



IR Emitter and Detector

Product Data Sheet

LTE-3271T-A

Spec No.: DS50-2001-002

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Revision: A

LITE-ON DCC

RELEASE

BNS-OD-FC001/A4

LITE-ON Technology Corp. / Optoelectronics

No.90,Chien 1 Road, Chung Ho, New Taipei City 23585, Taiwan, R.O.C.

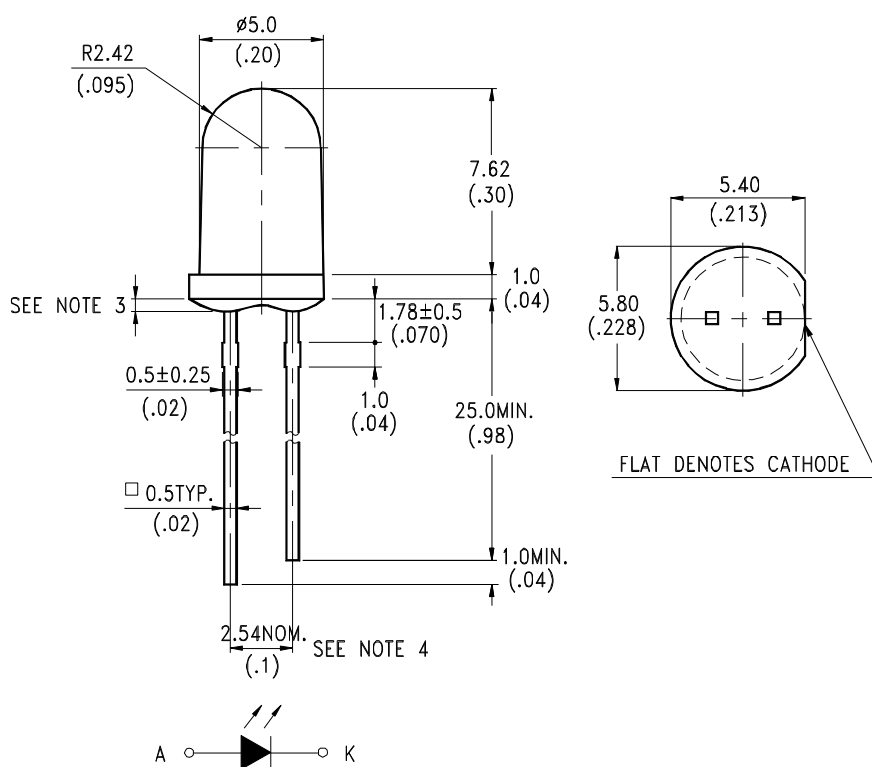
Tel: 886-2-2222-6181 Fax: 886-2-2221-1948 / 886-2-2221-0660

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FEATURES

- * SPECIAL FOR HIGH CURRENT AND LOW FORWARD VOLTAGE
- * HIGH POWER
- * AVAILABLE FOR PULSE OPERATING
- * WIDE VIEWING ANGLE
- * WATER CLEAR PACKAGE
- * SOLDER PLATED LEADS

PACKAGE DIMENSIONS



NOTES:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25\text{mm}(.010")$ unless otherwise noted.
3. Protruded resin under flange is $1.5\text{mm}(.059")$ max.
4. Lead spacing is measured where the leads emerge from the package.
5. Specifications are subject to change without notice.

ABSOLUTE MAXIMUM RATINGS AT TA=25°C

PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation	150	mW
Peak Forward Current (300pps, 10 μ s pulse)	2	A
Continuous Forward Current	100	mA
Reverse Voltage	5	V
Operating Temperature Range	-40°C to + 85°C	
Storage Temperature Range	-55°C to + 100°C	
Lead Soldering Temperature [4.0mm(.157") From Body]	320°C for 3 Seconds	

