

660nm Low Power Lasers

RLD65MPT7

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

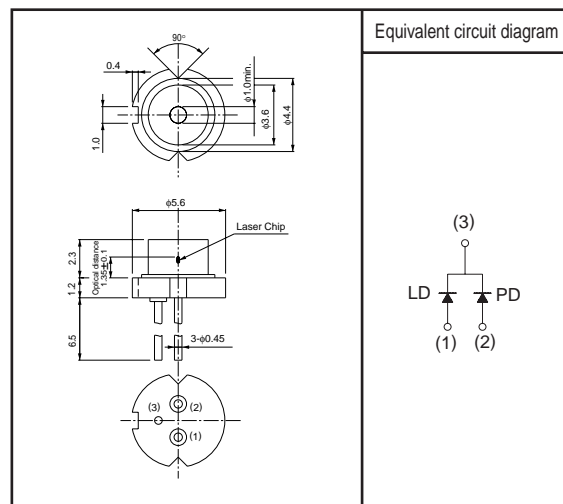
●Applications

DVD-ROM
DVD-player
Combo
Bar cord scanner
Sensor
etc.

●Features

- 1) Optical power output : CW7mW
- 2) Single mode
- 3) Excellent temperature characteristics

●Dimensions (Unit : mm)



●Absolute maximum ratings (T_c=25°C)

Parameter		Symbol	Limits	Unit
Output		P _o	7	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}	-	20	60	mA	-
Operating current	I_{op}	-	30	70	mA	$P_o=5mW$
Operating voltage	V_{op}	-	2.3	2.6	V	$P_o=5mW$
Differential efficiency	η	0.2	0.7	1.0	mW/mA	$2mW/(I(1mW)-I(3mW))$
Monitor current	I_m	0.08	0.2	0.5	mA	$P_o=5mW$
Parallel divergence angle	$\theta_{//}$	6.5	8	10	deg	$P_o=5mW$
Perpendicular tolerance angle	θ_{\perp}	20	27	35	deg	$P_o=5mW$
Parallel tolerance angle	$\Delta\phi_{//}$	-2.5	0	2.5	deg	$P_o=5mW$
Perpendicular tolerance angle	$\Delta\phi_{\perp}$	-3	0	3	deg	$P_o=5mW$
Emission point accuracy	ΔX	-80	0	80	μm	-
	ΔY					
	ΔZ					
Lasing wavelength	λ	645	655	662	nm	$P_o=5mW$
Astigmatism	As	-	-	10	μm	$P_o=5mW$

●Electrical and optical characteristics curves

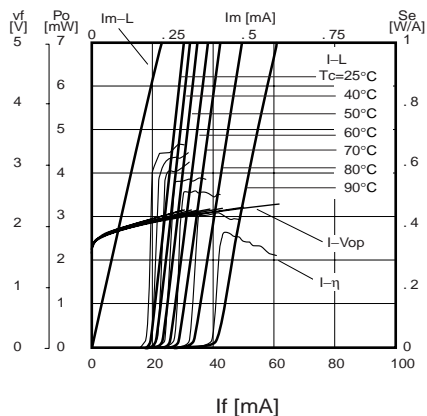


Fig.1 Electrical characteristics vs. package temperature

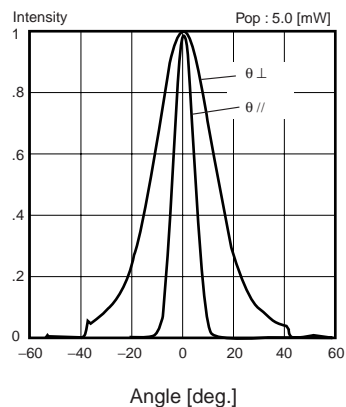


Fig.2 Far-field pattern

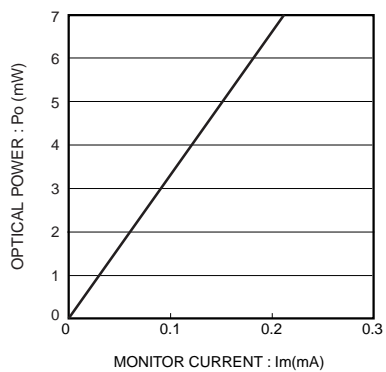


Fig.3 Monitor current vs. optical output

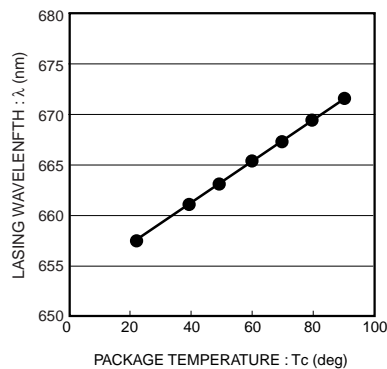


Fig.4 Package temperature vs. wavelength

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