Technical Data Data Sheet 3639, Rev. -

# **Surface Mount Device LED**

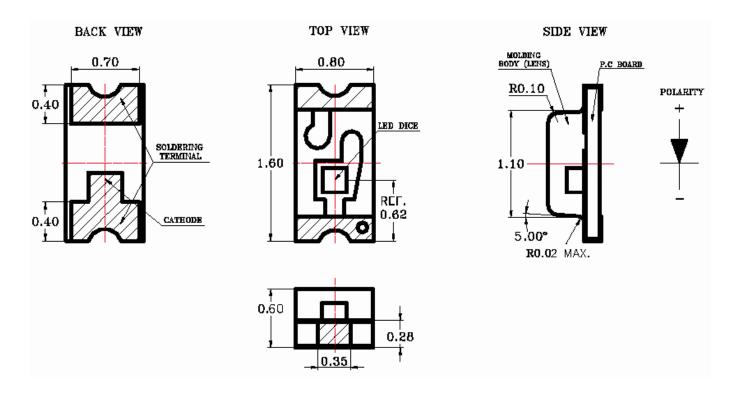
#### Features:

- Top view, wide view angle, single color chip LED.
- Compatible with automatic Pick & Place equipment.
- Compatible with Infrared and Wave soldering reflow solder processes.
- EIA STD package.

### **Ordering Information:**

- Package in 8mm tape on 7" diameter reels.
- Tape quantity: 3000 pcs per reel with part number suffix "-T1"

#### Mechanical Dimensions: In mm



#### Notes:

- 1. All dimensions are in millimeters.
- 2. Tolerance is  $\pm$  0.1 mm (.004") unless otherwise noted.



Technical Data Data Sheet 3639, Rev. -

# Absolute Maximum Ratings (T<sub>A</sub> = 25 °C)

Parameter	Symbol	Parameters	Unit
Power Dissipation	$P_{AD}$	75	mW
Peak Forward Current (1/10 Duty Cycle, f = 1kHz)	I <sub>PF</sub>	80	mA
Continuous Forward Current	I <sub>AF</sub>	30	mA
Reverse Voltage	$V_R$	5	V
Electrostatic Discharge Threshold(HBM) <sup>Note A</sup>	ESD	2000	V
Derating Linearly from 25 °C	-	0.25	mA/°C
Operating Temperature Range	$T_{opr}$	-40 ~ +85	°C
Storage Temperature Range	T <sub>stg</sub>	-40 ~ +85	°C
Wave Soldering Condition (Two times Max)	-	260 ± 5 (for 5 seconds)	°C
Infrared Soldering Condition (Two times Max)	-	240 $\pm$ 5 (for 5 seconds)	°C

# Electro-Optical Characteristic (T<sub>A</sub> = 25 °C)

Parameter	Symbol	Parameters	Unit
Dice Material	-	AllnGaN	-
Light Color	-	Super Amber	=
Lens Color	-	Water Clear	-
Luminous Intensity @I <sub>F</sub> = 20 mA	I <sub>V</sub>	80.0 (Typ.) 40.0 (Min)	mcd
Viewing Angle @Note2	2θ <sub>1/2</sub>	130	Degree
Peck Emission Wavelength Measurement@Peak	$\lambda_{p}$	611	nm
Dominant Wavelength @I <sub>F</sub> = 5 mA	$\lambda_{D}$	605	nm
Spectral Line Half-Width	$\triangle_{\lambda}$	17	nm
Forward Voltage @I <sub>F</sub> = 20 mA	V <sub>F</sub>	2.4 (Max) 2.0(Typ.)	V
Max. Reverse Current @ 5V	$I_R$	100	μΑ

<sup>• 221</sup> West Industry Court ☐ Deer Park, NY 11729-4681 ☐ (631) 586-7600 FAX (631) 242-9798 •

<sup>•</sup> World Wide Web Site - http://www.sensitron.com • E-Mail Address - sales@sensitron.com •



#### **TECHNICAL DATA**

#### DISCLAIMER:

- 1- The information given herein, including the specifications and dimensions, is subject to change without prior notice to improve product characteristics. Before ordering, purchasers are advised to contact the Sensitron Semiconductor sales department for the latest version of the datasheet(s).
- 2- In cases where extremely high reliability is required (such as use in nuclear power control, aerospace and aviation, traffic equipment, medical equipment, and safety equipment), safety should be ensured by using semiconductor devices that feature assured safety or by means of users' fail-safe precautions or other arrangement.
- 3- In no event shall Sensitron Semiconductor be liable for any damages that may result from an accident or any other cause during operation of the user's units according to the datasheet(s). Sensitron Semiconductor assumes no responsibility for any intellectual property claims or any other problems that may result from applications of information, products or circuits described in the datasheets.
- 4- In no event shall Sensitron Semiconductor be liable for any failure in a semiconductor device or any secondary damage resulting from use at a value exceeding the absolute maximum rating.
- 5- No license is granted by the datasheet(s) under any patents or other rights of any third party or Sensitron Semiconductor.
- 6- The datasheet(s) may not be reproduced or duplicated, in any form, in whole or part, without the expressed written permission of Sensitron Semiconductor.
- 7- The products (technologies) described in the datasheet(s) are not to be provided to any party whose purpose in their application will hinder maintenance of international peace and safety nor are they to be applied to that purpose by their direct purchasers or any third party. When exporting these products (technologies), the necessary procedures are to be taken in accordance with related laws and regulations.