Electrical Optical Characteristics at Ta=25℃

Parameter	Symbol	Color	Min.	Typ.	Max.	Unit	Test Condition
Radiant Intensity	Ie	Infrared	2.5	4.0	5.8	mW/sr	I_F=20mA
Luminous Intensity	Iv	Red	200	275	415	mcd	I_F=20mA
Viewing Angle	$2\theta_{1/2}$	---	---	120	---	Deg.	(Note 2)
Peak Emission Wavelength	λp	Infrared	930	940	960	nm	I_F=20mA
		Red	650	660	665	nm	I_F=20mA
Spectral Line Half-Width	λ	Infrared	---	50	---	nm	I_F=20mA
		Red	---	20	---	nm	I_F=20mA
Forward Voltage	V_F	Infrared	1.1	---	1.5	V	I_F=20mA
		Red	1.9	---	2.3	V	I_F=20mA
Reverse Current	I_R	---	---	---	10	μA	V_R=5V

Note:

1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve. Tolerance of Luminous Intensity: ±15%.
2. $\theta_{1/2}$ is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
3. The dominant wavelength, λd is derived from the CIE chromaticity diagram

Typical Electrical / Optical Characteristics Curves for Red

(25°C Ambient Temperature Unless Otherwise Noted)

Fig.1 Spectral Distrbution

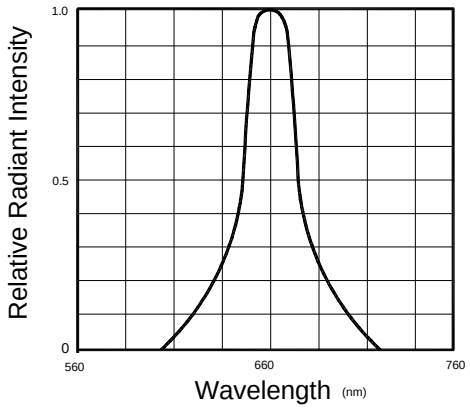


Fig.2 Forward Current Vs Ambient Temperature

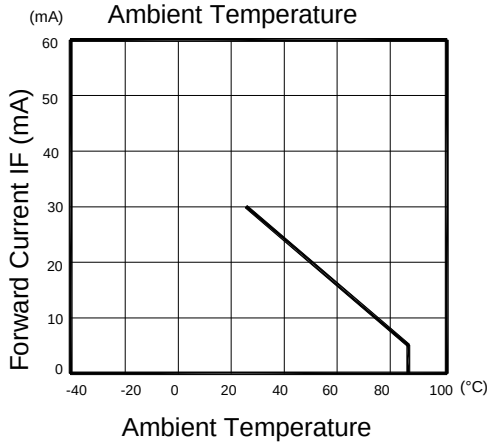


Fig.3 Forward Current Vs Forward Voltage

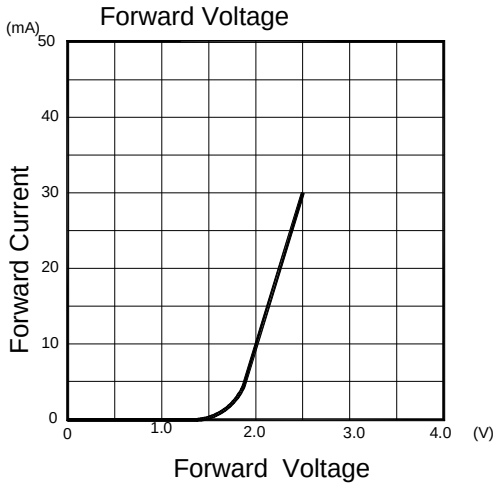


