



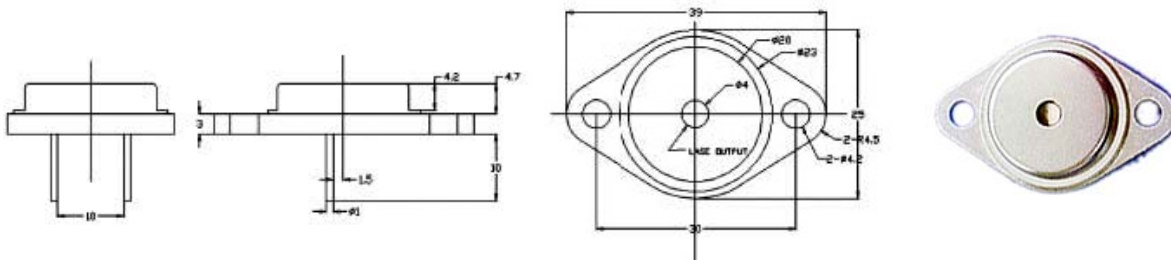
## RLT67300T

### TECHNICAL DATA

#### High Power Red Laser Diode

Emitting Aperture:  $1 \times 100 \mu\text{m}^2$   
Lasing Wavelength: **typ. 670 nm**  
Optical Power: **300 mW cw**  
Package: **TO3 w/o Photodiode**

**NOTE!**  
LASERDIODE  
MUST BE COOLED!



Laser Diode Anode = Case

#### Absolute Maximum Ratings ( $T_c = 25^\circ\text{C}$ )

CHARACTERISTIC	SYMBOL	RATING	UNIT
Optical Output Power	$P_o$	350	mW
LD Reverse Voltage	$V_{R(LD)}$	3	V
Operating Case Temperature	$T_c$	-20 .. +50	$^\circ\text{C}$
Storage Temperature	$T_{STG}$	-30 .. +70	$^\circ\text{C}$

#### Optical-Electrical Characteristics ( $T_c = 25^\circ\text{C}$ )

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Threshold Current	$I_{th}$	cw	450	500	550	mA
Operating Current	$I_{op}$	$P_o = 300 \text{ mW}$	800	850	900	mA
Operating Voltage	$V_{op}$	$P_o = 300 \text{ mW}$	2.0	2.1	2.2	V
Lasing Wavelength	$\lambda$	$P_o = 300 \text{ mW}$	670	673	675	nm
Spectral Width	$\Delta\lambda$	$P_o = 300 \text{ mW}$	0.9	1.0	1.1	nm
Beam Divergence	$\theta_{\perp}$	$P_o = 300 \text{ mW}$	28	30	33	$^\circ$
Beam Divergence	$\theta_{//}$	$P_o = 300 \text{ mW}$	3.5	5	5.5	$^\circ$
Differential Resistance	$R_d$	$P_o = 300 \text{ mW}$	0.25	0.3	0.35	$\Omega$
Differential Efficiency	$dP_o/dI_{op}$	$P_o = 300 \text{ mW}$	0.8	0.9	0.95	W/A