Red Laser Diode DL-3148-033/-034/-234

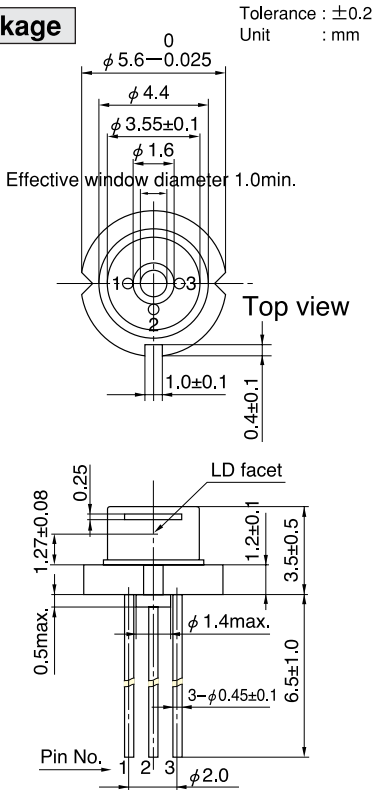
Features

- Short wavelength : 635 nm (Typ.)
- Low threshold current : Ith = 40 mA (Typ.)
- High operating temperature : 5mW at 50˚C
- Small package : ø 5.6mm

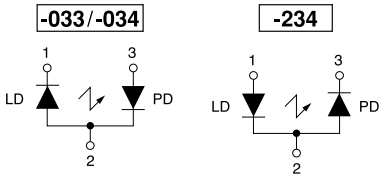
Applications

- Bar-code scanner
- Laser pointer

Package



Pin Connection



Absolute Maximum Ratings

(Tc = 25˚C)

Parameter		Symbol	Ratings	Unit
Light Output	CW	Po	5	mW
Reverse Voltage	LD	VR	2	V
	PD		30	
Operating Temperature		Topr	–10 to +50	˚C
Storage Temperature		Tstg	–40 to +85	˚C

Electrical and Optical Characteristics 1) 2)

(Tc = 25˚C)

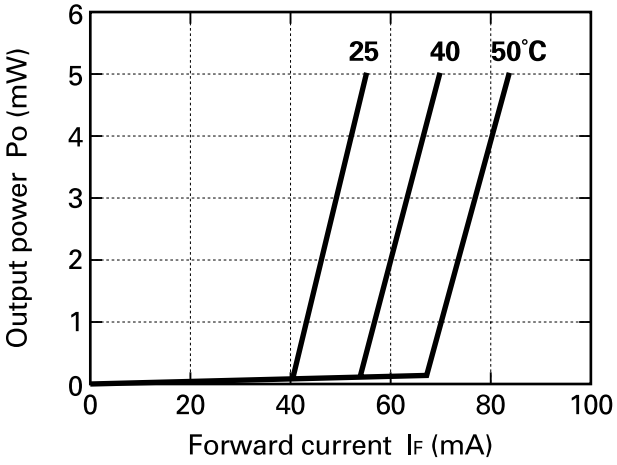
Parameter		Symbol	Condition	Min.	Typ.	Max.	Unit
Threshold Current		Ith	CW	—	40	60	mA
Operating Current		Iop	Po=5mW	—	55	75	mA
Operating Voltage		Vop	Po=5mW	—	2.2	2.4	V
Lasing Wavelength		λp	Po=5mW	—	635	640 4)	nm
Beam Divergence 3)	Perpendicular	θ⊥	Po=5mW	25	30	35	°
	Parallel	θ//	Po=5mW	6	8	10	°
Off Axis Angle	Perpendicular	Δθ⊥	—	—	—	±3	°
	Parallel	Δθ//	—	—	—	±3	°
Differential Efficiency		dPo/dIop	—	—	0.4	—	mW/mA
Monitoring Output Current		Im	Po=5mW	0.1	0.2 5)	0.5	mA
Astigmatism		As	Po=5mW	—	8	—	μm

1)Initial values 2)All the above values are evaluated with Tottori Sanyo's measuring apparatus 3) Full angle at half maximum 4)-034/-234 : λp max=645nm 5) -234 : Im Typ = 0.1mA

