RED LASER DIODE
DL-3147-160

SANYO

Ver.1 Jul. 2008

Features

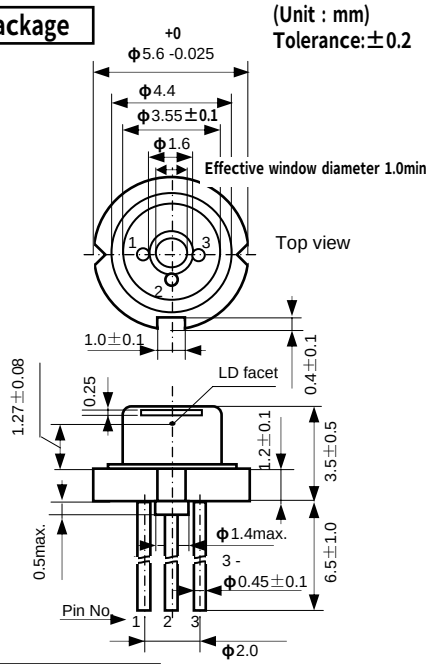
- Wavelength : 650nm(Typ.)
- Threshold current : Ith=20mA(Typ.)
- High operating temperature : 5mW at 70℃
- TE mode

Applications

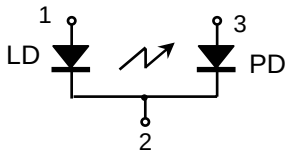
- DVD-ROM/PLAYER
- Laser module
- Bar-code scanner

Package

(Unit : mm)
Tolerance:±0.2



Pin Connection



Absolute Maximum Ratings

(Tc=25℃)

Parameter		Symbol	Ratings	Unit
Light Output	CW	Po	7	mW
Reverse Voltage	Laser	VR	2	V
	PD		30	
Operating Temperature 1)		Topr	-10 to +70	℃
Storage Temperature 1)		Tstg	-40 to +85	℃

1) Case temperature.

Electrical and Optical Characteristics 2) 3) 4) 5)

(Tc=25℃)

Parameter		Symbol	Condition	Min.	Typ.	Max.	Unit
Threshold Current		Ith	CW	-	20	35	mA
Operating Current		Iop	Po=5mW	-	30	45	mA
Operating Voltage		Vop	Po=5mW	-	2.3	2.6	V
Lasing Wavelength		Lp	Po=5mW	645	650	660	nm
Beam Divergence 6)	Perpendicular	Qv	Po=5mW	25	30	35	°
	Parallel	Qh	Po=5mW	7	8	10	°
Off Axis Angle	Perpendicular	dQv	Po=5mW	-3	-	3	°
	Parallel	dQh	Po=5mW	-2	-	2	°
Differential Efficiency		SE	Po=5mW	0.3	0.5	0.8	mW/mA
Monitoring Output Current		Im	Po=5mW	0.08	0.2	0.4	mA

2) Initial Values. 3) All the above values are evaluated with Sanyo's measuring apparatus.
4) It makes a typical value a Reference Value. 5) Measurement condition : CW. 6) Full angle at half maximum.

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

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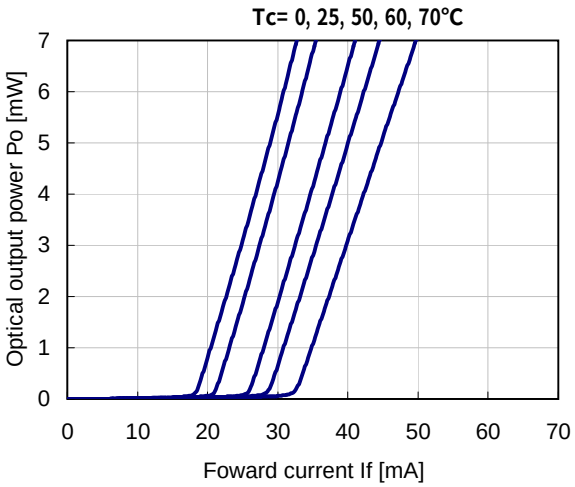
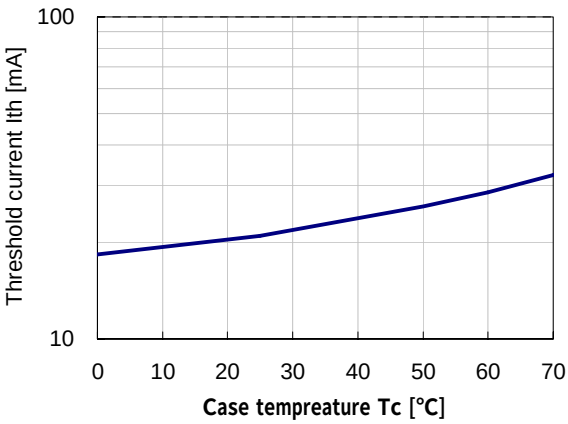
Characteristics

