

Low power red laser diode

RLD65MPT4

Glass-less structure Red Laser.

Low lth & good temperature characteristics made by suitability of Multi Quantum Well.

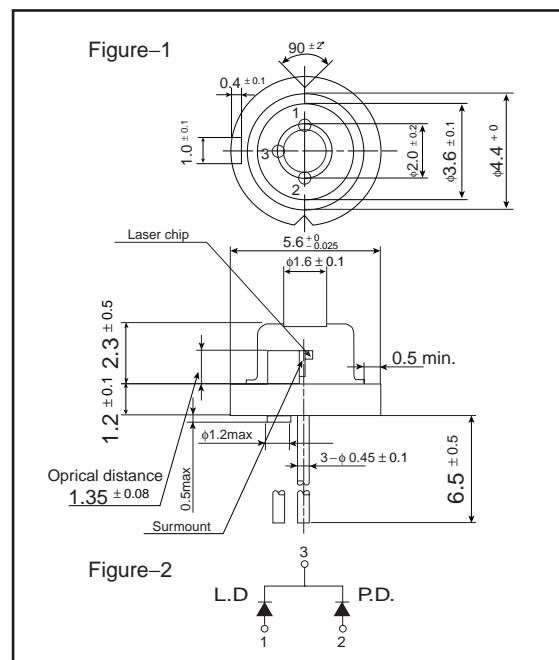
●Applications

DVD-ROM
COMBINATION Drive
Sensors

●Features

- 1) The 10mW of the maximum rating corresponding to DVD-RAM read.
- 2) Optimization of a strained multi quantum well realizes the reduction in threshold current, and the good temperature characteristic.
- 3) Low threshold current : 25mA (Tc=25°C).

●Dimensions (Unit : mm)



●Absolute maximum ratings (Tc=25°C)

Parameter	Symbol	Limits	Unit
Output	Po	10	mW
Reverse voltage	Raser	2	V
	PIN photodiode	30	V
Operating temperature	Topr	-10 to +70	°C
Storage temperature	Tstg	-40 to +85	°C

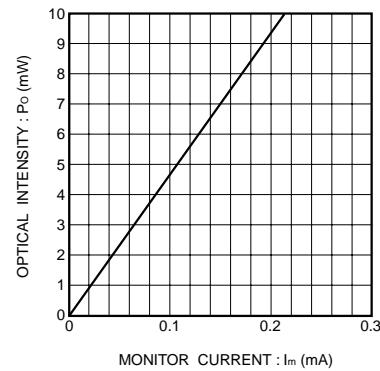
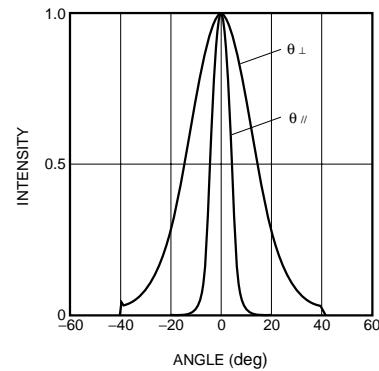
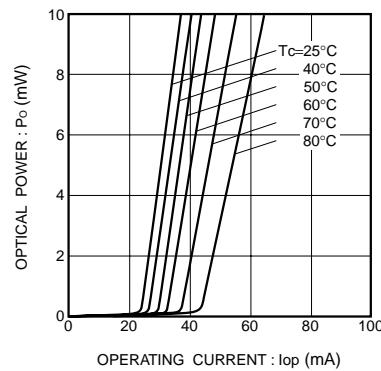
Laser Diodes

●Electrical and optical characteristics (T_c=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Threshold current	I _{th}	—	25	60	mA	—
Operating current	I _{op}	—	35	70	mA	P _o =5mW
Operating voltage	V _{op}	—	2.3	2.6	V	P _o =5mW
Differential efficiency	η	0.2	0.4	0.8	mW/mA	—
Monitor current	I _m	0.07	0.12	0.35	mA	P _o =5mW
Parallel divergence angle	θ _{//} *	7	8	10	deg	P _o =5mW
Perpendicular divergence angle	θ _⊥ *	20	27	35	deg	P _o =5mW
Parallel deviation angle	Δφ _{//}	-2	0	+2	deg	P _o =5mW
Perpendicular deviation angle	Δφ _⊥	-3	0	+3	deg	P _o =5mW
Emission point accuracy	ΔX ΔY ΔZ	-80	0	+80	μm	—
Peak emission wavelength	λ	645	655	664	nm	P _o =5mW
Astigmatism	Δℓ	—	—	10	μm	P _o =5mW

* θ_{//} and θ_⊥ are defined as the angle within which the intensity is 50% of the peak value.

●Electrical and optical characteristics curves



Appendix

Notes

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