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DATA SHEET

PART NO. : L-C19DJECT

REV : A / 0

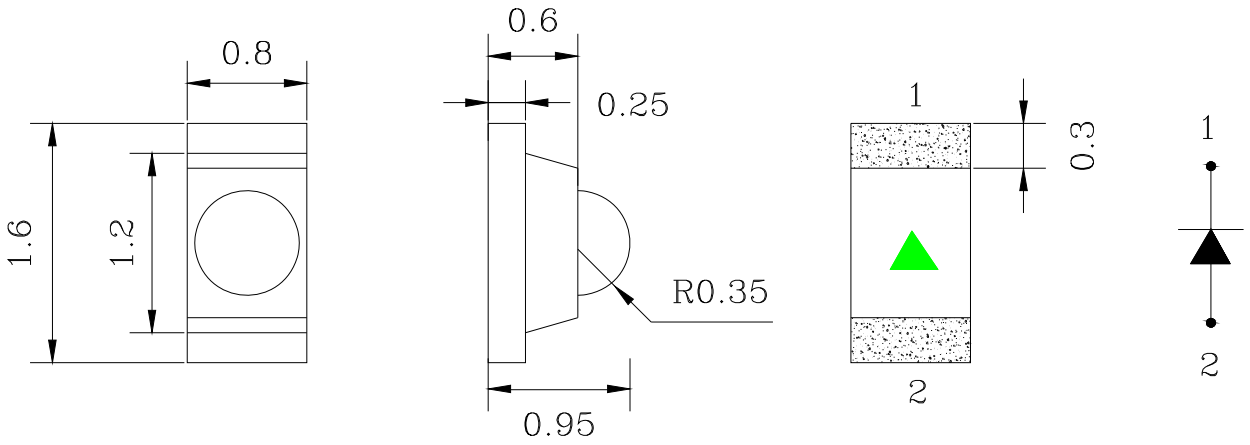
CUSTOMER'S APPROVAL : _____ DCC : _____

1.6*0.8*0.95 mm SMD LED

L-C19DJECT

REV:A / 0

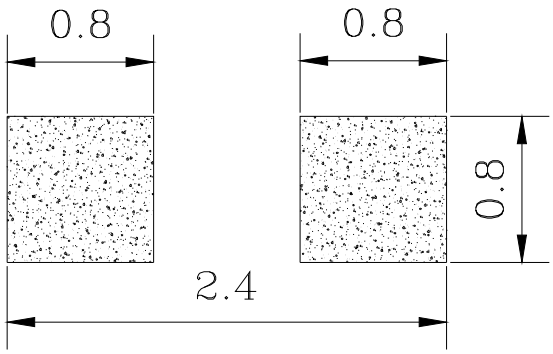
PACKAGE DIMENSIONS



NOTES：

1.All dimensions are in millimeters
2.Tolerances are±0.2mm (0.008inch) unless otherwise noted
3.The Specifications in the datasheet are subject to change without notice.

Recommended Soldering Pattern (Unit： mm ; Tolerance: +/-0.1)



NOTES：

1.All dimensions are in millimeters (in
2.Tolerances are±0.1mm (0.004inch) unless otherwise noted
3.The Specifications in the datasheet are subject to change without notice.

1.6*0.8*0.95 mm SMD LED

L-C19DJECT

REV:A / 0

FEATURES
* 1.6*0.8*0.95 mm SMD LED
* Long operating life
* Low Power Consumption
* Low voltage DC operated

CHIP MATERIALS
* Dice Material : AlGaInP
* Light Color : Red
* Lens Color : Water Clear

ABSOLUTE MAXIMUM RATING : (Ta = 25°C)

SYMBOL	PARAMETER	Rating	UNIT
If	Forward Current	30	mA
Ifp	Peak Forward Current (1/10 duty cycle 0.1ms)	100	mA
VR	Reverse Voltage	5	V
ESD	Electrostatic Discharge Threshold(HBM)	2000	V
Topr	Operating Temperature Range	-40 ~ + 90	℃
Tstg	Storage Temperature Range	-40 ~ + 90	℃
Tsld	Reflow Soldering	260℃ for 10 secs	

