

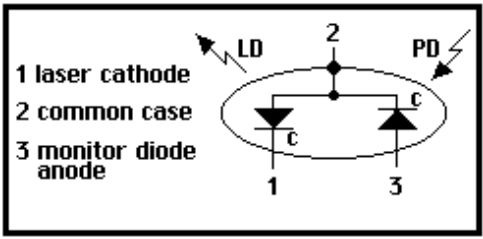
US-Lasers: 850nm-30mW - Infrared Laser Diode and Infrared Diode Laser Module

[Back To Laser Modules](#)

TECHNICAL DATA for LASER MODULE		
Barrel Specs:	Collect Specs:	Lens Housing Specs:
<ul style="list-style-type: none"> • 3/8 - 56 Thread Size • Dia: 10.4mm • Length: 17mm 	<ul style="list-style-type: none"> • 3/8 - 56 Thread Size • 4.3mm Aperature • Half Hard Brassbbb 	<ul style="list-style-type: none"> • 3/8 - 56 Thread Size • 3.7mm Aperature • 7mm Plastic Lens

IR LASER DIODE DATA SHEET

ABSOLUTE MAXIMUM RATINGS - ($T_c=25^\circ\text{C}$)

TECHNICAL DATA IR light output 850nm Optical power output 30mW CW Package Type 5.6mm Built-in photo diode for monitoring laser output	 <p>1 laser cathode 2 common case 3 monitor diode anode</p>
Pin Out Diagram	

Items	Symbols	Values	Unit
Optical output power	Po	30	mW
Laser diode reverse voltage	V	2	V
Photo diode reverse voltage	V	30	V
Operating temperature	Topr	-10 ~ +50	°C
Storage temperature	Tstg	-40 ~ +85	°C

OPTICAL and ELECTRICAL CHARACTERISTICS - ($T_c=25^\circ\text{C}$)

Items	Symbols	Min.	Typ.	Max.	Unit	Test Condition
Optical output power	Po	-	30	-	mW	-
Threshold current	Ith	30	50	70	mA	Po=30mW
Operating current	Iop	60	80	100	mA	Po=30mW
Operating voltage	Vop	2.0	2.2	2.7	V	Po=30mW
Lasing wavelength	ep	830	850	870	nm	Po=30mW
Beam divergence		8	10	11	deg	Po=30mW
Beam divergence		25	31	40	deg	Po=30mW
Monitor current	Im	100	300	500	uA	Po=30mW
Astigmatism	As	-	11	-	um	Po=30mW
Slope Efficiency (mW/mA)		0.3	0.4	0.7		Po=30mW
MTTF			10000 hrs.			Po=30mW
Emitter Size	10 x 60 Microns - Emitter Distance to Cap Lens = 0.3mm					
Structure	Index Guided					

