



RLT975-300SPM



TECHNICAL DATA

Single-Mode 14-Pin Butterfly Laser Diode

Features

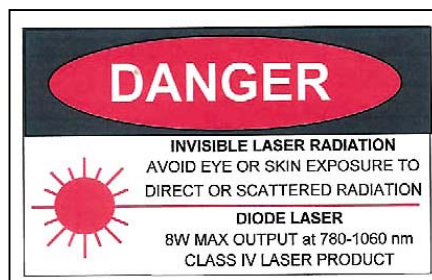
- Lasing Mode Structure: single mode
- Peak Wavelength : typ. 975 nm
- Optical Output Power: 300 mW
- Package: 14-Pin Butterfly, Thermistor, TEC
- Polarization: TE



Specifications (T_c=25°C)

Item	Symbol	Min.	Typ.	Max.	Unit
Optical Specification					
Wavelength	λ_p	970	975	980	nm
Spectrum FWHM	$\Delta\lambda$	-	0.5	2.0	nm
Operating Power	P _o	-	300	-	mW
Kink-Free Power	P _k				mW
Emitting Aperture	W x H				μm
Electrical Specification					
Operating Current	I _o	-	490	580	mA
Threshold	I _{th}	-	30	50	mA
Operating Voltage	V _o	-	2.0	2.3	V
Slope Efficiency	$\Delta P/\Delta I$	0.60	0.71	-	W/A
TEC Voltage		-	-	2.9	V
TEC Current		-	-	7.5	A
General Specification					
Lifetime		100.000			hours
Storage temperature		-40	-	80	°C
Operating Temperature		0	25	75	°C
Lead Soldering Temp. (5 sec)		-	-	250	°C

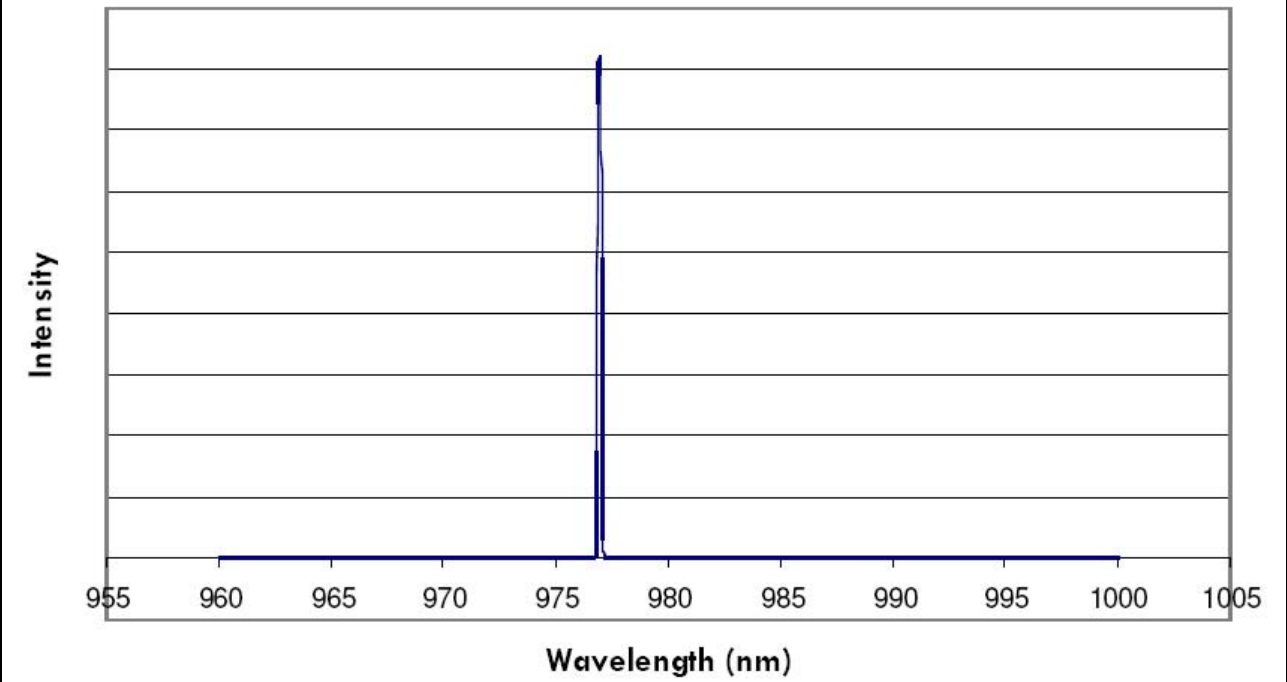
The above specifications are for reference purpose only and subjected to change without prior notice.



