

RED LASER DIODE

DL-5147-042

SANYO

Ver.1 July. 2002

Features

- Short wavelength : 655 nm (Typ.)
- High output power : 30 mW at 60°C (CW)
- Low threshold current : $I_{th} = 40$ mA (Typ.)
- Small package : $\phi 5.6$ mm
- TE mode

Applications

Bar-code scanner

Absolute Maximum Ratings

(T_c=25°C)

Parameter		Symbol	Ratings	Unit
Light Output	CW	Po (CW)	30	mW
	Pulse ¹⁾	Po(pulse)	50	
Reverse Voltage	Laser	VR	2	V
	PD		30	
Operating Temperature		Topr	-10 to +60	°C
Storage Temperature		Tstg	-40 to +85	°C

1) Pulse Width 0.5μs, Duty 50%

Electrical and Optical Characteristics

2) 3)

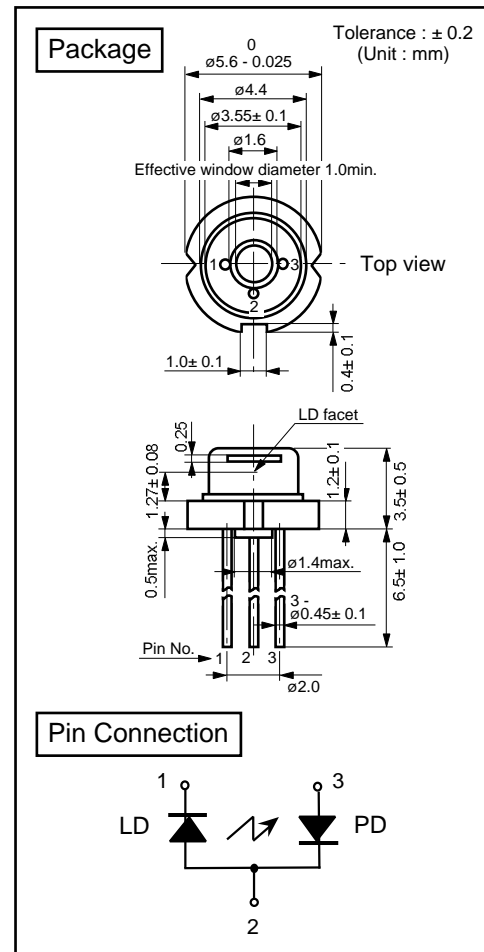
(T_c=25°C)

Parameter		Symbol	Condition	Min.	Typ.	Max.	Unit
Threshold Current		I _{th}	CW	-	40	50	mA
Operating Current		I _{op}	Po=30mW	-	80	110	mA
Operating Voltage		V _{op}	Po=30mW	-	2.4	2.8	V
Lasing Wavelength		L _p	Po=30mW	-	655	665	nm
Beam ⁴⁾ Divergence	Perpendicular	Q _v	Po=30mW	15	23	28	°
	Parallel	Q _h	Po=30mW	6	7	10	°
Off Axis Angle	Perpendicular	dQ _v	-	-	-	± 3	°
	Parallel	dQ _h	-	-	-	± 3	°
Differential Efficiency		dPo/dI _{op}	-	-	0.75	-	mW/mA
Monitoring Output Current		I _m ⁵⁾	Po=30mW	0,1	0.3	-	mA
Astigmatism		A _s	Po=30mW	-	10	-	μm

2) Initial values 3) All the above values are evaluated with Tottori Sanyo's measuring apparatus

4) Full angle at half maximum

Note : The above product specification are subject to change without notice.



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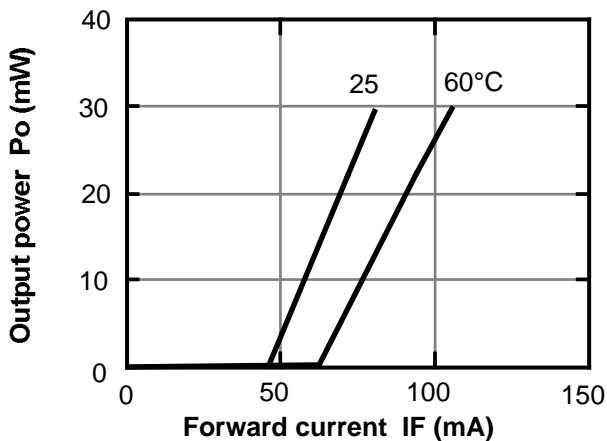
Sales: Creative Technology Lasers USA +1.925.210.1330 Tele +1.925. 210.1380 FAX

