RED LASER DIODE
DL-4038-026

SANYO

Features

- Short wavelength : 635 nm (Typ.)
- High output power : 20 mW CW
- Low threshold current : Ith = 40 mA (Typ.)
- Low operating voltage : Vop = 2.3 V (Typ.)

Applications

Line marker,Leveler

Absolute Maximum Ratings

(Tc=25°C)

Parameter		Symbol	Ratings	Unit
Light Output	CW	Po	25	mW
Reverse Voltage	Laser	VR	**2**	V
	PD		30	
Operating Temperature		Topr	-10 to +40	°C
Storage Temperature		Tstg	-40 to +85	°C

Package

Tolerance : ± 0.2
(Unit : mm)

ø9.0- 0.03
ø5.35
ø4.75± 0.15
ø2.1
Effective window diameter 1.0min.

Top view

1.0± 0.1
0.45± 0.1

LD facet
2.45± 0.15
0.3
1.5± 0.1
5.0± 0.3
0.5max.
ø1.4max.
3 - ø0.45± 0.1
10± 1.0
Pin No. 1 2 3
ø2.54

Pin Connection

LD ◄ ►   PD
1   3

2

Electrical and Optical Characteristics [1) 2)]

(Tc=25°C)

Parameter		Symbol	Condition	Min.	Typ.	Max.	Unit
Threshold Current		Ith	CW	-	40	60	mA
Operating Current		Iop	Po=20mW	-	70	85	mA
Operating Voltage		Vop	Po=20mW	-	2.3	2.6	V
Lasing Wavelength		Lp	Po=20mW	-	635	645	nm
Beam [3)] Divergence	Perpendicular	Qv	Po=20mW	22	28	35	°
	Parallel	Qh	Po=20mW	6	7	10	°
Off Axis Angle	Perpendicular	dQv	-	-	-	± 3	°
	Parallel	dQh	-	-	-	± 3	°
Differential Efficiency		dPo/dIop	-	-	0.7	-	mW/mA
Monitoring Output Current		Im	Po=20mW	0.1	0.2	0.5	mA
Astigmatism		As	Po=20mW	-	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.
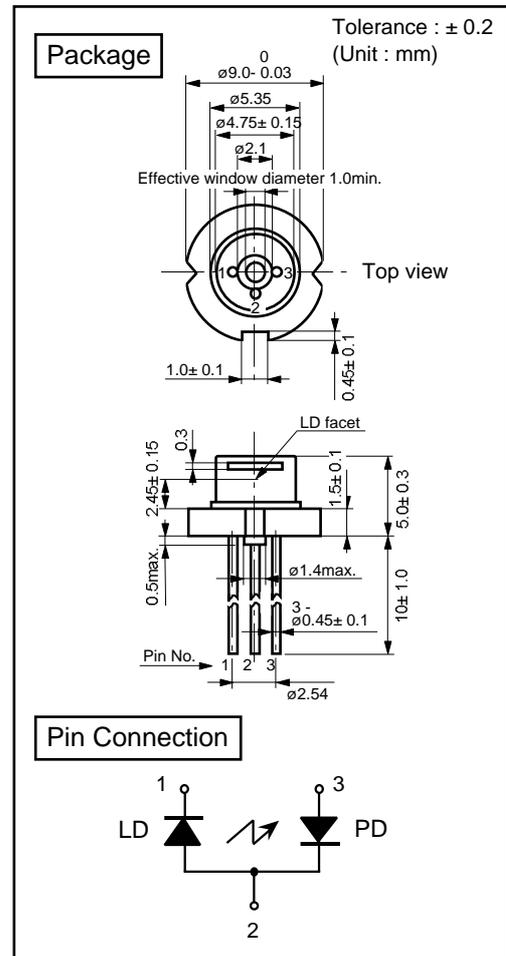
Characteristics

