



RLT878-5MG

Laser Diode Technical Data

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

DESCRIPTION	SYMBOL	RATED VALUE
Optical Power (mW)	P_o	5
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 : 878 nm (Typ.)
- Optical Power : 5 mW CW
- Threshold Current : 25 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	870	878	890	$P_o=5\text{mW}$
Threshold Current (mA)	I_{th}	20	25	45	$P_o=5\text{mW}$
Operating Current (mA)	I_{op}	15	25	35	$P_o=5\text{mW}$
Operating Voltage (V)	V_{op}	1.8	2.0	2.5	$P_o=5\text{mW}$
Monitor Current (mA)	I_m	0.1	0.35	0.55	$P_o=5\text{mW}$, $V_R=5\text{V}$
Slope Efficiency (mW/mA)	η	0.5	0.7	0.9	***
Beam Divergence \parallel ($^\circ$)	θ_{\parallel}	8	10	12	$P_o=5\text{mW}$
Beam Divergence \perp ($^\circ$)	θ_{\perp}	25	30	40	$P_o=5\text{mW}$
Astigmatism (μm)	A_s	*	11	*	$P_o=5\text{mW}$, $NA=0.4$

