LITEON
OPTOELECTRONICS

Infrared
Product Data Sheet
LTE-3273DL

Spec No. :DS50-2014-0066
Effective Date: 07/22/2017
Revision: A

LITE-ON DCC

RELEASE

BNS-OD-FC001/A4

IR Emitter and Detector
LTE-3273DL

1. Description

Lite-On offers a broad range of discrete infrared components for application such as remote controller, IR wireless data transmission, security alarm & etc. The product line includes GaAs 940nm IREDs, AlGaAs high power 880nm IREDs, AlGaAs high speed 875nm/850nm IREDs, PIN Photodiodes, Phototransistor and Photodarlingtons.

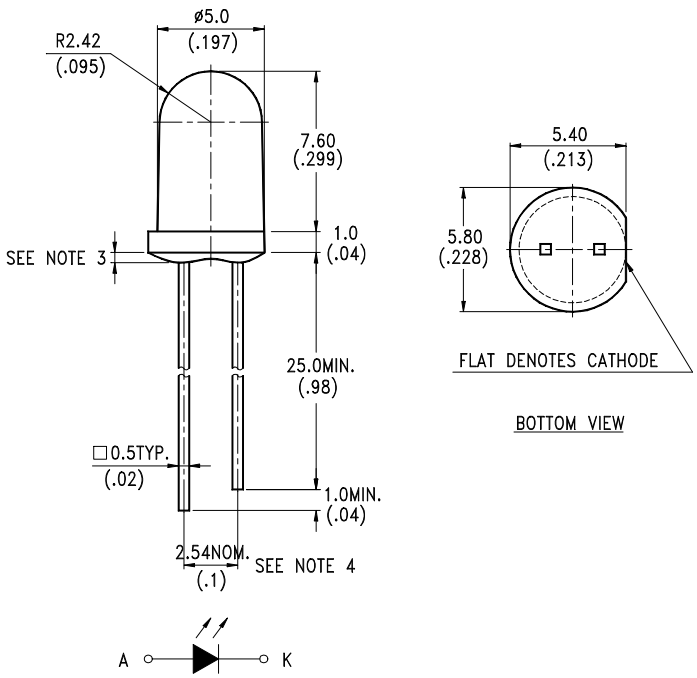
1. 1. Features

- Special for high current and low forward voltage
- Available for pulse operating
- Wide viewing angle
- Blue transparent color package

1.2. Applications

- Sensor
- Remote controller
- 940nm emitter

2. Outline Dimensions



Notes :

1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.25mm (.010") unless otherwise noted.
3. Protruded resin under flange is 0.5mm (.02") max.
4. Lead spacing is measured where the leads emerge from the package.
5. Specifications are subject to change without notice.
6. Manufacturing site: Thailand & ChangZhou

3. Absolute Maximum Ratings at TA=25℃

Parameter	Maximum Rating	Unit
Power Dissipation	150	mW
Peak Forward Current (300pps, 10μs pulse)	2	A
Continuous Forward Current	100	mA
Reverse Voltage	5	V
Operating Temperature Range	-40℃ to + 85℃	
Storage Temperature Range	-55℃ to + 100℃	
Lead Soldering Temperature [1.6mm (.063") From Body]	260℃ for 5 Seconds	

4. Electrical / Optical Characteristics at TA=25℃

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Radiant Intensity	I_E	5.6	8.0		mW/sr	I_F = 20mA
		28.0	40.0			I_F = 100mA
Peak Emission Wavelength	λ_{Peak}		940		nm	I_F = 20mA
Spectral Line Half-Width	Δλ		50		nm	I_F = 20mA
Forward Voltage	V_F		1.25	1.6	V	I_F = 50mA
			1.85	2.3		I_F = 500mA
Reverse Current	I_R			100	μA	V_R = 5V
Value Angle	$2\theta_{1/2}$		45		deg.	

5. Typical Electrical / Optical Characteristics Curves

(25℃ Ambient Temperature Unless Otherwise Noted)

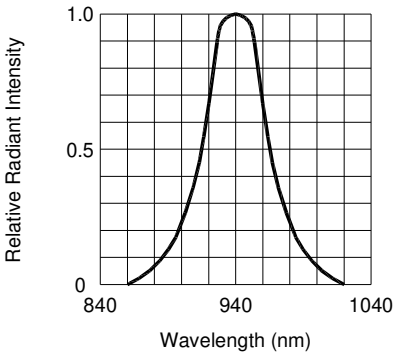


FIG.1 SPECTRAL DISTRIBUTION

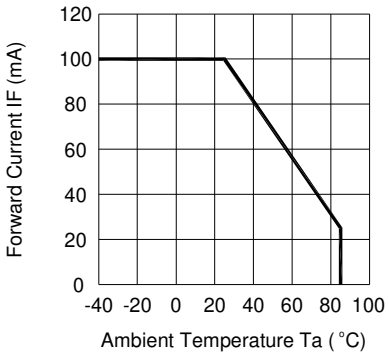


FIG.2 FORWARD CURRENT VS. AMBIENT TEMPERATURE

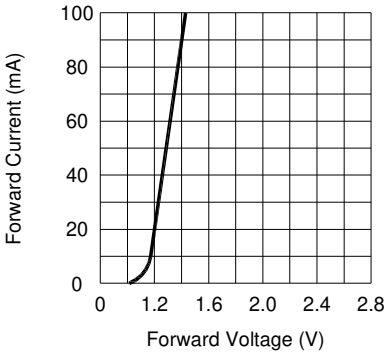


FIG.3 FORWARD CURRENT VS. FORWARD VOLTAGE

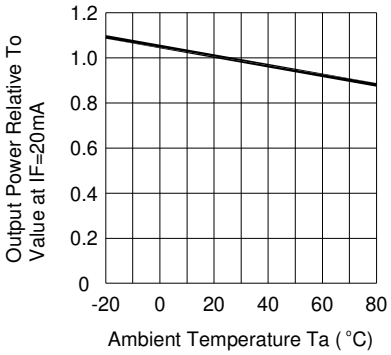


FIG.4 RELATIVE RADIANT INTENSITY VS. AMBIENT TEMPERATURE

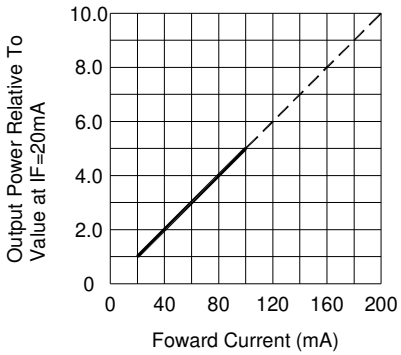


FIG.5 RELATIVE RADIANT INTENSITY VS. FORWARD CURRENT

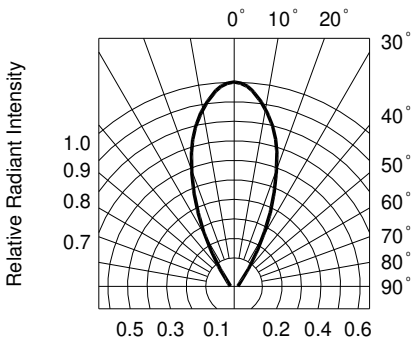


FIG.6 RADIATION DIAGRAM