

RED LASER DIODE

DL-LS1034

Tentative

SANYO

Ver.1 Oct. 2001

Features

- Short wavelength : 635 nm (Typ.)
- High output power : 20 mW CW
- Low threshold current : I_{th} = 40 mA (Typ.)
- Low operating voltage : V_{op} = 2.3 V (Typ.)

Applications

Line marker, Leveler

Absolute Maximum Ratings

(T_c=25°C)

Parameter		Symbol	Ratings	Unit
Light Output	CW	P _o	25	mW
Reverse Voltage	Laser	V _R	2	V
	PD		30	
Operating Temperature		T _{opr}	-10 to +50	°C
Storage Temperature		T _{stg}	-40 to +85	°C

Electrical and Optical Characteristics ^{1) 2)}

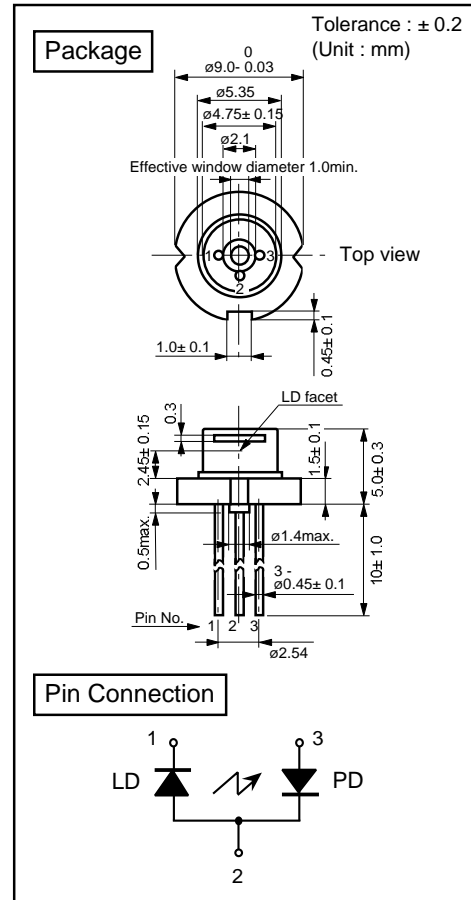
(T_c=25°C)

Parameter		Symbol	Condition	Min.	Typ.	Max.	Unit
Threshold Current		I _{th}	CW	-	40	60	mA
Operating Current		I _{op}	P _o =20mW	-	70	85	mA
Operating Voltage		V _{op}	P _o =20mW	-	2.3	2.6	V
Lasing Wavelength		L _p	P _o =20mW	-	635	645	nm
Beam ³⁾ Divergence	Perpendicular	Q _v	P _o =20mW	22	28	35	°
	Parallel	Q _h	P _o =20mW	6	7	10	°
Off Axis Angle	Perpendicular	dQ _v	-	-	-	± 3	°
	Parallel	dQ _h	-	-	-	± 3	°
Differential Efficiency		dP _o /dI _{op}	-	-	0.7	-	mW/mA
Monitoring Output Current		I _m	P _o =20mW	0.1	0.2	0.5	mA
Astigmatism		A _s	P _o =20mW	-	8	-	μm

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

3) Full angle at half maximum

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

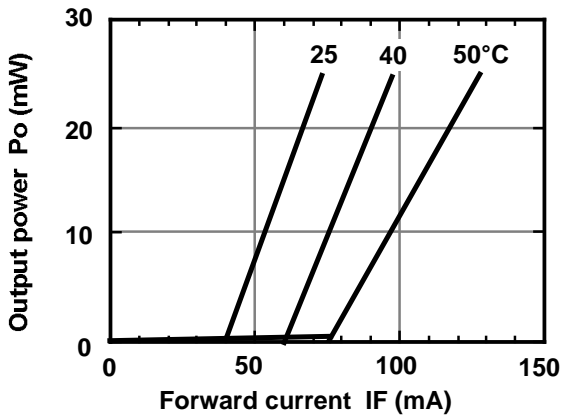


Tottori SANYO Electric Co., Ltd. Electronic Device Business Headquarter
LED Division

