

TME-XB29-304

10Gbps DFB Laser Diode

preliminary

FEATURES:

- TO-56 package with 2.0(mm) ball lens cap
- Low threshold current and low operation current.
- Support from DC to 10.3125Gbps data rate operation
- Isolation pinout



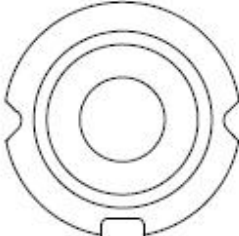
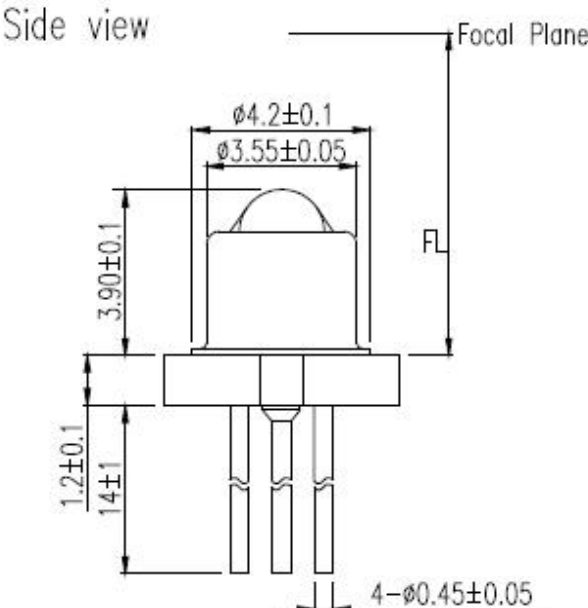
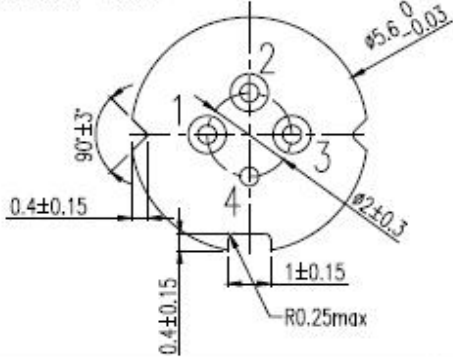
ELECTRO-OPTICAL CHARACTERISTICS : (Tc=25°C, unless otherwise stated)

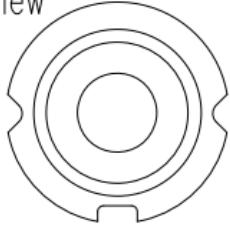
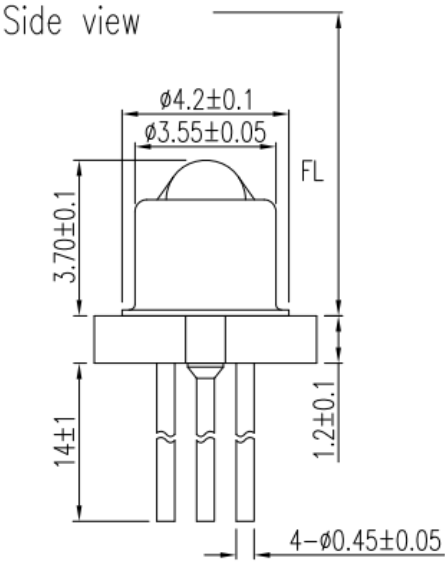
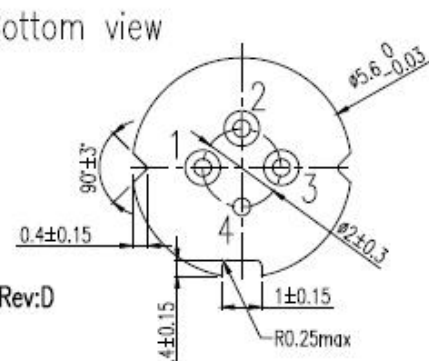
PARAMETERS	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITIONS
Threshold Current	I_{th}	8	15		mA	CW
		25	35			CW, Tc=85°C
Forward Voltage	V_f	1.4	2.0		V	CW, $I_F=I_{th}+20mA$
Slope Efficiency	η	0.3			mW/mA	CW, $I_F=I_{th}+20mA$
Peak Wavelength	λ_P	1260		1280	nm	CW, $I_F=I_{th}+20mA$, Tc=-40~85°C
TME-2B29-304:1270nm		1280		1300		
TME-0B29-304:1290nm		1300		1320		
TME-3B29-304:1310nm		1320		1340		
TME-1B29-304:1330nm		1340		1360		
TME-6B29-304:1350nm		1360		1380		
TME-8B29-304:1370nm						
Side Mode Suppression Ratio	SMSR	35			dB	CW, $I_F=I_{th}+20mA$
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}	5.5	10		pF	$V_R=5V$ @1MHz
Focal Length	FL	6.45	6.6	6.75	mm	CW, $I_F=I_{th}+20mA$, SMF

ABSOLUTE MAXIMUM RATINGS :

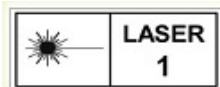
PARAMETERS	MIN	MAX	UNIT	CONDITIONS
Storage Temperature	-40	95	°C	
Operating Temperature	-40	85	°C	
Lead Solder Temperature		260	°C	10 seconds
LD Reverse Voltage		2	V	
LD Forward Current		120	mA	
PD Reverse Voltage		20	V	
PD Forward Current		2	mA	

OUTLINE DIMENSIONS: (unit : mm)

Outline Dimensions	TME-XB29-304 (normal index cap)	
Top view  Side view  Bottom view  Unit : mm	Focal Length : 6.6 ± 0.15 mm	
	Pin Out (Bottom View)	1: LD Cathode 2: PD Cathode 3: LD Anode 4: PD Anode

Outline Dimensions	TME-XB29-304 (high index cap)	
Top view  Side view  Bottom view  Rev:D Unit : mm	Focal Length : 6.6 ± 0.15 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.



Rev2.00