

RLD78PPY4

●Applications

●Features

- Dimensions (Unit : mm)



Parameter		Symbol	Limits	Unit
Output		P _O	Pulsed 240	mW
Reverse voltage	Laser	V _R	2	V
	Photodiode	V _R (PIN)	–	V
Operating temperature		T _{OP}	–10 to +75	°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}	—	35	50	mA	CW
Operating current	I_{op}	—	130	160	mA	$P_o=90mW$, CW
Operating voltage	V_{op}	—	2.1	2.5	V	$P_o=90mW$, CW
Differential efficiency	η	0.8	0.9	1.4	mW/mA	$40mW/(I(90mW)-I(50mW))$
Parallel divergence angle	$\theta_{//}$	7	9	10	deg	$P_o=90mW$, CW
Perpendicular divergence angle	$\theta_{\perp}$	14	17	19	deg	
Parallel deviation angle	$\Delta\phi_{//}$	-2	0	2	deg	
Perpendicular deviation angle	$\Delta\phi_{\perp}$	-3	0	3	deg	
Emission point accuracy	ΔX ΔY ΔZ	-80	0	80	μm	—
Peak emission wavelength	λ	777	784	789	nm	$P_o=90mW$, CW
Astigmatism	As	—	—	6	μm	$P_o=90mW$, CW

●Electrical and optical characteristics curves

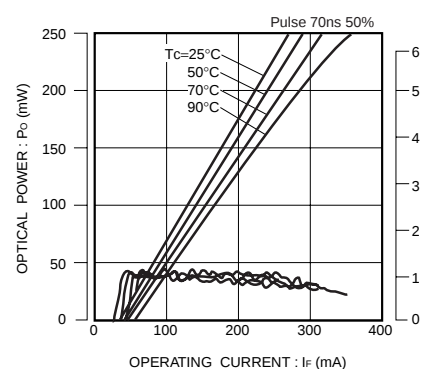


Fig.1 Optical output vs. operating current

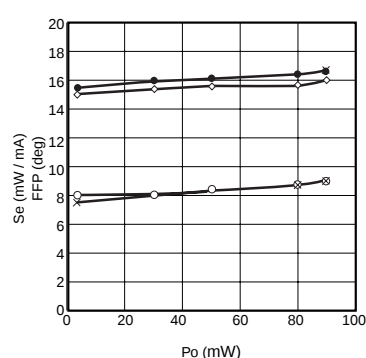


Fig.2 PO vs. FFP

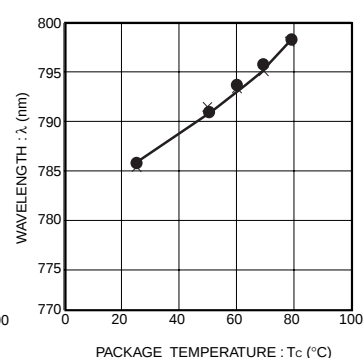


Fig.3 Dependence of wavelength on temperature

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