

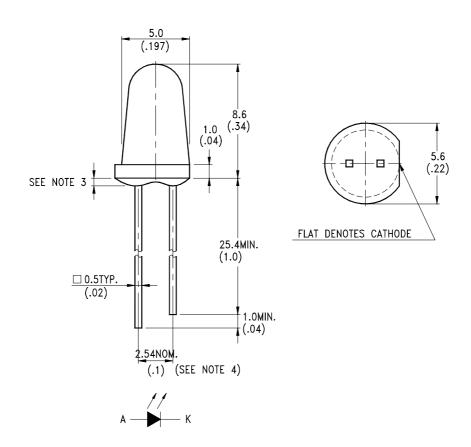
LITE-ON ELECTRONICS, INC.

Property of Lite-On Only

FEATURES

- * SPECIAL FOR HIGH INTENSITY
- * LOW COST
- * NARROW BEAM
- * T-1 3/4 MODIFIED PACKAGE

PACKAGE DIMENSIONS



NOTES

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is \pm 0.25mm(.010") unless otherwise noted.
- 3. Protruded resin under flange is 1.0mm(.039") max.
- 4. Lead spacing is measured where the leads emerge from the package.
- 5. Specifications are subject to change without notice.

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ABSOLUTE MAXIMUM RATINGS AT TA=25°C

PARAMETER	MAXIMUM RATING	UNIT			
Power Dissipation	90	mW			
Peak Forward Current (300pps, 10 μ s pulse)	1	A			
Continuous Forward Current	60	mA			
Reverse Voltage	5	V			
Operating Temperature Range	-40°C to +85°C				
Storage Temperature Range	-55°C to + 100°C				
Lead Soldering Temperature [1.6mm(.063") From Body]	260°C for 5 Seconds				

ELECTRICAL OPTICAL CHARACTERISTICS AT TA=25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION	BIN NO.
Aperture Radiant Incidence	Ee	0.44		0.96	mW/cm²	$I_F = 20 \text{mA}$	BIN A
		0.64		1.20			BIN B
		0.80		1.68			BIN C
		1.12					BIN D
Radiant Intensity	$I_{\rm E}$	3.31		7.22	mW/sr	$I_F = 20 \text{mA}$	BIN A
		4.81		9.02			BIN B
		6.02		12.63			BIN C
		8.42					BIN D
Peak Emission Wavelength	λ _{Peak}		940		nm	$I_F = 20 \text{mA}$	
Spectral Line Half-Width	Δλ		50		nm	$I_F = 20 \text{mA}$	
Forward Voltage	$V_{_{\mathrm{F}}}$		1.2	1.6	V	$I_F = 20 \text{mA}$	
Reverse Current	I_R			100	μ A	$V_R = 5V$	
Viewing Angle (See FIG.6)	$2 heta_{_{1/2}}$		16		deg.		

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TYPICAL ELECTRICAL / OPTICAL CHARACTERISTICS CURVES

(25°C Ambient Temperature Unless Otherwise Noted)

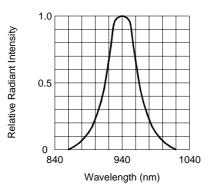


FIG.1 SPECTRAL DISTRIBUTION

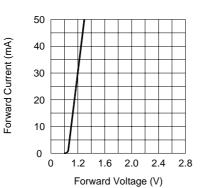


FIG.3 FORWARD CURRENT VS. FORWARD VOLTAGE

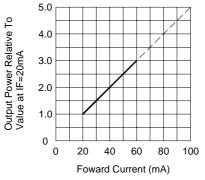


FIG.5 RELATIVE RADIANT INTENSITY VS. FORWARD CURRENT

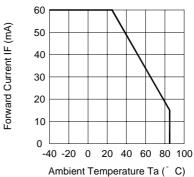


FIG.2 FORWARD CURRENT VS. AMBIENT TEMPERATURE

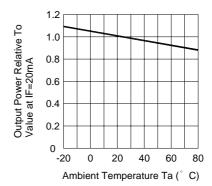


FIG.4 RELATIVE RADIANT INTENSITY VS. AMBIENT TEMPERATURE

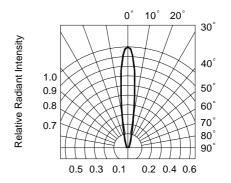


FIG.6 RADIATION DIAGRAM

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