



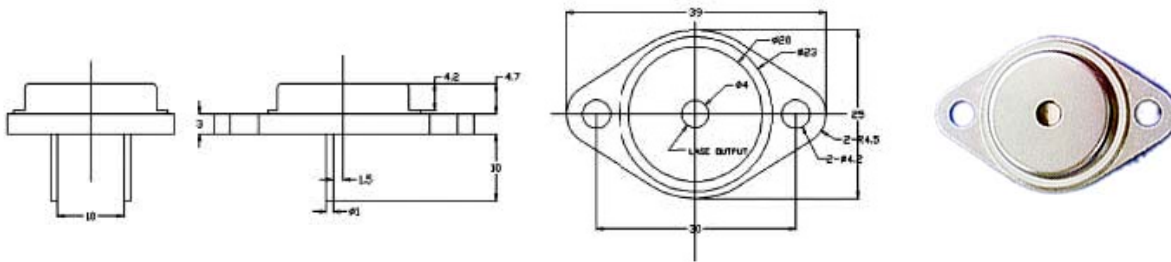
RLT67300T

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	λ	$P_o = 300 \text{ mW}$	670	673	675	nm
Spectral Width	$\Delta\lambda$	$P_o = 300 \text{ mW}$	0.9	1.0	1.1	nm
Beam Divergence	θ_{\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	Ω
Differential Efficiency	dP_o/dI_{op}	$P_o = 300 \text{ mW}$	0.8	0.9	0.95	W/A