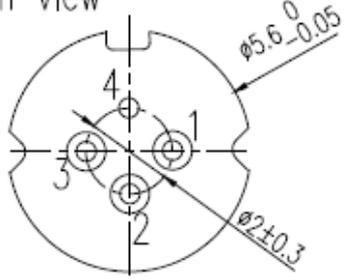
ELECTRO-OPTICAL CHARACTERISTICS : (Tc=25°C, unless otherwise stated)

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	9.8	10.1	10.4	mm	CW, I _F =I _{th} +20mA, SMF

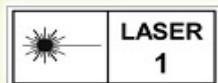
ABSOLUTE MAXIMUM RATINGS :

PARAMETERS	MIN	MAX	UNIT	CONDITIONS
Storage Temperature	-40	85	°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-1B89-309	
<p>Top view</p>  <p>Side view</p>  <p>Bottom view</p>  <p>Rev: F</p>	<p>Focal Length : 10.1 ± 0.3 mm</p>	
		<p>Pin Out (Bottom View)</p>

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.

