

Rev.	01

# PRODUCT SPECIFICATION

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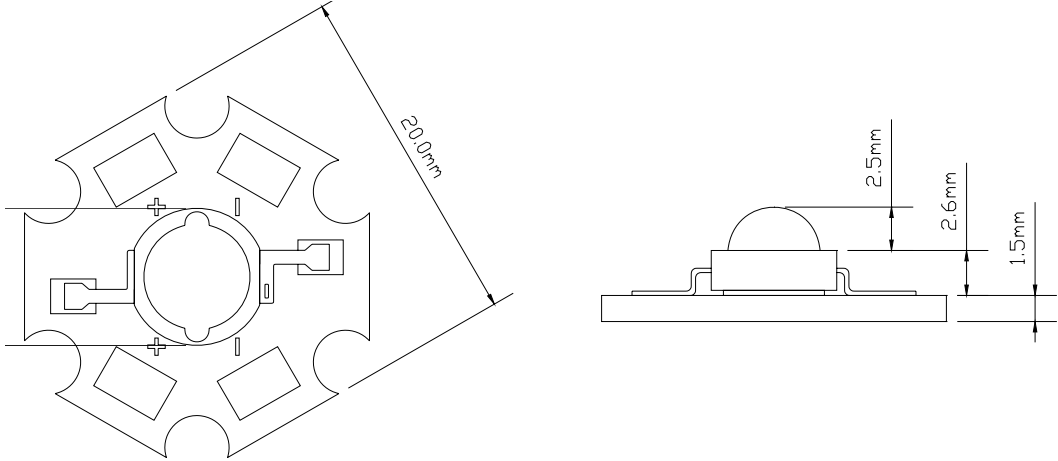
Descriptions:

- 1W High Power Type
- Emitting Color: 850 IR
- Viewing Angle: 135°

CUSTOMER APPROVED SIGNATURES

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■ Package Dimensions



Notes

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.25\text{mm}(0.010\text{'})$  unless otherwise noted.
- 3. Protruded resin under flange is 1.0mm(0.04") max.
- 4. Specifications are subject to change without notice.

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■ **Absolute Maximum Ratings (Ta = 25°C)**

Parameter	Maximum Rating
Power Dissipation	1W
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	1500mA
Continuous Forward Current	550mA
Derating Linear From 30°C	0.5mA/°C
Reverse Voltage	5V
Operating Temperature Range	-20°C to + 80°C
Storage Temperature Range	-30°C to + 100°C
Lead Soldering Temperature	260°C for 5 Seconds

■ **Typical Electrical & Optical Characteristics ( Ta = 25°C)**

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	LM	---	---	---	lm	IF =350mA
Viewing Angle	$2\theta$ 1/2	120	130	140	deg	IF =350mA
Dominant Wavelength	Tc				K	IF =350mA
Spectral Line Half-Width	$\Delta \lambda$	845	850	855	nm	IF =350mA
Forward Voltage	VF	1.5	1.6	1.7	V	IF =350mA
Reverse Current	IR			20	$\mu$ A	VR = 5V

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

**Spectrum Distribution Ta=25°**

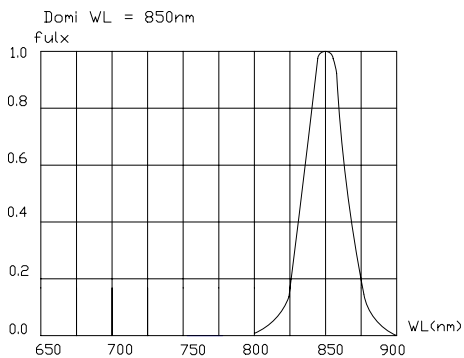
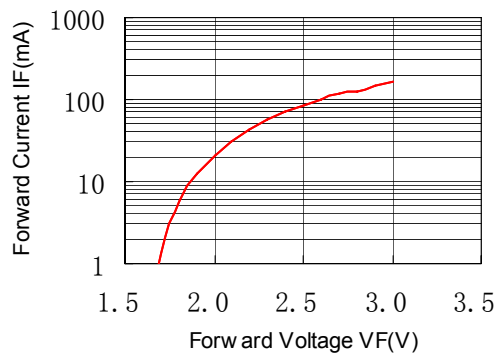
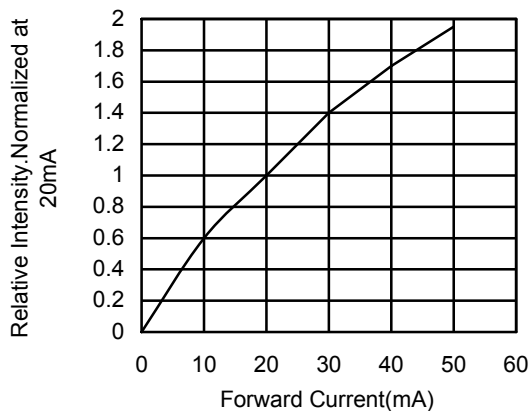


Fig.4 Relative Luminous Flux vs. Wavelength

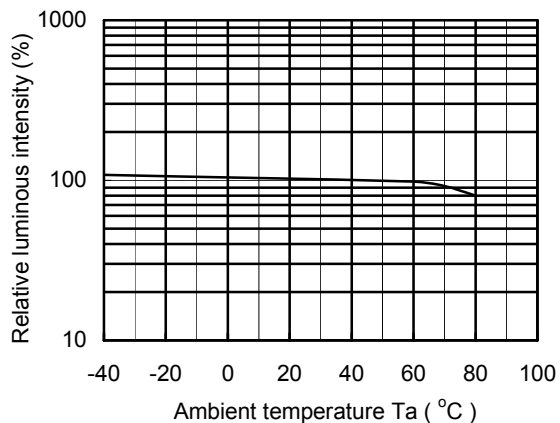
**Forward Voltage vs. Forward Current (Ta=25°C)**



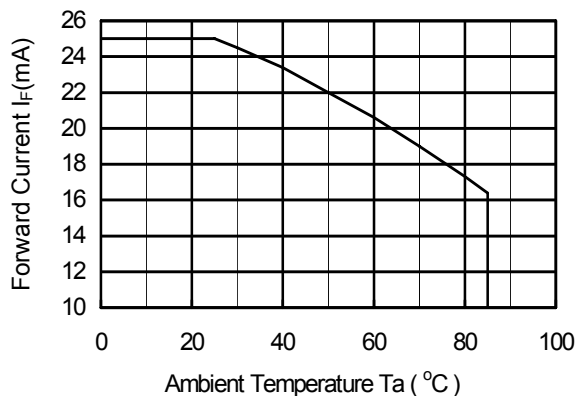
**Relative Luminous Intensity vs. Forward Current**



**Relative Luminous Intensity vs. Ambient Temperature (IF=20mA)**



**Forward Current Derating Curve**



**Beam Pattern**

