

RED LASER DIODE

DL-LS1035

Tentative

SANYO

Ver.1 Apr. 2001

Features

- Short wavelength : 635 nm (Typ.)
- High output power :30 mW at 40°C
- Low threshold current : I_{th} = 50 mA (Typ.)
- TE mode (Conventional 635nm : TM mode)

Applications

- Bar-code scanner
- Line marker

Absolute Maximum Ratings

(T_c=25°C)

Parameter	Symbol	Ratings	Unit	
Light Output	CW	P _o	35	mW
Reverse Voltage	Laser	VR	2	V
	PD		30	
Operating Temperature	T _{opr}	-10 to +40	°C	
Storage Temperature	T _{stg}	-40 to +85	°C	

Electrical and Optical Characteristics ^{1) 2)}

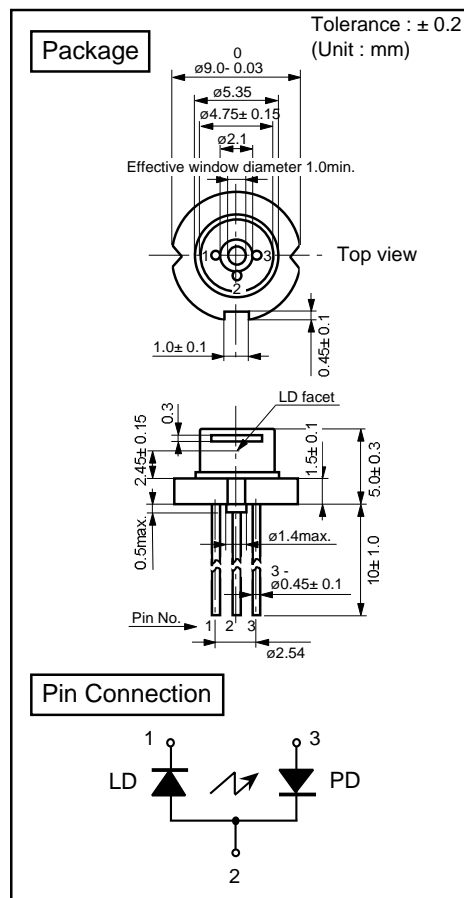
(T_c=25°C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit	
Threshold Current	I _{th}	CW	-	50	70	mA	
Operating Current	I _{op}	P _o =30mW	-	90	110	mA	
Operating Voltage	V _{op}	P _o =30mW	-	2.4	2.7	V	
Lasing Wavelength	L _p	P _o =30mW	-	635	645	nm	
Beam ³⁾ Divergence	Perpendicular	Q _v	P _o =30mW	25	30	35	°
	Parallel	Q _h	P _o =30mW	6	7	9	°
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 =30mW	0.1	0.3	0.6	mA	
Astigmatism	A _s	P _o =30mW	-	10	-	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.
LED Division