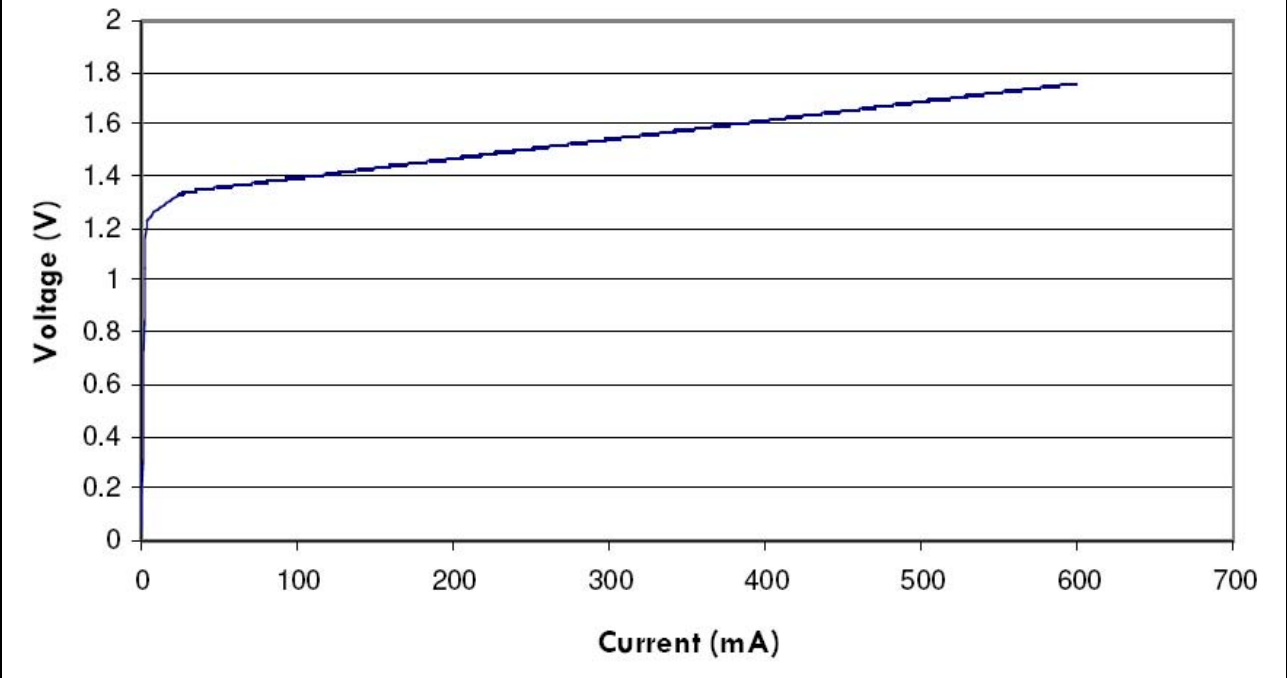


Module Performance Data Graphs

Intensity / wavelength

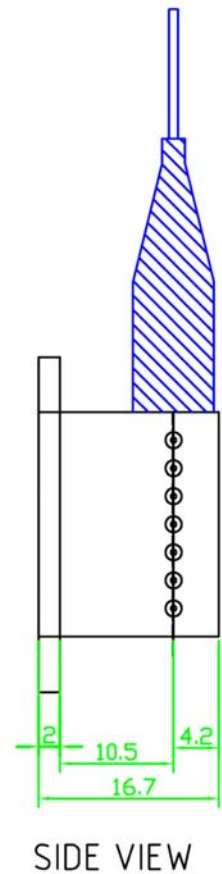
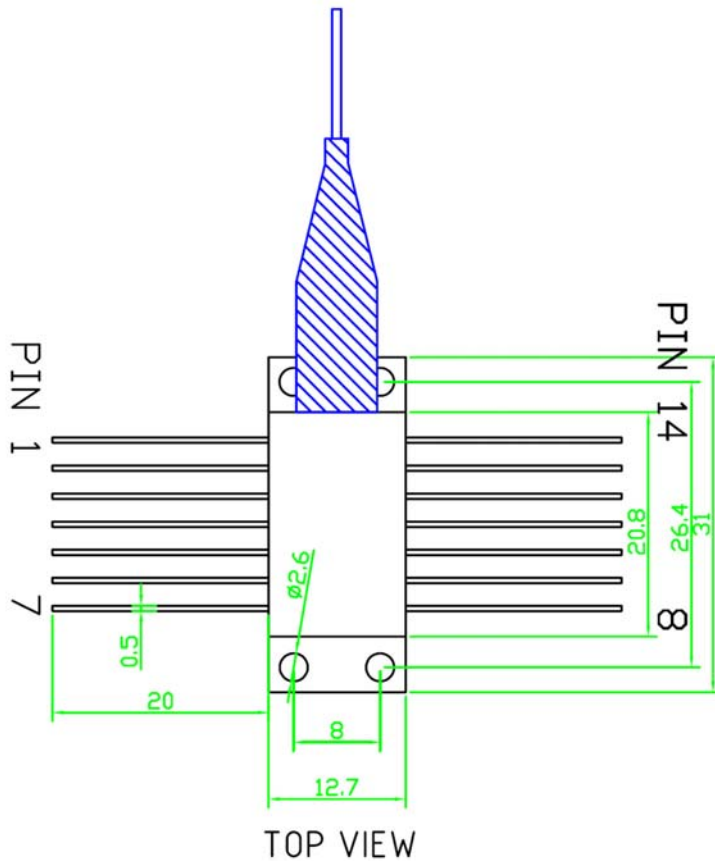


voltage / current





Package



PIN OUT

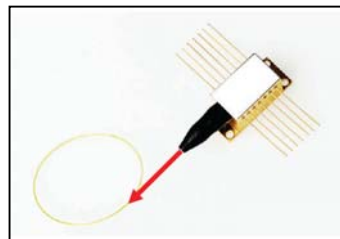
1 TEC(+)	14 TEC(-)
2 Thermistor	13 Case Ground
3 PD Anode	12 NC
4 PD Cathode	11 Laser Cathode(-)
5 Thermistor	10 Laser Anode(+)
6 NC	9 NC
7 NC	8 NC

UNIT: mm



Safety of Laser light

- Laser Light can damage the human eyes and skin. Do not expose the eye or skin directly to any laser light and/or through optical lens. When handling the LDs, wear appropriate safety glasses to prevent laser light, even any reflections from entering to the eye. Focused laser beam through optical instruments will increase the chance of eye hazard.
- **WARNING: Laserdiode is emitting invisible light**



Cautions

1. Operating methode

- This LD shall change its forward voltage requirement and optical output power according to temperature change. Also, the LD will require more operation current to maintain same output power as it degrades.
- Confirm that electrical spike current generated by switching on and off does not exceed the maximum operating current level specified herein above as absolute maximum rating. Also, employ appropriate countermeasures to reduce chattering and/or overshooting in the circuit.

2. Static Electricity

- Static electricity or electrical surges will reduce and degrade the reliability of the LDs. It is recommended to use a wrist strap or anti-electrostatic glove when handling the product.

3. Absolute Maximum Rating

- Active layer of LDs shall have high current density and generate high electric field during its operation. In order to prevent excessive damage, the LD must be operated strictly below absolute maximum rating.