



RLT85100MG

Laser Diode Technical Data

ABSOLUTE MAXIMUM RATINGS ($T_c=25\text{ }^\circ\text{C}$)

DESCRIPTION	SYMBOL	RATED VALUE
Optical Power (mW)	P_o	100
Operation Temperature ($^\circ\text{C}$)	T_{op}	-10 to +50
Storage Temperature ($^\circ\text{C}$)	T_{stg}	-40 to +85
LD Reverse Voltage (V)	V_{LDR}	2
PD Reverse Voltage (V)	V_{PDR}	30

Features

- Index Guided MQW Structure
- Wavelength : 850 nm (Typ.)
- Optical Power : 100 mW CW
- Threshold Current : 100 mA (Typ.)
- Package Style : TO-18 (5.6 mm \varnothing)

OPTICAL AND ELECTRICAL CHARACTERISTICS ($T_c=25\text{ }^\circ\text{C}$)

DESCRIPTION	SYMBOL	MIN.	TYPICAL	MAX.	TEST CONDITION
Lasing Wavelength (nm)	λ_p	835	850	865	$P_o=100\text{mW}$
Threshold Current (mA)	I_{th}	70	100	150	$P_o=100\text{mW}$
Operating Current (mA)	I_{op}	200	250	350	$P_o=100\text{mW}$
Operating Voltage (V)	V_{op}	1.8	2.0	2.5	$P_o=100\text{mW}$
Monitor Current (mA)	I_m	0.1	1.0	2.0	$P_o=100\text{mW}$, $V_R=5\text{V}$
Slope Efficiency (mW/mA)	η	0.5	0.7	0.9	***
Beam Divergence \parallel ($^\circ$)	θ_{\parallel}	3	5	8	$P_o=100\text{mW}$
Beam Divergence \perp ($^\circ$)	θ_{\perp}	30	40	50	$P_o=100\text{mW}$
Astigmatism (μm)	A_s	*	11	*	$P_o=100\text{mW}$, $NA=0.4$

