

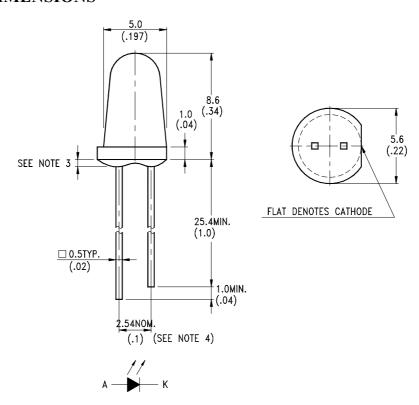
LITEON LITE-ON ELECTRONICS, INC.

Property of Lite-On Only

FEATURES

- * SELECTED TO SPECIFIC ON-LINE INTENSITY AND RADIANT INTENSITY RANGES
- * LOW COST PLASTIC END LOOKING PACKAGE
- * MECHANICALLY AND SPECTARALLY MATCHED TO THE LTR-3208 SERIES OF **PHOTOTRANSISTOR**
- * THE LTE-2872U SERIES ARE MADE WITH GALLIUM ALUMINUM ARSENIDE WINDOW LAYER ON GALLIUM ARSENIDE INFRARED EMITTER DIODES
- * UL APPROVED FOR SMOKING DETECTOR, UL FILE NO.:S5010
- * NARROW BEAM
- * CLEAR TRANSPARENT COLOR PACKAGE

PACKAGE DIMENSIONS



NOTES:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is ± 0.25 mm(.010") unless otherwise noted.
- 3. Protruded resin under flange is 1.5mm(.059") 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	250	mW	
Peak Forward Current (300pps, 10 μ s pulse)	3	A	
Continuous Forward Current	150	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	BIN
						CONDITION	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	$V_{\scriptscriptstyle F}$		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)

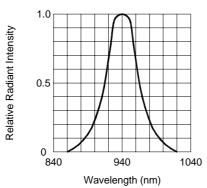


FIG.1 SPECTRAL DISTRIBUTION

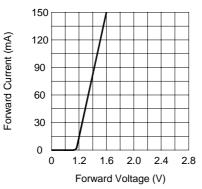


FIG.3 FORWARD CURRENT VS. FORWARD VOLTAGE

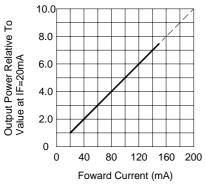


FIG.5 RELATIVE RADIANT INTENSITY VS. FORWARD CURRENT

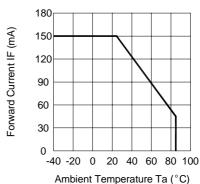


FIG.2 FORWARD CURRENT VS.
AMBIENT TEMPERATURE

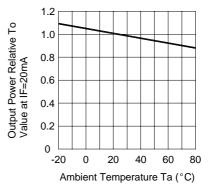


FIG.4 RELATIVE RADIANT INTENSITY VS. AMBIENT TEMPERATURE

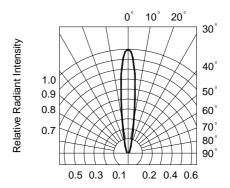


FIG.6 RADIATION DIAGRAM

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