Fig.4 Relative Radiant Intensity Vs Ambient Temperature

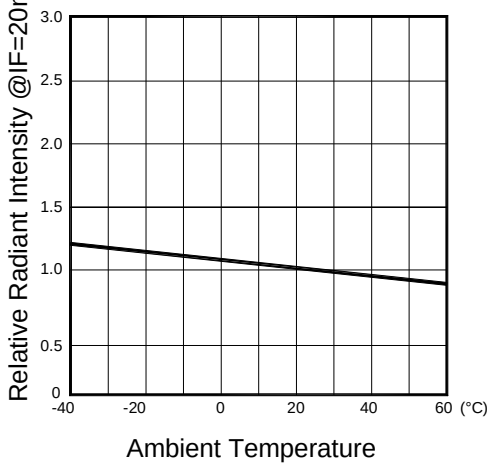


Fig.5 Relative Radiant Intensity Vs Forward Current

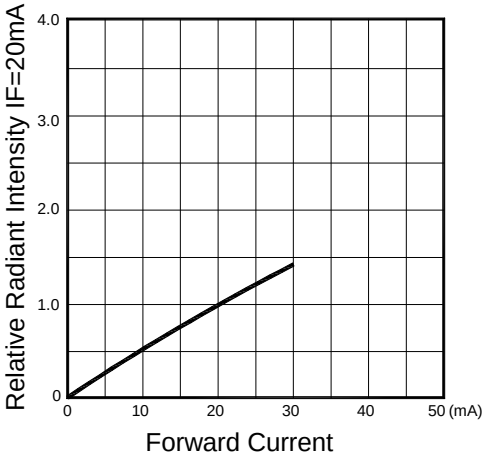
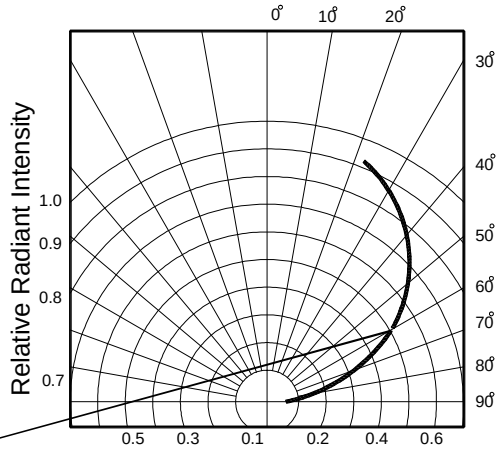
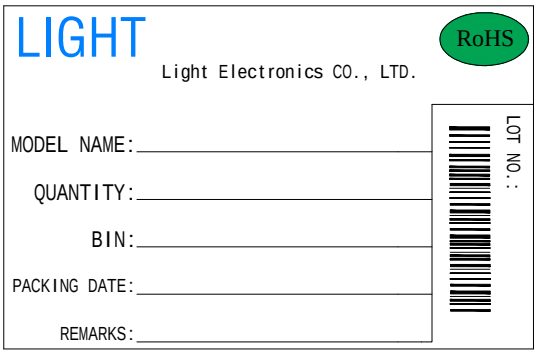


Fig.6 Radiation Diagram

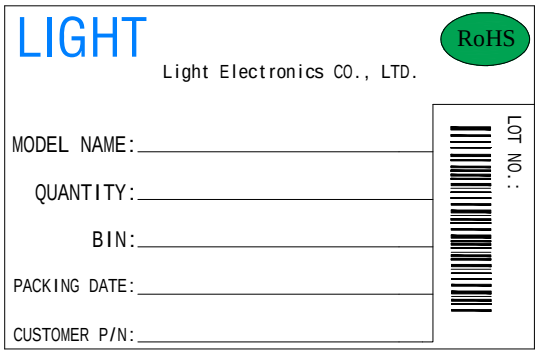


Label Explanation

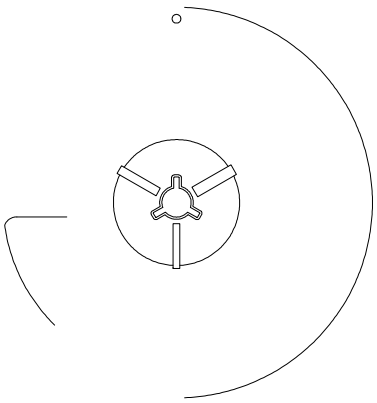
LIGHT Universal Label



Customer Defined Label

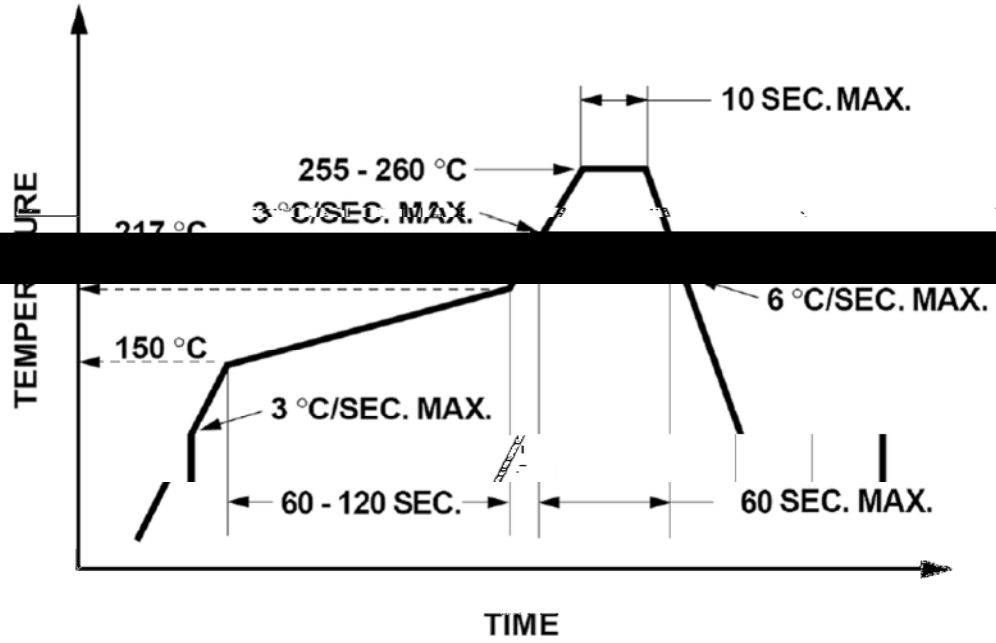


Reel Dimensions



Note: Tolerance unless mentioned is ±0.2mm; Unit = mm

Figure 10 Recommended Reflow Condition for Lead Free



1. Reflow soldering should not be done more than two times.
2. When soldering, do not put stress on the LEDs during heating.

Soldering iron

1. When hand soldering, the temperature of the iron must less than 300℃ for 3 seconds.
2. The hand solder should be done only once.

Repairing

Repair should not be done after the LEDs have been soldered. When repairing is unavoidable, a double-head soldering iron should be used (as below figure). It should be confirmed beforehand whether the characteristics of LEDs will or will not be damaged by repairing.