



# **Features**

Pb free product—RoHS compliant

Low power consumption, High efficiency

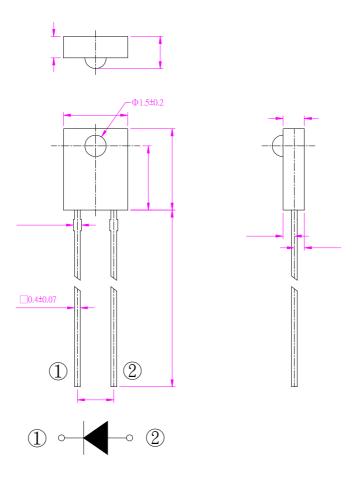
General purpose leads

Reliable and rugged

Long life – solid state reliability

Radiant angle: 40°

# Package Dimension



Part NO.	Chip Material	Lens Color	
LG-256IR2C94A-908	GaAs	Water Clear	

#### **Notes:**

- 1. All dimensions are in millimeters.
- 2. Tolerance is  $\pm 0.20$ mm unless otherwise noted.
- 3. Protruded resin under flange is 1.0mm 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℃

Parameter	MAX.	Unit	
Power Dissipation	on 75		
Continuous Forward Current	50	mA	
Peak Forward Current*3	1.0	A	
Reverse Voltage	erse Voltage 5		
Electrostatic Discharge (HBM)*4	4000	V	
Operating Temperature	-40 to +85		
Storage Temperature	-40°C to + 100°C		
Lead Soldering Temperature [2mm From Body]	260 for 3 Seconds		
Lead Soldering Temperature [5mm From Body]	260 for 5 Seconds		

### 1. Storage:

The storage ambient for the LEDs should not exceed 30°C temperature or 70% relative humidity.

It is recommended that LEDs out of their original packaging are used within three months.

For extended storage out of their original packaging, it is recommended that the LEDs be stored in a sealed container with appropriate desiccant or in desiccators with nitrogen ambient.

### 2. Precautions in handling:

When soldering, leave 2mm of minimum clearance from the resin to the soldering point.

Dipping the resin to solder must be avoided.

Correcting the soldered position after soldering must be avoided.

In soldering, do not apply any stress to the lead frame particularly when heated.

When forming a lead, make sure not to apply any stress inside the resin.

Lead forming must be done before soldering.

It is necessary to cut the lead frame at normal temperature.

#### 3. Peak Forward Current:

Condition for is IFP pulse: Pulse Width 100 us and duty 1%.

#### 4. Caution in ESD:

Static Electricity and surge damages the LED. It is recommend to use a wrist band or anti-electrostatic glove when handling the LED. All devices, equipment and machinery must be properly grounded.

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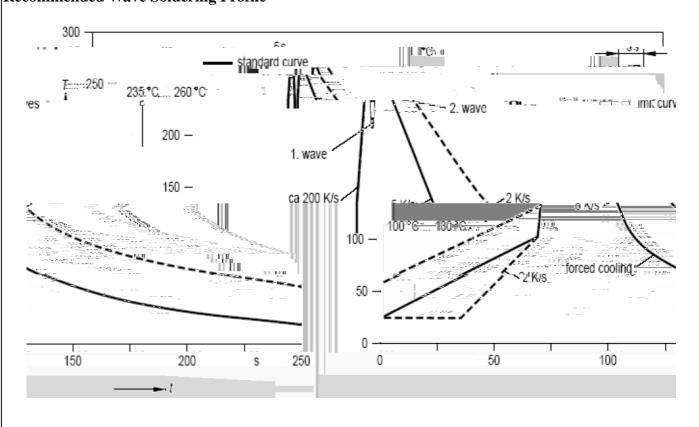
## Electrical Optical Characteristics at Ta=25°C

Parameter	Symbol	Min.	Тур.	Max.	Unit	Test Condition
Radiant Intensity	Ie	0.44	0.80		mW/sr	I <sub>F</sub> =5mA (Note 1,3)
Viewing Angle	<b>2</b> <sub>1/2</sub>		40		Deg.	(Note 2)
Peak Wavelength	p		940		nm	I <sub>F</sub> =5mA
Spectral Line Half- Width			50		nm	I <sub>F</sub> =5mA
Forward Voltage	$V_{\mathrm{F}}$		1.2	1.5	V	I <sub>F</sub> =5mA
Reverse Current	$I_R$			10	μΑ	V <sub>R</sub> =5V

### **Note:**

- 1. Point sources of the amount of radiation per unit time in a given direction within the unit solid Angle radiated energy.
- 2. <sub>1/2</sub> is the off-axis angle at which the Radiant Intensity is half the axial Radiant Intensity.
- 3. The Ie guarantee should be added  $\pm 15\%$  tolerance.