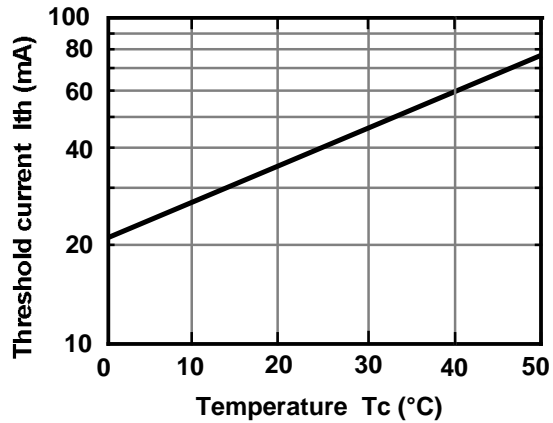
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Characteristics

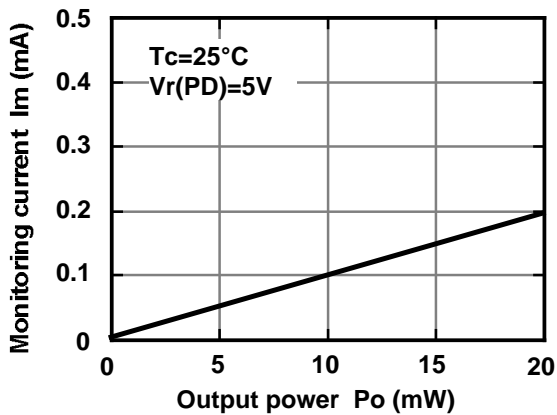
Output power vs. Forward current



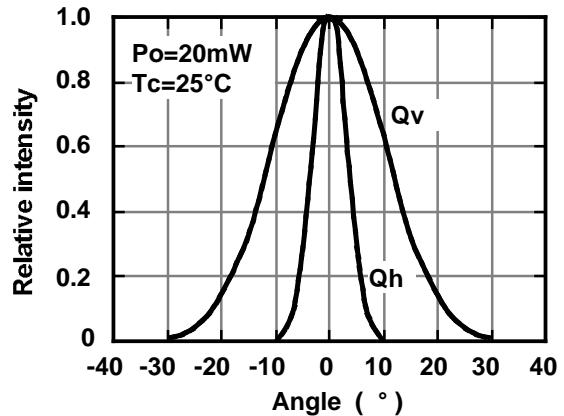
Threshold current vs. Temperature



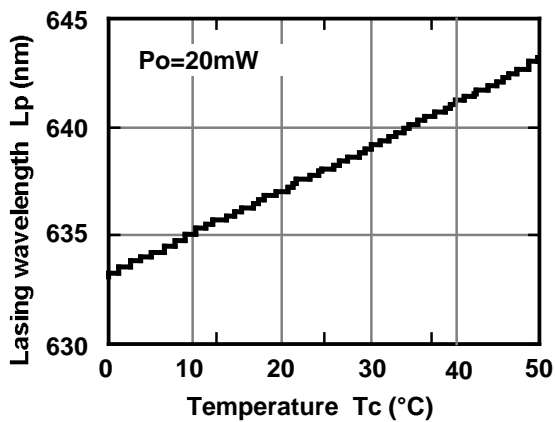
Monitoring current vs. Output power



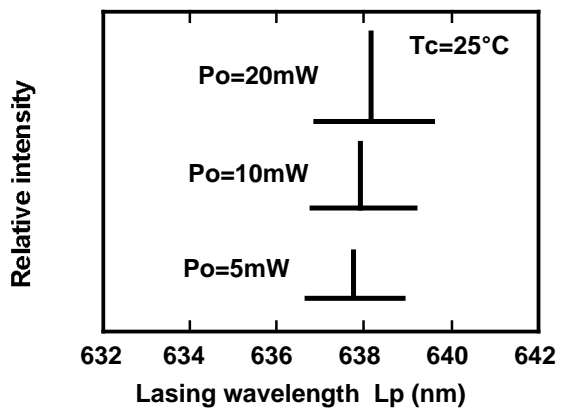
Beam divergence



Lasing wavelength vs. Temperature



Lasing wavelength vs. Output power



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