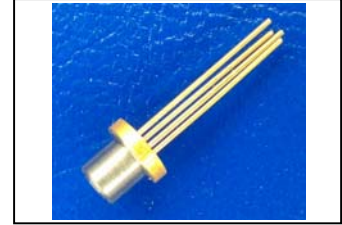


TME-4B83-537

2.5Gbps 1490nm DFB Laser Diode

FEATURES:

- Industry standard TO-56 package with aspherical lens cap.
- Low threshold current and low operating current.
- Support from DC to 2.5Gbps data rate operation.
- Common anode pinout.



ELECTRO-OPTICAL CHARACTERISTICS: ($T_A = 25^\circ\text{C}$, unless otherwise specified)

PARAMETERS	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITIONS
Threshold Current	I_{th}		6	10	mA	CW
Forward Voltage	V_F		1.2	1.5	V	CW, $I_F = I_{th} + 20\text{mA}$
Slope Efficiency	η	0.25	0.30		mW/mA	CW, $I_F = I_{th} + 20\text{mA}$
Rise / Fall time(20%~80%)	tr/tf			150	ps	$I_F = I_{th} + 20\text{mA}$, @2488.32Mbps
Wavelength	λ_p	1480	1490	1500	nm	CW, $I_F = I_{th} + 20\text{mA}$
Side Mode Suppression Ratio	SMSR	35	40		dB	CW, $I_F = I_{th} + 20\text{mA}$
PD Monitor Current	I_M	100		800	μA	CW, $I_F = I_{th} + 20\text{mA}$, $V_R = 1\text{V}$
PD Dark Current	I_D			0.1	μA	$V_R = 5\text{V}$
PD Capacitance	C_M		7	10	pF	$V_R = 5\text{V}$, $f = 1\text{MHz}$
Focal Length	FL	7.2	7.5	7.8	mm	CW, $I_F = I_{th} + 20\text{mA}$, SMF

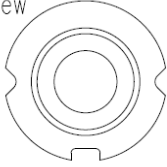
ABSOLUTE MAXIMUM RATINGS:

PARAMETERS	MIN	MAX	UNIT	TEST CONDITIONS
Storage Temperature	-40	85	$^\circ\text{C}$	
Operating Temperature	-10	85	$^\circ\text{C}$	
Lead Solder Temperature		260	$^\circ\text{C}$	10 seconds
LD Reverse Voltage		2	V	
PD Reverse Voltage		20	V	
PD Forward Current		2	mA	

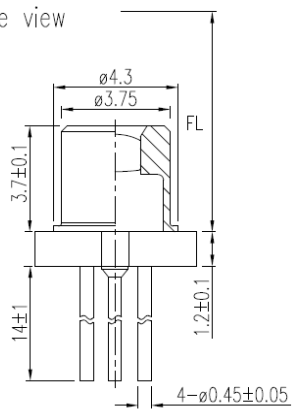
OUTLINE DIMENSIONS:

• Unit: mm

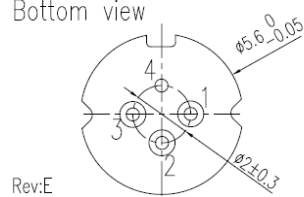
Top view



Side view



Bottom view



Rev:E

Pinout:

Pin no.	TME-4B83-537
	Function(CA)
1	LD Cathode
2	PD Anode
3	LD Anode / PD Cathode
4	Case