## **Recommended Wave Soldering Profile**



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# Infrared Emitting Diode Specification

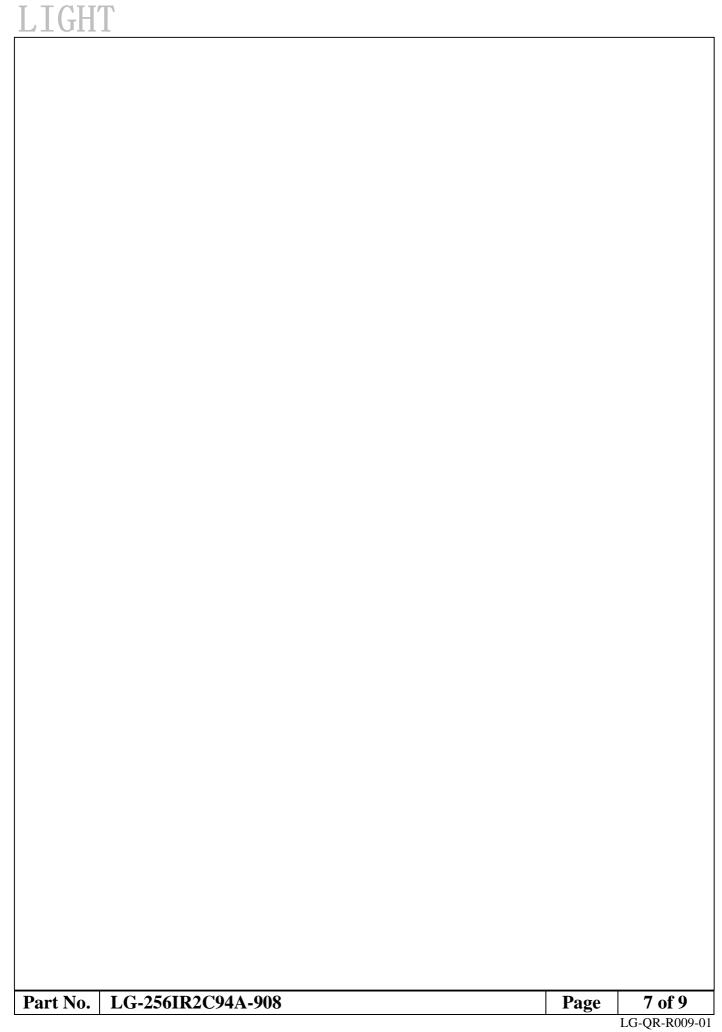
- ●Commodity: Infrared emitting diode
  - Radiant Intensity Bin Limits (IF=5mA)

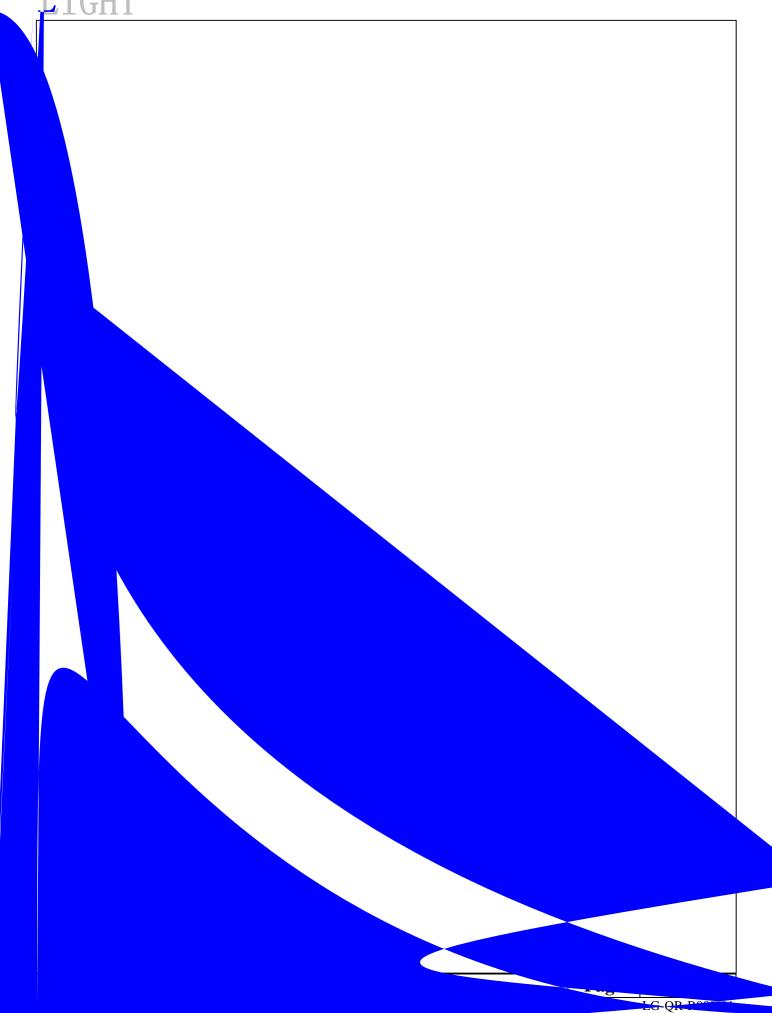
BIN CODE	Min.(mW/sr)	Max. (mW/sr)
E2	0.44	0.53
E3	0.53	0.64
E4	0.64	0.77
E5	0.77	0.92
E6	0.92	1.10
E7	1.10	1.30

**NOTE**: The Ie guarantee should be added  $\pm 15\%$  tolerance.

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# **PACKAGE**



Bag minimum volume	Bag volume	Inner box volume	Outer carton volume
(pcs / Bag)	(pcs / Bag)	(Bag / box)	(Box / Carton)
500	1000	10	4

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