ELECTRICAL / OPTICAL CHARACTERISTICS AT TA=25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Aperture Radiant Incidence	Ee	0.80	1.4		mW/cm ²	I _F = 20mA
Radiant Intensity	I _E	30			mW/sr	I _F = 100mA
Radiant Intensity	I _E	6	10.5		mW/sr	I _F = 20mA
Peak Emission Wavelength	λ_p		940		nm	I _F = 20mA
Spectral Line Half-Width	$\Delta \lambda$		50		nm	I _F = 20mA
Forward Voltage	V _F		1.25	1.6	V	I _F = 50mA
Forward Voltage	V _F		1.65	2.1	V	I _F = 250mA
Forward Voltage	V _F		2.0	2.4	V	I _F = 450mA
Forward Voltage	V _F		2.4	3	V	I _F = 1A
Reverse Current	I _R			100	μ A	V _R = 5V
Viewing Angle (See FIG.6)	2 $\theta_{1/2}$		50		deg.	

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTICS CURVES

(25°C Ambient Temperature Unless Otherwise Noted)

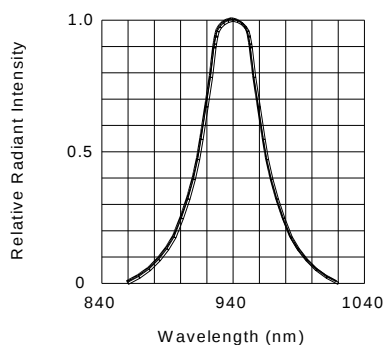


FIG.1 SPECTRAL DISTRIBUTION

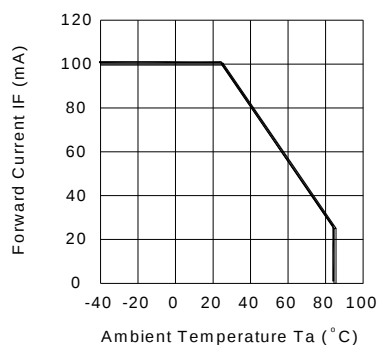


FIG.2 FORWARD CURRENT VS. AMBIENT TEMPERATURE

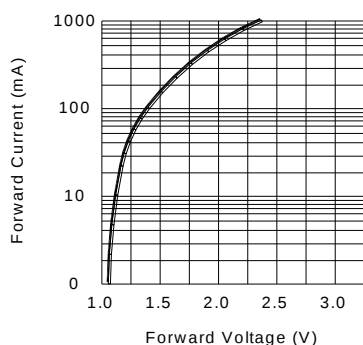


FIG.3 FORWARD CURRENT VS. FORWARD VOLTAGE

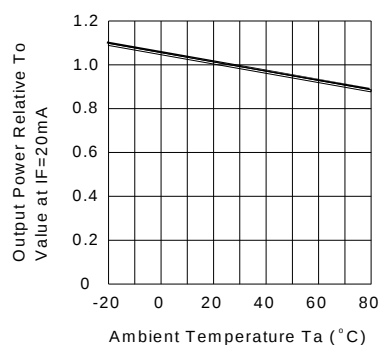


FIG.4 RELATIVE RADIANT INTENSITY VS. AMBIENT TEMPERATURE

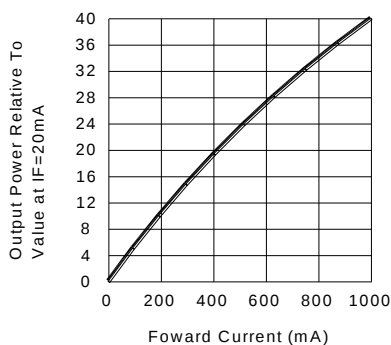


FIG.5 RELATIVE RADIANT INTENSITY VS. FORWARD CURRENT

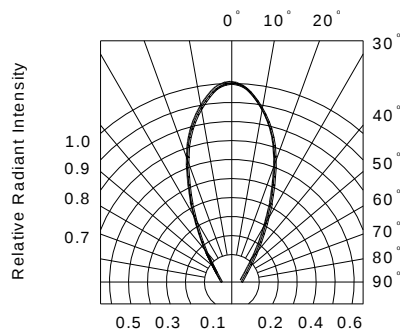


FIG.6 RADIATION DIAGRAM