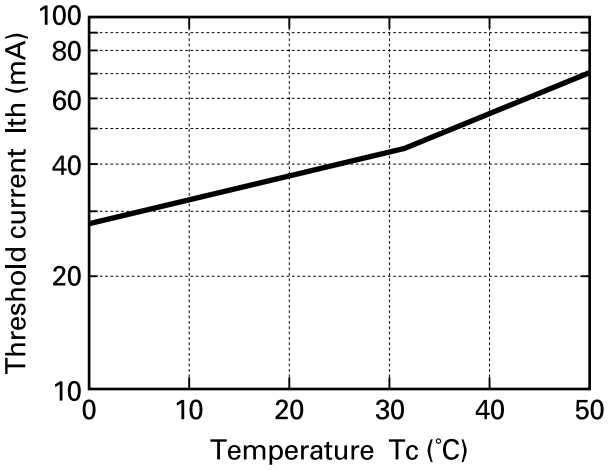
Note : The above product specifications are subject to change without notice.

Characteristics

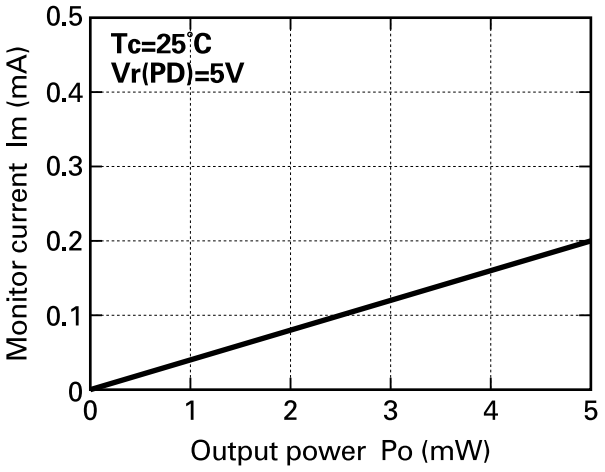
Output power vs. Forward current



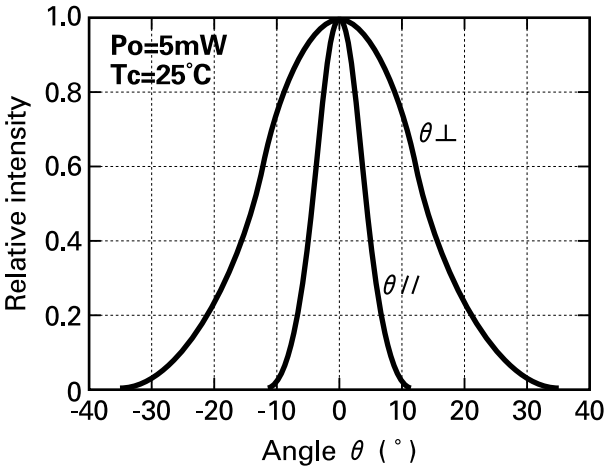
Threshold current vs. Temperature



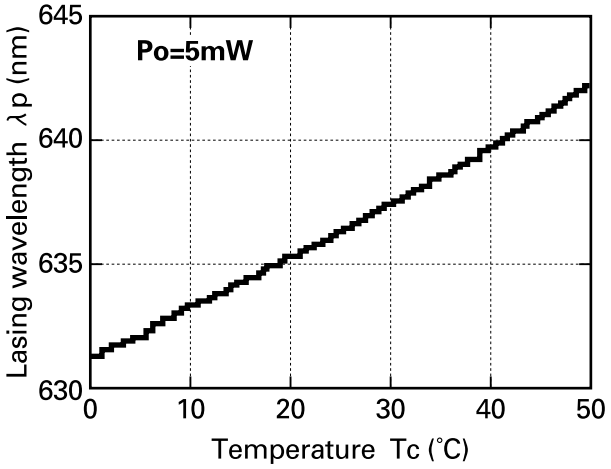
Monitor current vs. Output power



Beam divergence



Lasing wavelength vs. Temperature



Lasing wavelength vs. Output power