

LL-U47W2C-001

DATA SHEET

QC:

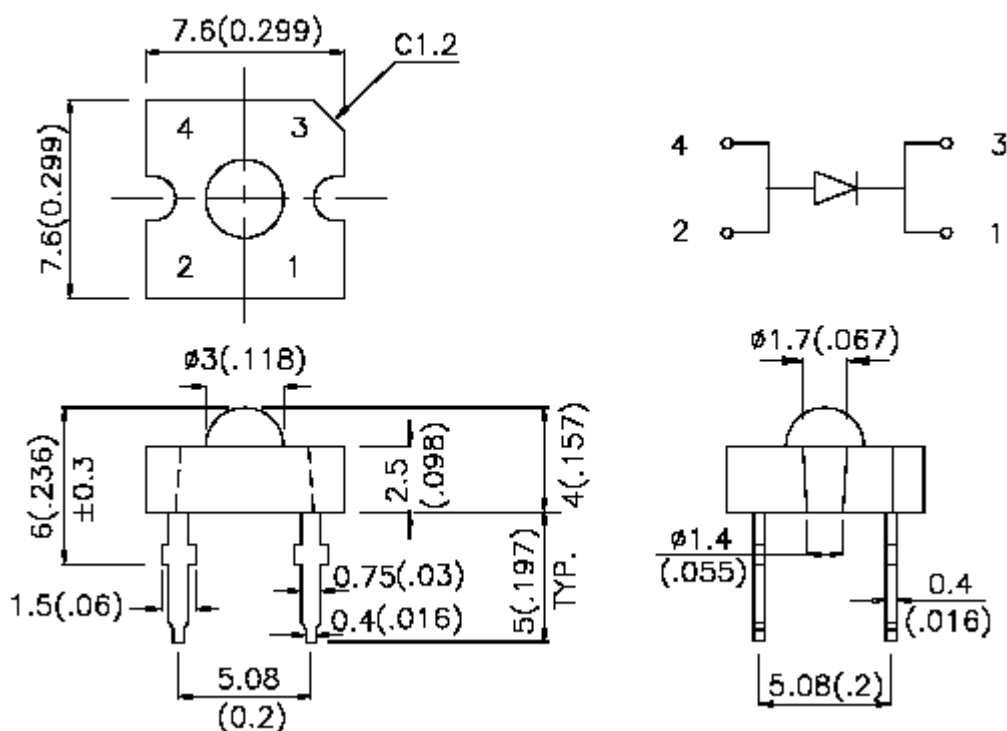
ENG:

Prepared By:

## Features

- SUPER FLUX OUTPUT
- DESIGN FOR HIGH CURRENT OPERATION
- OUT STANDING MATERIAL EFFICIENCY
- RELIABLE AND RUGGED

## Package Dimension:



Part NO.	Material	Lens Color	Source Color
LL-U47W2C-001	GaInN/SiC	Water Clear	White

### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25$  (0.010") mm unless otherwise noted.
3. Specifications are subject to change without notice.
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.

### Absolute Maximum Ratings at Ta=25°C

Parameter	MAX.	Unit
Power Dissipation	100	mW
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	100	mA
Continuous Forward Current	35	mA
Derating Linear From 50°C	0.4	mA/°C
Reverse Voltage	5	V
Operating Temperature Range	-40°C to +80°C	
Storage Temperature Range	-40°C to +80°C	
Lead Soldering Temperature [4mm(.157") From Body]	260°C for 5 Seconds	

### Electrical Optical Characteristics at Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	I <sub>v</sub>	1000	2000	3500	mcd	I <sub>F</sub> =70mA (Note 1)
Viewing Angle	2 θ <sub>1/2</sub>	--	70	--	Deg	(Note 2)
$x = \frac{X}{X+Y+Z} = \frac{Red}{Red+Green+Blue}$	x	--	0.29	--	---	I <sub>F</sub> =20mA (Note 3)
$y = \frac{Y}{X+Y+Z} = \frac{Green}{Red+Green+Blue}$	y	--	0.3	--	---	I <sub>F</sub> =20mA (Note 3)
Forward Voltage	V <sub>F</sub>	2.8	3.6	4.0	V	I <sub>F</sub> =20mA
Reverse Current	I <sub>R</sub>	---	---	100	μA	V <sub>R</sub> =5V

#### Note:

1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
2. θ<sub>1/2</sub> is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
3. It use many parameters that correspond to the CIE 1931 2°. X,Y, and Z are CIE 1931 2° values of Red, Green and Blue content of the measurement.

Typical Electrical / Optical Characteristics Curves  
(25°C Ambient Temperature Unless Otherwise Noted)

