

TME-5F42-201

1550 nm 2.5Gbps FP Laser Diode

Features

- Industry TO-56 package of ball lens cap
- 1550nm typical emission wavelength
- Data rate operation from DC to 2.5Gbps
- Common anode type



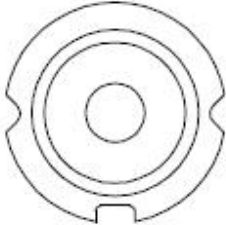
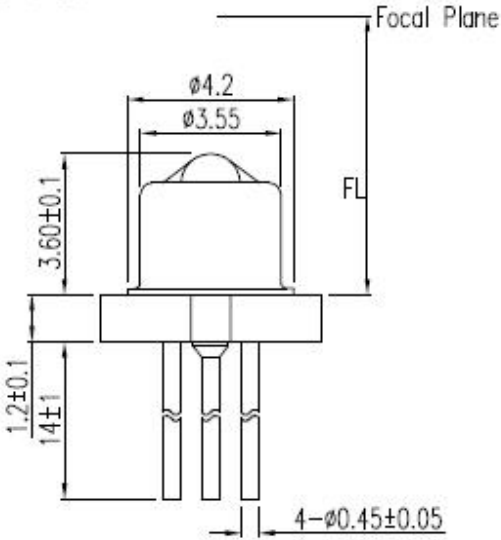
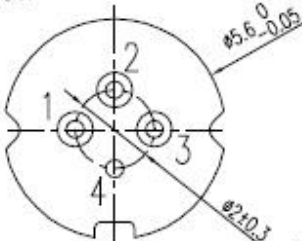
ELECTRO-OPTICAL CHARACTERISTICS: (Tc=25°C, unless otherwise stated)

PARAMETERS	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITIONS
Threshold Current	I _{th}		10	15	mA	CW
Operating Current	I _{op}			43		CW, P _o =5mW
Operating Voltage	V _{op}		1.1	1.5		CW, P _o =5mW
Slope Efficiency	η	0.14	0.2		mW /mA	CW, P _o =5mW
Peak Wavelength	λ_p	1515	1530	1545	nm	CW, P _o =5mW
Spectral Width	$\Delta\lambda$		2	3	nm	CW, P _o =5mW, (RMS, -20 dB)
Rise / Fall Time (20%~80%)	T _r / T _f			0.2	ns	P _o =5mW
PD Monitor Current	I _m	100		800		CW, P _o =5mW, 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	5.5	5.8	6.1	mm	CW, P _o =5mW, SMF

ABSOLUTE MAXIMUM RATINGS:

PARAMETERS	MIN	MAX	UNIT	CONDITION
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 DIMINTIONS: (unit:mm)

Outline Dimensions		TME-5F42-201	
Top view  Side view  Bottom view  Rev:B Unit: mm		Focal Length: 5.8±0.3 mm	
		Pin Out (Bottom View)	1: LD Cathode 2: PD Anode 3: LD Anode / PD Cathode 4: CASE