

# EG-R3A140-010G

# PRODUCT SPECIFICATION

Approved by:

Checked by:

Prepared by:

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 EG-R3A140-010G
 Spec No.
 WKF-BA3071
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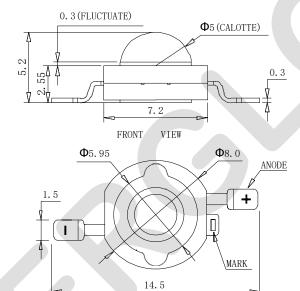
#### **Features:**

- ◆ Excellent Transiting Heat from LED Chip Operating under 700mA
- ♦ High Luminous Output
- ♦ No UV

# Typical purpose:

- ◆ Portable Flashlight
- ◆ Garden lighting
- ♦ General Lighting

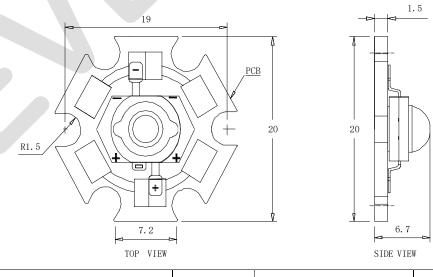
# Package Dimensions:



TOP

VIEW

# Installs on the aluminum sheet:



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#### Notes:

- 1. Thermoelectric integrated Red chip packaged in this product.
- 2. All dimensions are in millimeters (inches).
- 3. Tolerance is ±0.25 mm (0.01") unless otherwise noted.

Part NO.	Lens Color	Source Color		
EG-R3A140-010G	Water Clear	Red		

### Absolute Maximum Ratings at Ta=25℃

Parameter	Symbol	MAX.	Unit
LED Junction Temperature	Tj	125	${\mathbb C}$
Power Dissipation	P <sub>D</sub>	2170	mW
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	I <sub>FP</sub>	1000	mA
Continuous Forward Current	IF	700	mA
Reverse Voltage	V <sub>R</sub>	5	V
Electrostatic Discharge Threshold (ESD)	ESD	2000	V
Operating Temperature Range	T <sub>opr</sub>	-40 to +70	$\mathbb{C}$
Storage Temperature Range	T <sub>spr</sub>	-40 to +100	
Lead Soldering Temperature	Tsol	Hand Soldering: 350°C for 8 sec.	

#### Notes:

- 1. Specifications are subject to change without notice.
- 2. Under the stipulated Characteristics parameters above, the life span of the LED is more than 50,000hours.
- 3. The data on this specification is for reference only and the actual data is in accordance with the acknowledgment.
- 4. Precautions for ESD:

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

#### Characteristics at If=700mA, Vr=5V (Ta=25°C):

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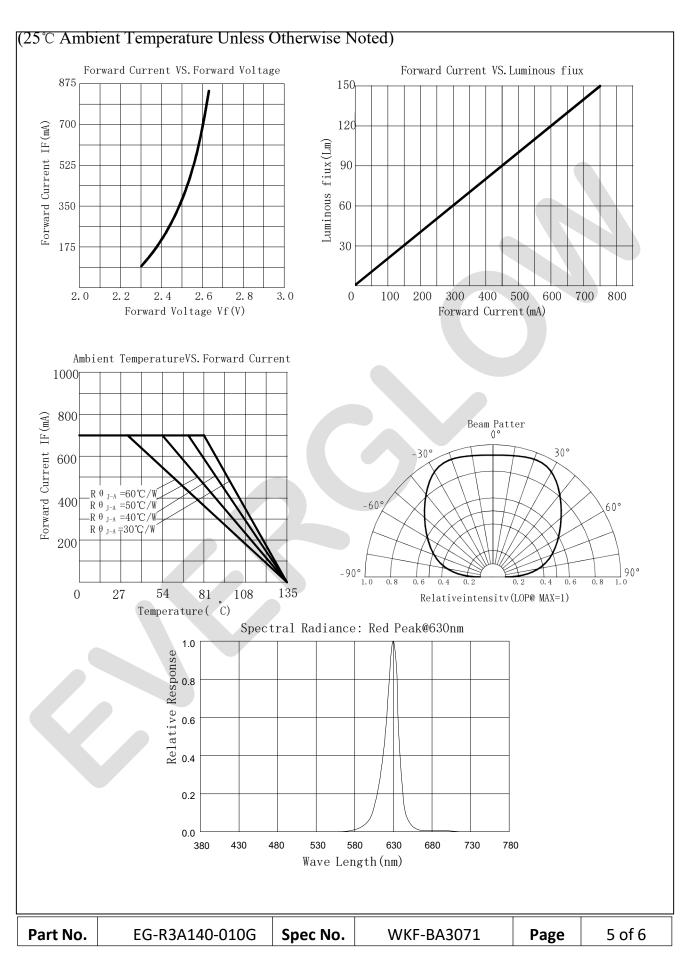


Parameter	Symbol	Values			Linita
Parameter		Min.	Тур.	Max.	Units
Luminous Flux	Фу	100	140		lm
Viewing Angle at 50 % IV	2θ <sub>1/2</sub>	_	140		Deg
Peak Emission Wavelength	λр	625	630	635	nm
Dominant Wavelength	λd	618	620	628	nm
Spectral Line Half-Width	Δλ	15	20	25	nm
Forward Voltage	Vf	2.0	2.3	2.7	V
Reverse Current	I <sub>R</sub>			10	μΑ
Thermal Resistance Junction to Case	$R\theta_{J-C}$	-	5.9	<u></u>	K/W
Temperature Coefficient of Forward Voltage	V△F/T	_	-2	_	mV/℃

### **Notes:**

- 1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
- $2.\theta_{1/2}$  is the off-axis angle at which the luminous intensity is half the axial luminous intensity
- 3. The dominant wavelength ( $\lambda$ d) is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.
- 4. Flux is measured with an accuracy of ±15%.
- 5. Forward voltage is measured with an accuracy of ±0.15V.

# **Typical Electrical / Optical Characteristics Curves**



#### **PRECAUTION IN USE**

#### Storage

Recommended storage environment

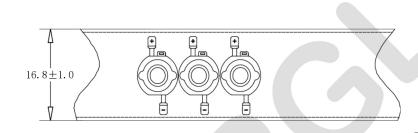
Temperature:  $5^{\circ}$ C ~  $30^{\circ}$ C (41oF ~ 86oF)

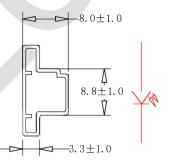
Humidity: 60% RH Max.

#### Soldering

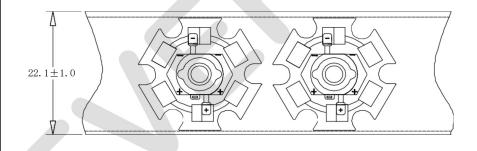
Hand Sol	dering
Temperature	350°C Max.
Soldering time	8sec. Max.

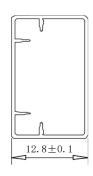
# **Dimensions for Cannulation and Packaging**





# **Quantity: 50PCS**





**Quantity: 24PCS** 

#### **Notes:**

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is ±2.0 mm (0.08") unless otherwise noted.
- 3. Product is packaged with silica gel to protect the light-emitting zone. Please avoid the light-emitting area from being pressed, stressed, rubbed, come into contact with sharp metal part which would damage the product.

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