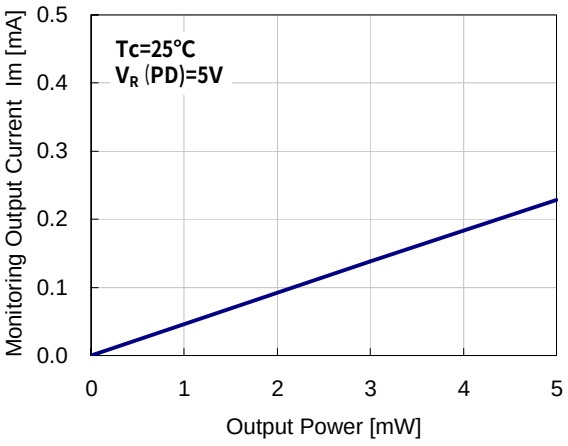
Optical output power vs. Forwerd current



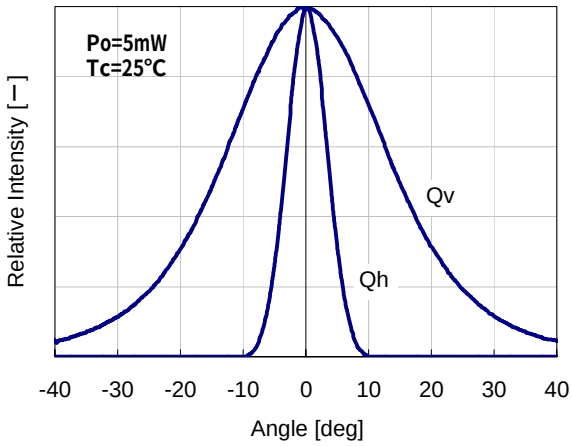
Threshold current vs. Case tempreature



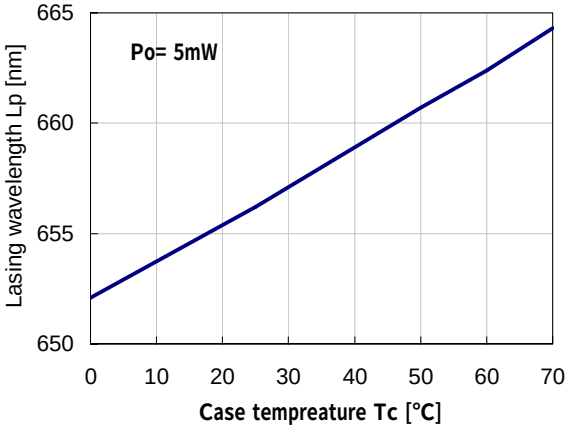
Monitoring Output Current vs. Output Power



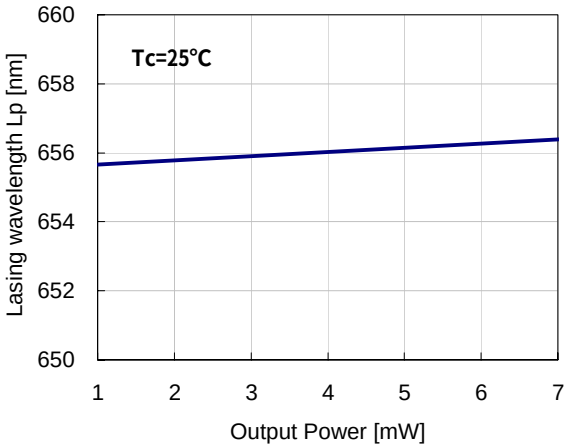
Beam divergence



Lasing wavelength vs. Case tempreature



Lasing wavelength vs. Output Power



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