Output power vs. Forward current
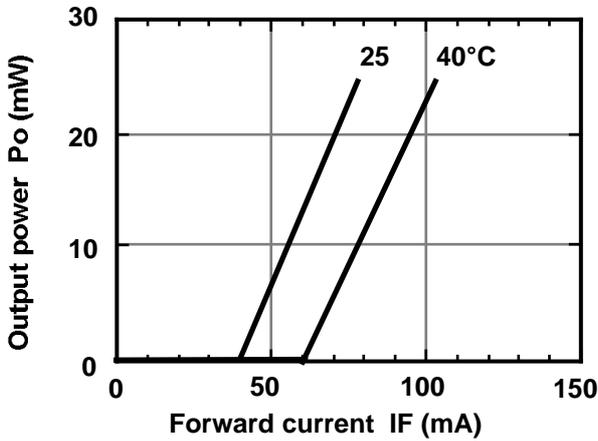

### Threshold current vs. Temperature
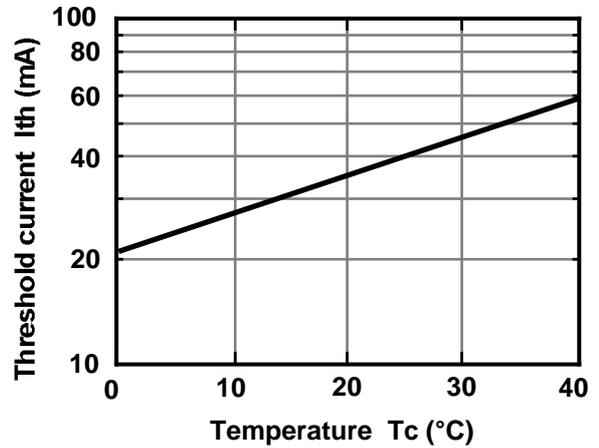
### Monitoring current vs. Output power
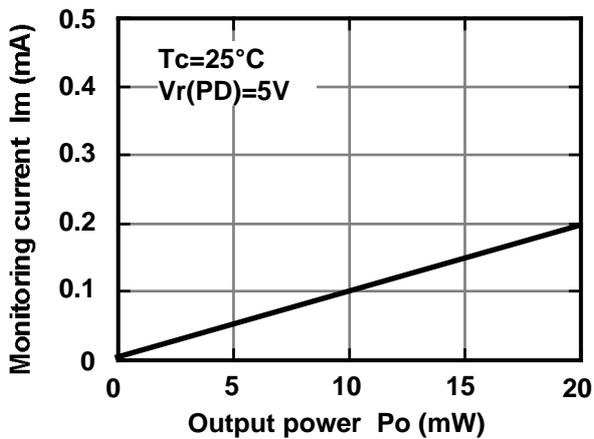
Beam divergence
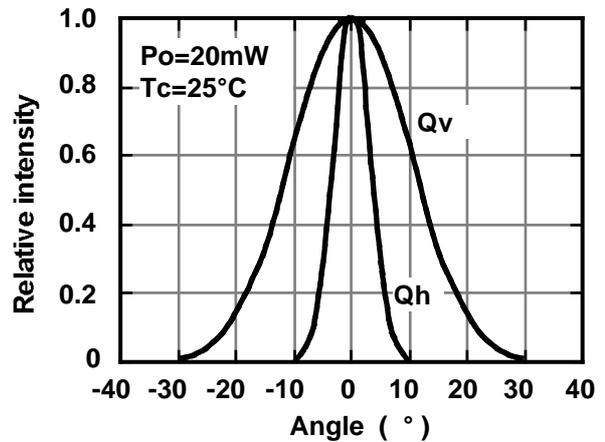
Lasing wavelength vs. Temperature
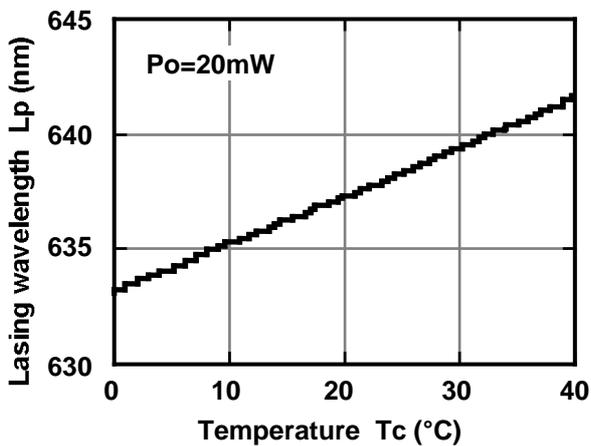
Lasing wavelength vs. Output power
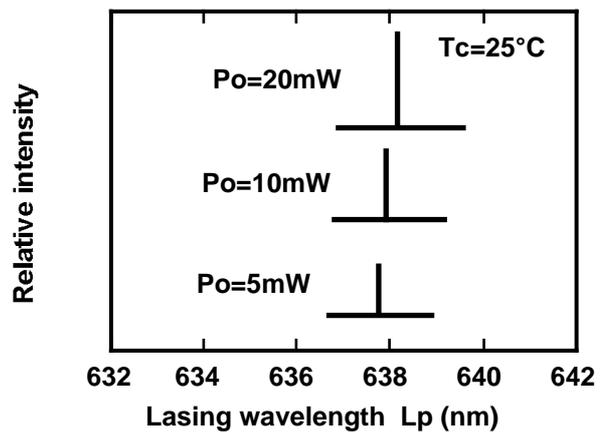
This is typical data and it may not represent all products.