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DATA SHEET

PART NO.: L-C191YCT

REV: A / 03

CUSTOMER'S APPROVAL : _____

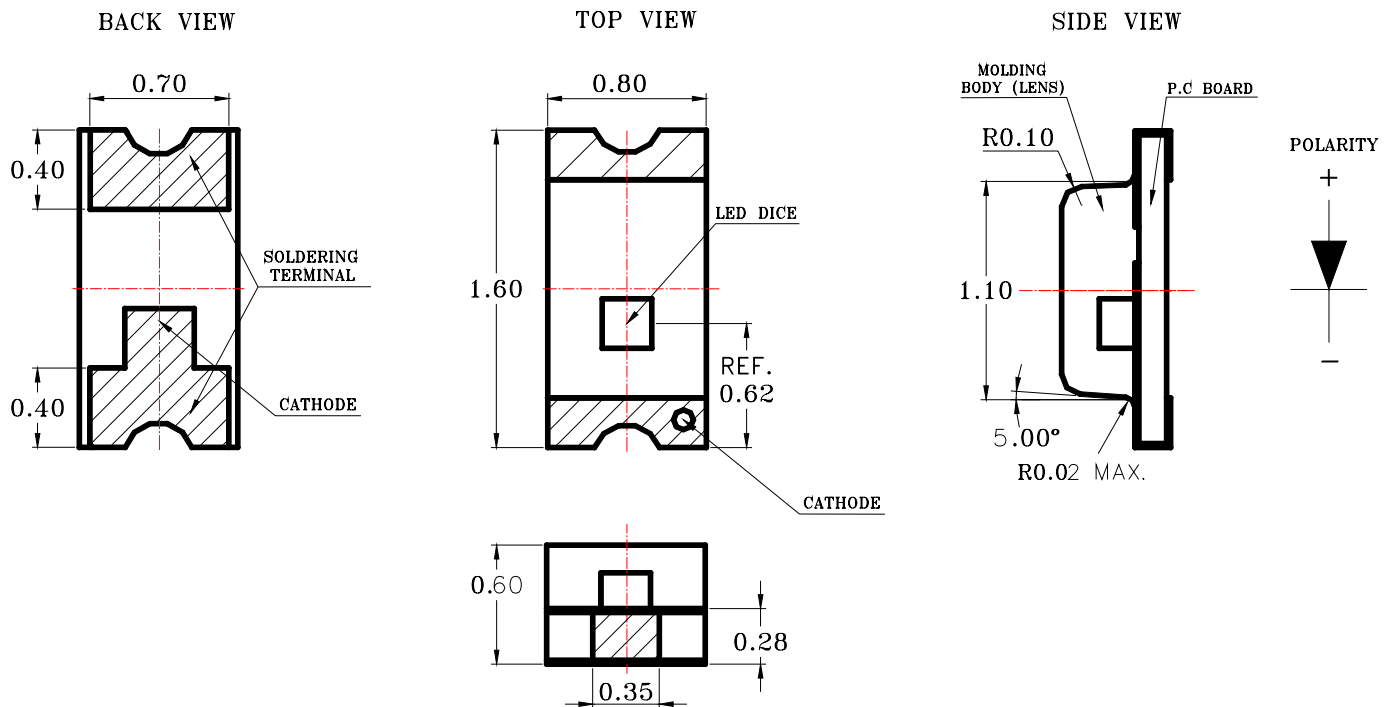
DCC : _____

SURFACE MOUNT DEVICE LED

Part No. : L-C191YCT

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● PACKAGE OUTLINE DIMENSIONS



Notes:

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

● Features

- * Top view, wide view angle, single color Chip LED.
- * Package in 8mm tape on 7" diameter reels.
- * Compatible with automatic Pick & Place equipment.
- * Compatible with Infrared and Wave soldering reflow solder processes.
- * EIA STD package.
- * I.C. compatible.
- * Pb free product.