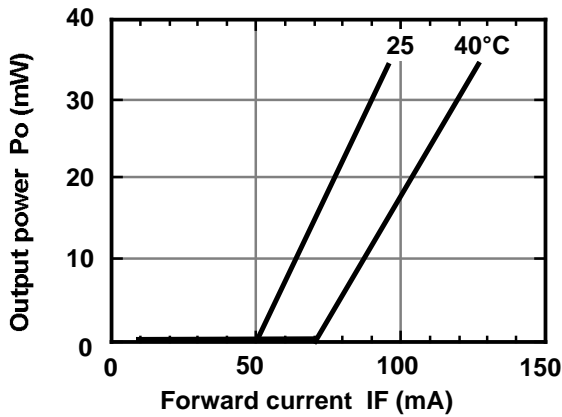
Electronic Device Business Headquarters

5-318, Tachikawa, Tottori 680-8634 Japan

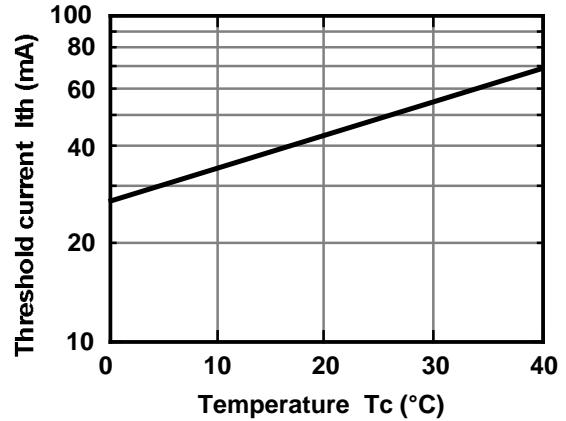
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Characteristics

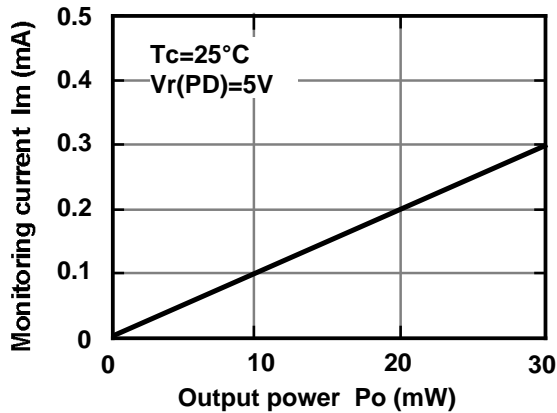
Output power vs. Forward current



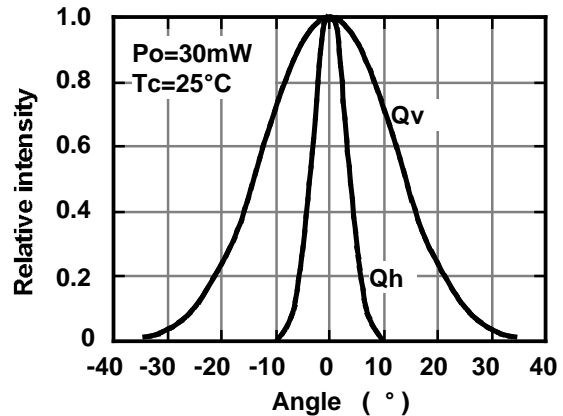
Threshold current vs. Temperature



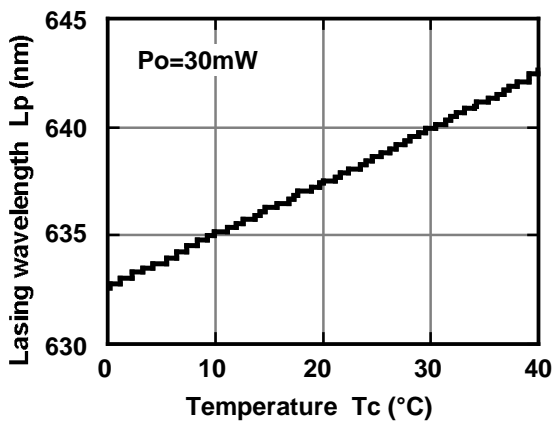
Monitoring current vs. Output power



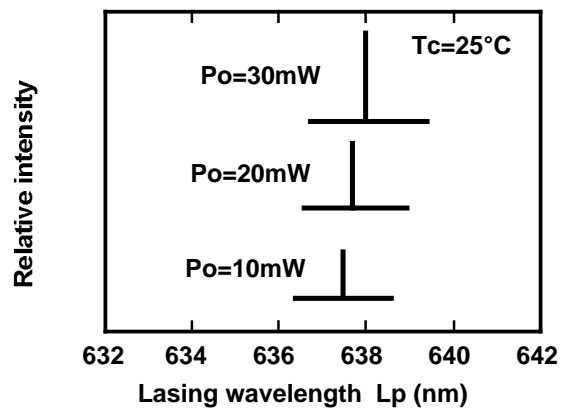
Beam divergence



Lasing wavelength vs. Temperature



Lasing wavelength vs. Output power



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