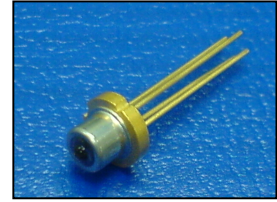


TME-3B83-507

1310nm 2.5Gbps DFB Laser Diode

FEATURES:

- Industry TO-56 package of aspherical lens cap
- 1310nm typical emission wavelength
- Data rate operation from DC up to 2.5Gbps
- Common anode type



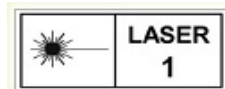
ELECTRO-OPTICAL CHARACTERISTICS : (Tc=25°C, unless otherwise stated)

PARAMETERS	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITIONS
Threshold Current	I_{th}		11	15	mA	CW
		3		40		CW, Tc = -40°C ~ 85°C
Operating Voltage	V_{op}		1.1	1.6	V	CW, Po=5mW, Tc = -40°C ~ 85°C
Slope Efficiency	η	0.3			mW/mA	CW, Po=5mW
Peak Wavelength	λ_p	1290	1310	1330	nm	CW, Iop=30(mA) Tc = -40°C ~ 85°C
Side Mode Suppression Ratio	SMSR	35			dB	CW, Iop=30(mA)
Rise / Fall Time (20%~80%)	T_r / T_f			150	ps	CW, Po=5mW, (20%~80%)
PD Monitor Current	I_m	100		1000	uA	CW, Iop=Ith+20(mA), $V_R=1V$
PD Dark Current	I_d			0.1	uA	$V_R=5V$
PD Capacitance	C_{PD}		5.5	10	pF	$V_R=5V @ 1MHz$
			6	10	pF	$V_R=3.3V @ 1MHz$
Focal Length	FL	7.3	7.5	7.8	mm	CW, Iop=Ith+20(mA), SMF
Minimum Rollover Current		100			mA	CW, Tc = -40°C ~ 85°C

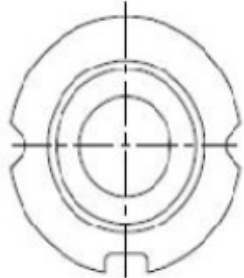
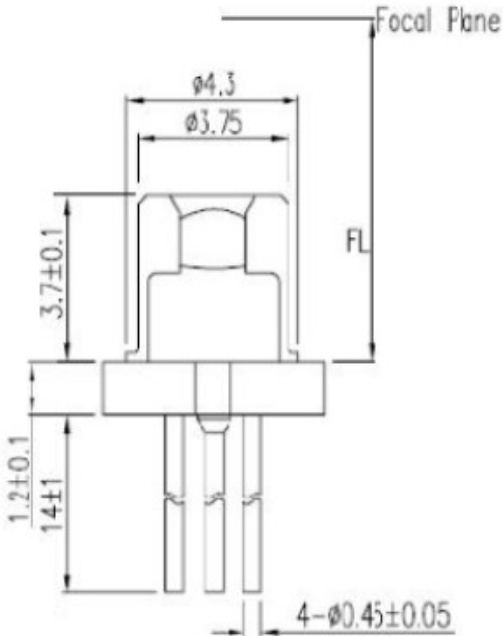
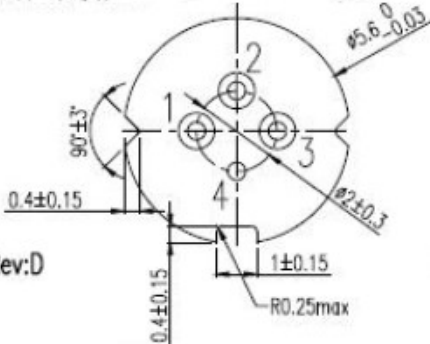
ABSOLUTE MAXIMUM RATINGS :

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	
LD Forward Current		120	mA	
PD Reverse Voltage		20	V	
PD forward Current		2	mA	

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



OUTLINE DIMENSIONS: (unit : mm)

Outline Dimensions	TME-3B83-507	
Top view  Side view  Bottom view  Rev:D Unit : mm	Focal Length : 7.5 ± 0.3 mm	
	Pin Out (Bottom View)	1: LD Cathode 2: PD Anode 3: LD Anode / PD Cathode 4: CASE