SURFACE MOUNT DEVICE LED

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● Chip Materials

- * Dice Material : GaAsP
- * Light Color : Yellow
- * Lens Color : Water Clear

● Absolute Maximum Ratings(Ta=25°C)

Symbol	Parameter	Rating	Unit
PD	Power Dissipation	60	mW
IPF	Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	80	mA
IF	Continuous Forward Current	20	mA
-	De-rating Linear From 25°C	0.25	mA/°C
VR	Reverse Voltage	5	V
Topr	Operating Temperature Range	-40 ~ +85	°C
Tstg	Storage Temperature Range	-40 ~ +85	°C
-	Wave Soldering Condition (Two times Max.)	260 (for 5 seconds)	°C
-	Infrared Soldering Condition (Two times MAX.)	240 (for 10 seconds)	°C

● Electro-Optical Characteristics(Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	IV	1.6	4.5		mcd	IF=20mA
Viewing Angle	2 θ 1/2		130		deg	Note 2
Peak Emission Wavelength	λ p		585		nm	Measurement @Peak
Dominant Wavelength	λ d		588		nm	IF=20mA
Spectral Line Half-Width	Δ λ		35		nm	
Forward Voltage	VF		2.1	2.6	V	IF =20mA
Reverse Current	IR			100	μ A	VR = 5V

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Notes:

1. Luminous intensity is measured with a light sensor and filter combination that proximates 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 λ_d is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.
4. Caution in ESD :
Static Electricity and surge damages the LED. It is recommended use a wrist band or anti-electrostatic glove when handling the LED. All devices, equipment and machinery must be properly grounded.
5. Major standard testing equipment by "Instrument System" Model : CAS140B Compact Array Spectrometer and "KEITHLEY" Source Meter Model : 2400.

● Typical Electro-Optical Characteristics Curves

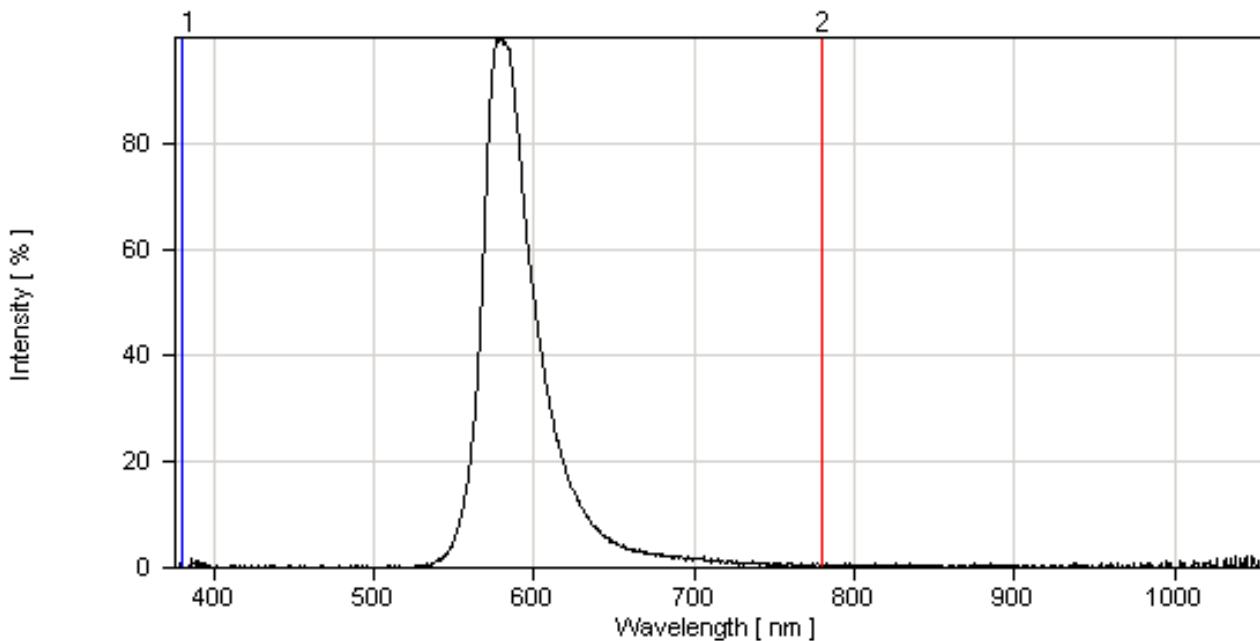


Fig.1 Relative Intensity vs. Wavelength

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● Typical Electro-Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)

