



## RLT7605MG

### TECHNICAL DATA

#### Infrared Laserdiode

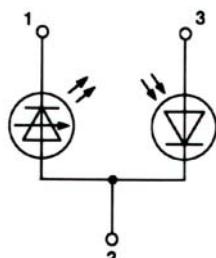
Structure: index guided single transverse mode

Lasing wavelength: 760 nm typ.

Output power: 5 mW cw

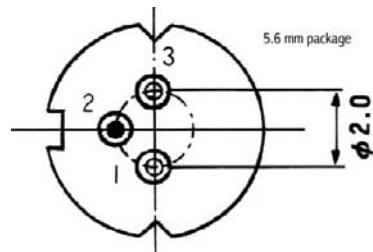
Package: 5.6 mm, TO-18

NOTE!  
LASERDIODE  
MUST BE COOLED!



#### PIN CONNECTION:

- 1) Laser diode cathode
- 2) Laser diode anode and photodiode cathode
- 3) Photodiode anode



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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Optical Output Power	$P_o$	5	mW
LD Reverse Voltage	$V_{R(LD)}$	2	V
PD Reverse Voltage	$V_{R(PD)}$	30	V
Operation Case Temperature	$T_c$	-10 .. +50	°C
Storage Temperature	$T_{STG}$	-40 .. +85	°C

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Threshold Current	$I_{th}$	cw		15	20	mA
Operation Current	$I_{op}$	$P_o = 5 \text{ mW}$		25	40	mA
Operating Voltage	$V_{op}$	$P_o = 5 \text{ mW}$	1.8	1.9	2.0	V
Lasing Wavelength	$\lambda_p$	$P_o = 5 \text{ mW}$	750	760	766	nm
Spectral Width	$\Delta\lambda$	$P_o = 5 \text{ mW}$	0.2	0.4	1.1	nm
Beam Divergence	$\theta_{//}$	$P_o = 5 \text{ mW}$	7	10	12	°
Beam Divergence	$\theta_{\perp}$	$P_o = 5 \text{ mW}$	30	33	38	°
Slope Efficiency	$\eta$	cw	0.5	0.65	1	mW/mA
Monitor Current	$I_m$	$P_o = 5 \text{ mW}$	250	400	800	μA