



Laser Diode LT-LD-520-100M-M

LT-LD-520-100M-M is a single mode laser diode with 100mW CW output power at 520nm. It is supplied in a 5.6mm floating mounted TO can with Zener Diode. The laser diode is suitable for the use in various opto-electronic applications.

■ Absolute Maximum Ratings (Tc=25°C)

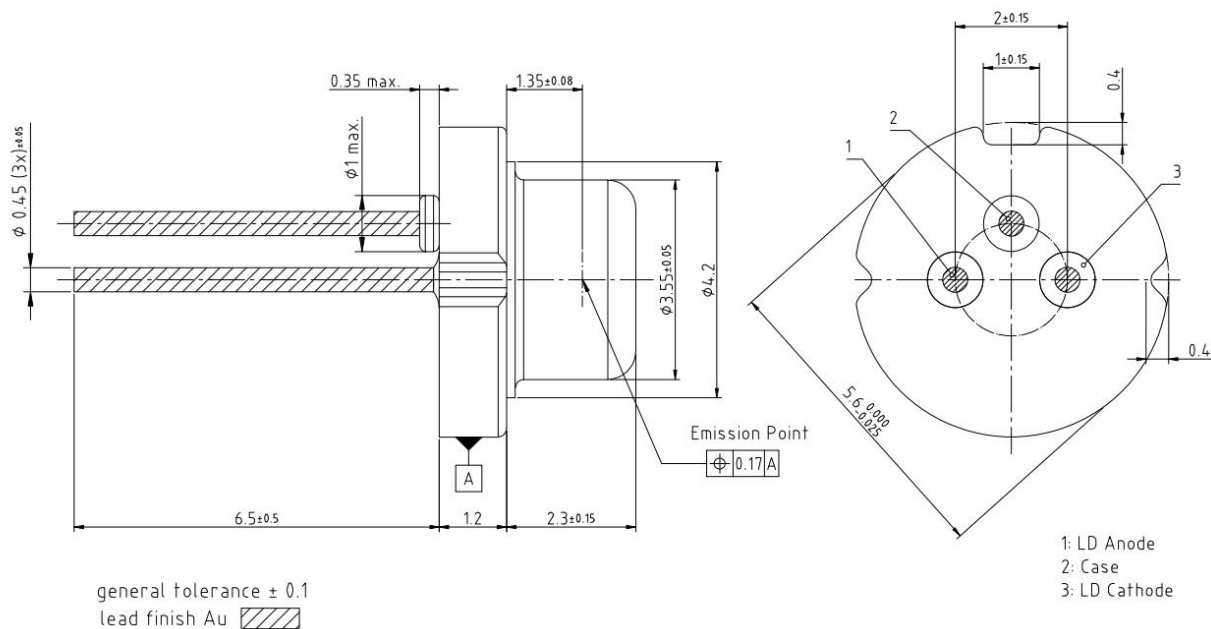
Parameter	Symbol	Value	Parameter
Operating current	I_f	300	mA
Reverse Voltage	V_R	2	V
Storage Temperature	T_{stg}	-40~+105	°C
Operating Temperature	T_{op}	-40~+85	°C
Soldering Temperature $t_{max}=10s$	T_s	260	°C

■ Initial Electrical/Optical Characteristics (Tc=25°C)

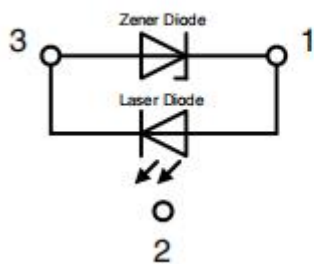
Parameter		Symbol	Condition	Min	Typ.	Max	Unit
Dominant Wavelength	B1	λ_d	Po=100mW	515	-	520	nm
	B2			520	-	525	
	B3			525	-	530	
Threshold Current		I _{th}	CW	-	30	60	mA
Optical Output Power	B1	P _{opt}		105	-	-	mW
	B2			95	-	-	
	B3			85	-	-	
Operating Voltage		V _o	Po=100mW	-	6.2	7.0	V
Beam Divergence *	Parallel	$\theta_{//}$		5.0	6.3	7.5	°
	Perpendicular	$\theta_{\perp}$		18.0	22.5	25.0	°

* Full angle at $1/e^2$ from peak intensity

■ Outline Dimension (Unit:mm)



Pin Connection



Pin 1: LD Anode
Pin 2: Case
Pin 3: LD Cathode

1. Laser light can damage the human eye and skin. Do not expose the eye and skin to any laser light directly or through optical lenses. Focused laser beam through optical instruments will increase the chance of eye hazard.
2. The laser needs a stable driver to avoid surges. The instantaneous reverse current and reverse voltage should not exceed the absolute maximum ratings, otherwise it will damage the laser diode.
3. Semiconductor lasers are sensitive to temperature, working at high temperatures will reduce the photoelectric conversion efficiency and accelerate the aging of laser diode. It should be used under adequate heat dissipation or cooling conditions.
4. The laser should be used at the rated current and rated power, the output power is too high will accelerate the aging of laser diode.
5. Semiconductor lasers are electrostatic sensitive devices, anti-static measures should be taken during storage and transportation.
6. Lasers should be stored or work in a dry, ventilated environment to prevent damage to the laser from condensation.
7. The light emitting surface (cavity surface) is the key parts of the laser diode, any handling to damage the cavity surface should be strictly prohibited. It should be ensured that the laser diode is not contaminated, and damaged in mechanical.

