

**LASERMATE GROUP, INC.**  
**THE FRIEND OF LASERS**

**Model No. LD-980-5A**

**Features**

- Index Guided MQW Structure
- Wavelength 980 nm
- 5mW CW Operation at -10 to +60 °C
- Low Threshold Current
- Standard package: TO-18 (Ø 5.6mm package)

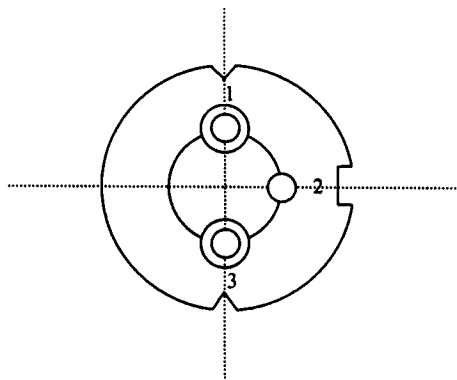
**Absolute Maximum Ratings**

PARAMETER	SYMBOL	RATINGS
Optical Output Power	$P_o$	5 mW
LD Reverse Voltage	$V_{RL}$	2 V
PD Reverse Voltage	$V_{RD}$	30 V
Operation Temperature	$T_o$	-10 to +60 °C
Storage Temperature	$T_{STG}$	-40 to +85°C

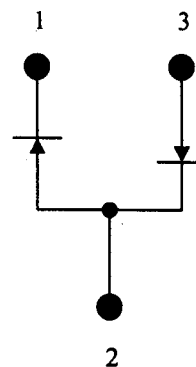
**Electrical – Optical Characteristics**

PARAMETER	SYMBOL	MIN.	TYP	MAX.	UNITS	TEST CONDITION
Lasing Wavelength	$\lambda_p$	960	980	995	nm	$P_o=5mW$
Threshold Current	$I_{th}$	15	25	40	mA	$P_o=5mW$
Operation Current	$I_{op}$	-	35	50	mA	$P_o=5mW$
Operation Voltage	$V_{op}$	2.0	2.2	2.7	V	$P_o=5mW$
Monitor Current	$I_m$	10	-	90	$\mu A$	$P_o=5mW, V_R = 5V$
Slope Efficiency	$\eta$	0.3	0.4	0.7	mW/mA	$P_o=5mW$
Beam Divergence	$\Theta$	8	10	12	deg	$P_o=5mW$ (parallel)
Beam Divergence	$\Theta_{\perp}$	25	31	40	deg	$P_o=5mW$ (perpendicular)
Astigmatism	$As$		11		$\mu m$	$P_o=5mW, NA=0.4$

**Pin Connection**



Bottom View



1. Laser diode cathode
2. Laser diode anode  
Photodiode cathode
3. Photodiode anode

\*Case and Pin#2 are common.

1987 W. Holt Ave., Pomona, CA 91768, USA

e-mail: [info@lasermate.com](mailto:info@lasermate.com)

URL: <http://www.lasermate.com/>

Tel: (909)6234995

Fax: (909)6234915