

**635nm 500mW Laser Diode with Square Beam|With FAC Lens |5.6mm Package | Red Laser**

**635nm~638nm 5.6mm Package | 500mW|High Power Red LD | Square Spot for Laser Show**

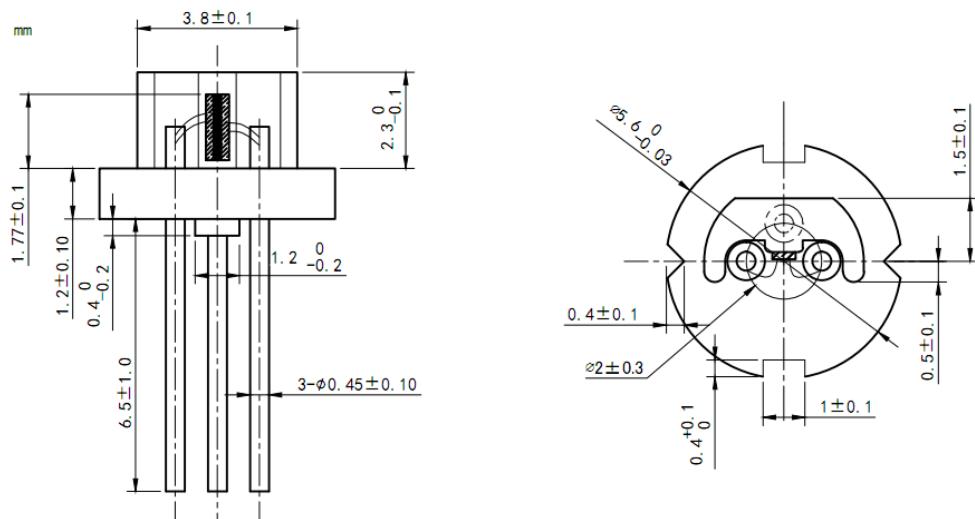
**RWSLD-635-500m-1-FAC**

### 635nm Laser Diode

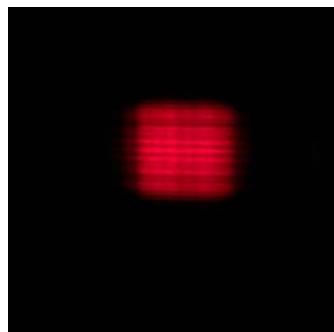
PARAMETER	SYMBOL	VALUE		UNIT			
Reverse Voltage	$V_r$	2.0		V			
Operating Temperature	$T_{op}$	-5 ~ +40		°C			
Storage Temperature	$T_{stg}$	-40 ~ +85		°C			
Lead soldering temperature (10 sec.)	$T_{ls}$	260		°C			
<b>Features:</b>	<ul style="list-style-type: none"> <li>• 638nm</li> <li>• Square Beam</li> <li>• 500mW Output Power</li> <li>• CW/Pulse Mode</li> </ul>						
<b>Applications:</b>	<ul style="list-style-type: none"> <li>• Medical Laser Treatment</li> <li>• Laser Indicator</li> </ul>						
<b>Specifications</b>	<b>RWSLD-635-500m-1-FAC</b>						
		Min	Type	Max			
Center Wavelength@25°C		630nm	638nm	645nm			
Spectral Width (FWHM)		----	2.0nm	----			
Output Power(CW Mode)		----	500mW	600mW			
Output Power (Pulsed Mode)		----	1W	----			
	Pulsed Duty=<30%, Frequency>=50HZ						
Recommended Operating Temperature	25°C						
Beam	Beam Divergence (FWHM)	$8^{\circ}\perp \times 8^{\circ}\parallel$					
	Beam Shape	Square Beam (1:1)					
Line Shape Beam( $2^{\circ}\perp \times 8^{\circ}\parallel, 1:4$ )	Optional						
Emitter Size	50um*1um						
Slope Efficiency		0.8mW/mA	1.0mW/mA	1.5mW/mA			
Threshold Current (Typ.)		----	175mA	210mA			
Operating Current (Typ.)		----	700mA	800mA			
Operating Voltage		2.2V	2.4V	2.6V			
Package Style	TO18 (5.6mm)						



**Package View:**



**Beam Shape:**

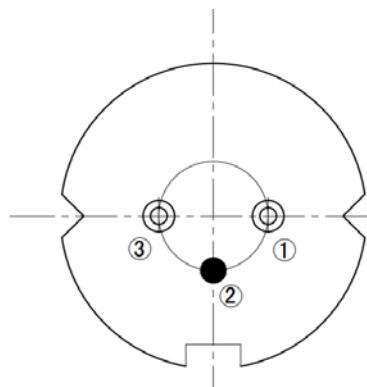


1:1 Square Beam



1:4 Line Beam

**PIN Bottom View:**



<b>1</b>	<b>LD(+)</b>
<b>2</b>	<b>GND</b>
<b>3</b>	<b>LD(-)</b>

**Electrically shorten LD module and store in non-extreme conditions.**

Suggest using the constant current power supply.