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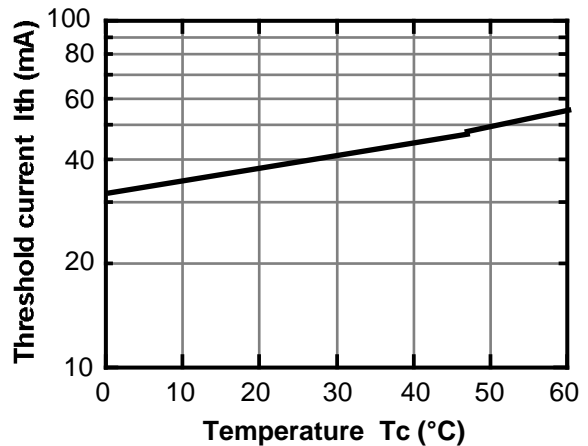


Characteristics

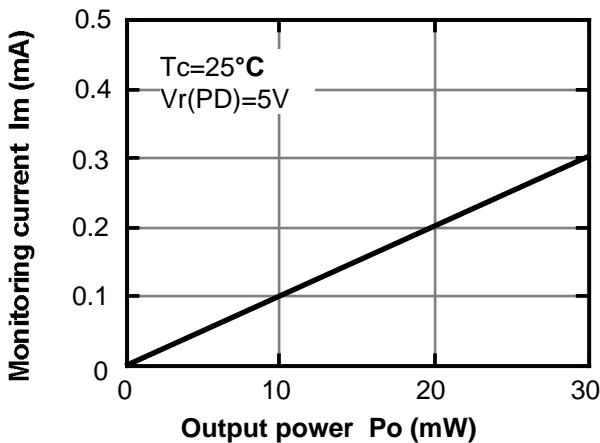
Output power vs. Forward current



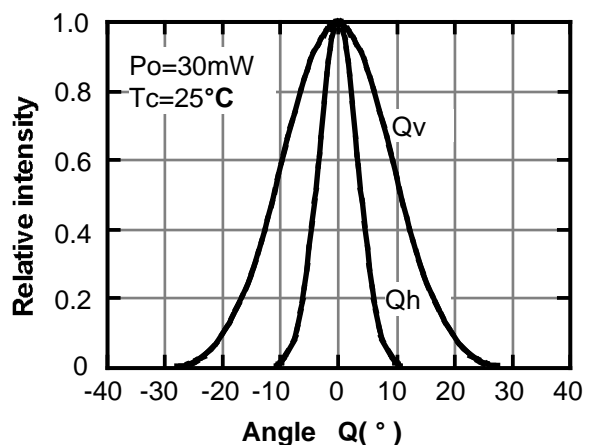
Threshold current vs. Temperature



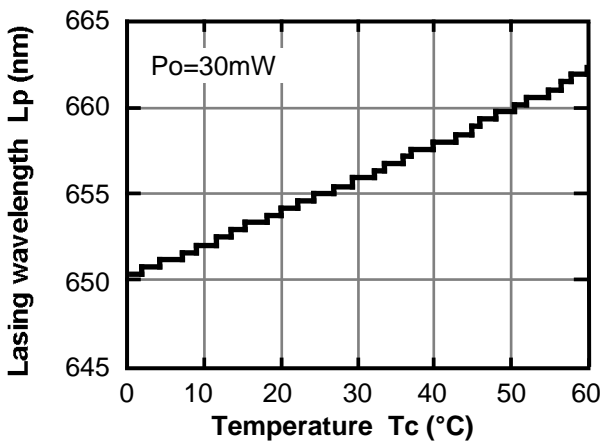
Monitoring current vs. Output power



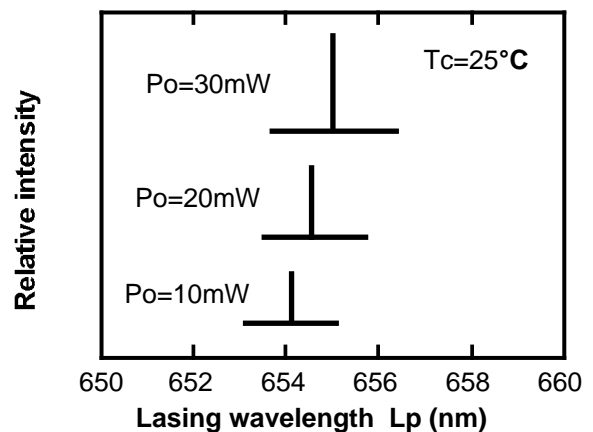
Beam divergence



Lasing wavelength vs. Temperature



Lasing wavelength vs. Output power



This is typical data and it may not represent all products.