

660nm Low Power Lasers

RLD65MPT4

A long-run product with market-driven high reliability. Matching to various needs.

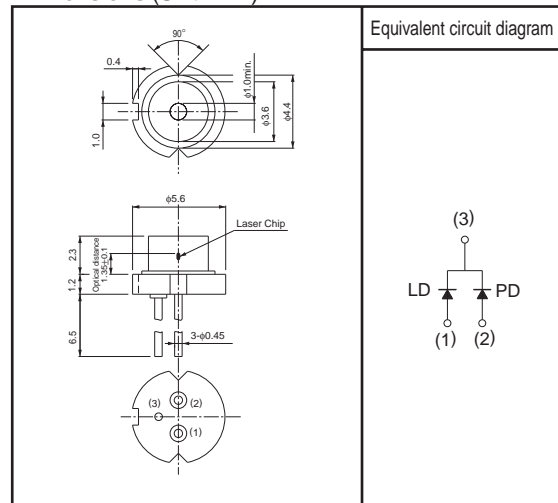
● **Applications**

- DVD-ROM
- DVD player
- Combo
- Barcode scanner
- Sensor
- etc.

● **Features**

- 1) Optical power output : CW10mW
- 2) Single mode
- 3) Excellent temperature characteristics

● **Dimensions (Unit : mm)**



● **Absolute maximum ratings (Tc=25°C)**

Parameter	Symbol	Limits	Unit	
Output	P _o	10	mW	
Reverse voltage	Laser	V _R	2	V
	Photodiode	V _{R(PIN)}	30	V
Operating temperature	T _{op}	-10 to +70	°C	
Storage temperature	T _{stg}	-40 to +85	°C	

Laser Diodes

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Threshold current	I_{th}	–	30	60	mA	–
Operating current	I_{op}	–	40	70	mA	$P_o=7mW$
Operating voltage	V_{op}	–	2.3	2.6	V	$P_o=7mW$
Differential efficiency	η	0.4	0.7	1.0	mW/mA	$2mW/(I(7mW)-I(5mW))$
Monitor current	I_m	0.07	0.12	0.35	mA	$P_o=7mW$
Parallel divergence angle	$\theta_{//}$	7	8	10	deg	$P_o=7mW$
Perpendicular divergence angle	θ_{\perp}	20	27	35	deg	$P_o=7mW$
Parallel deviation angle	$\Delta\phi_{//}$	-2	0	2	deg	$P_o=7mW$
Perpendicular deviation angle	$\Delta\phi_{\perp}$	-3	0	3	deg	$P_o=7mW$
Emission point accuracy	$\frac{\Delta X}{\Delta Y}{\Delta Z}$	-80	0	80	μm	–
Peak emission wavelength	λ	645	655	662	nm	$P_o=7mW$
Astigmatism	As	–	–	10	μm	$P_o=7mW$

●Electrical and optical characteristics curves

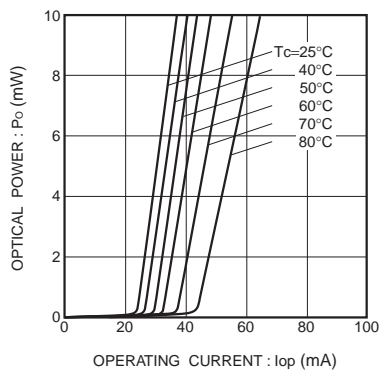


Fig.1 Optical output vs. operating current

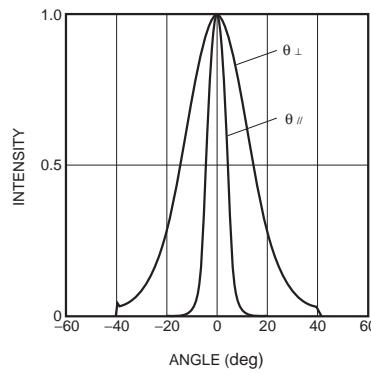


Fig.2 Far-field pattern

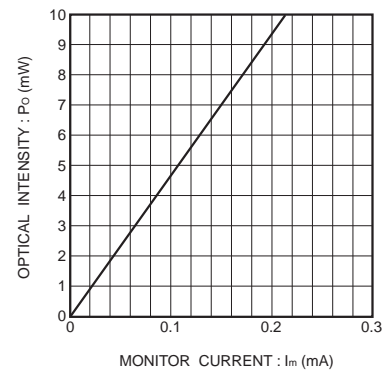


Fig.3 Monitor current vs. optical output

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