

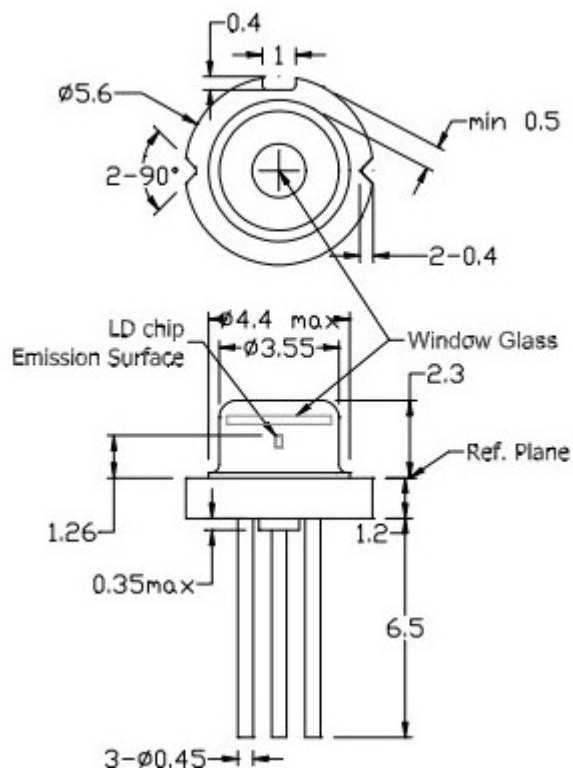
650nm 10mw Red Laser Diode

* 650nm 10mw 50°C Low Current Operation

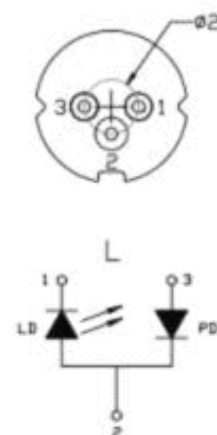
•Features

1. Low operating current
2. High efficiency
3. FFP single lateral mode
4. Sort lm by grade

Application: Medical Use



Parameter	Symbol	Condition	Rating	Unit
Light output power	P_O	CW	1.0	mW
Reverse voltage (LD)	V_{RL}	-	2	V
Reverse voltage (PD)	V_{RD}	-	30	V
Forward current (PD)	I_{FD}	-	10	mA
Case temperature	T_C	-	-10~+50	°C
Storage temperature	T_S	-	-40~+85	°C



• Electrical and optical characteristics ($T_C=25^\circ\text{C}$)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Peak wavelength	λ	645	655	660	nm
Threshold current	I_{th}	-	15	20	mA
Operating current	I_{op}	-	20	22	mA
Operating voltage	V_{op}	-	2.2	2.5	V
Differential efficiency	η	0.5	1.0	1.4	mW/mA
Monitor current	I_m	0.1	0.18	0.4	mA
Parallel divergence angle	$\theta_{\parallel}$	6	8	12	deg
Perpendicular divergence angle	$\theta_{\perp}$	24	27	32	deg
Parallel FFP deviation angle	$\Delta\theta_{\parallel}$	-3	0	+3	deg
Perpendicular FFP deviation angle	$\Delta\theta_{\perp}$	-3	0	+3	deg
Emission point accuracy	$\Delta x \Delta y \Delta z$	-80	0	+80	um