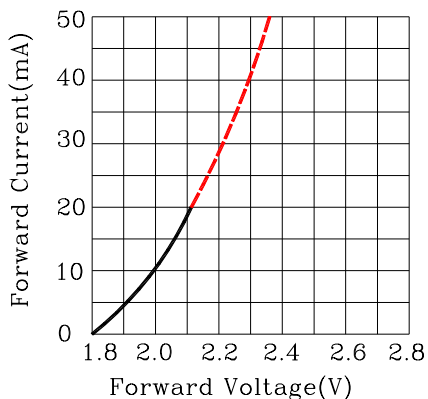


Fig.2 Forward Current vs. Forward Voltage

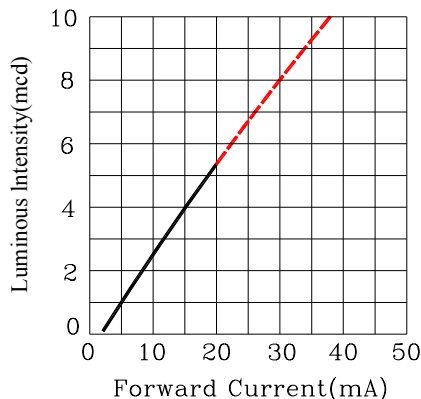


Fig.3 Luminous Intensity vs. Forward Current

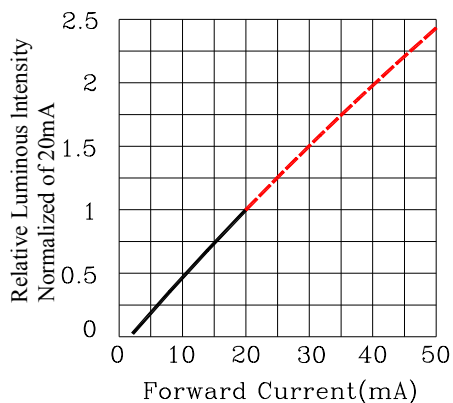


Fig.4 Relative Luminous Intensity vs. Forward Current

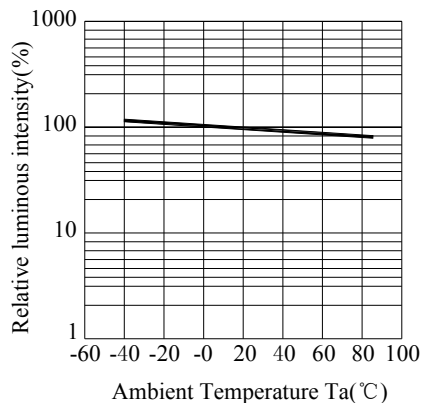


Fig.5 Luminous Intensity vs. Ambient Temperature

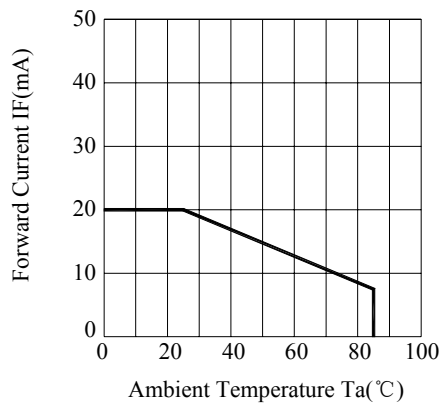


Fig.6 Forward Current Derating Curve

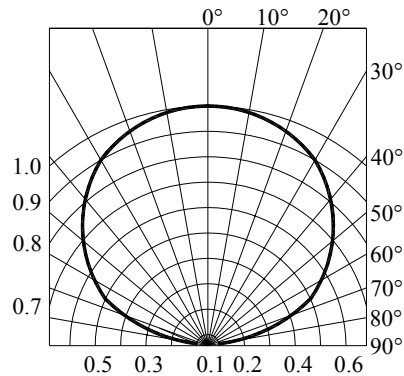


Fig.7 Relative Intensity vs. Angle