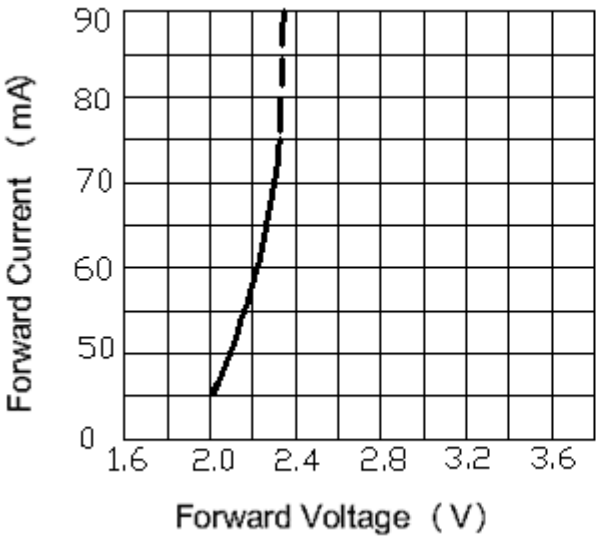
ELECTRO-OPTICAL CHARACTERISTICS : (Ta = 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	Iv	200	300		mcd	IF=20mA
Viewing Angle	2θ1/2		30		deg	IF=20mA
Spectral Line Half-Width	△λ		20		nm	IF=20mA
Dominant Wavelength	λD		622		nm	IF=20mA
Forward Voltage	VF	1.9		2.4	V	IF=20mA
Reverse Current	IR			10	μA	VR=5V

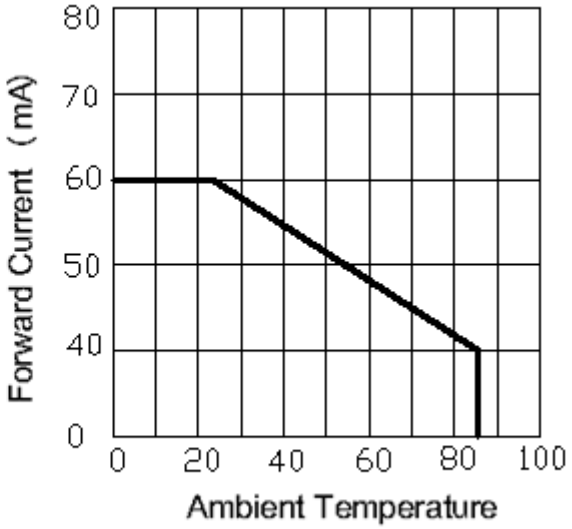
Typical Electro-Optical Characteristics Curves

(25℃ Ambient Temperature Unless Otherwise Noted)

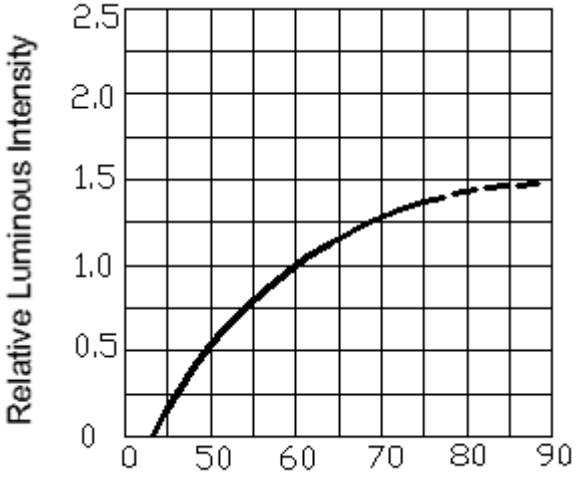
Forward Current vs.Forward Voltage



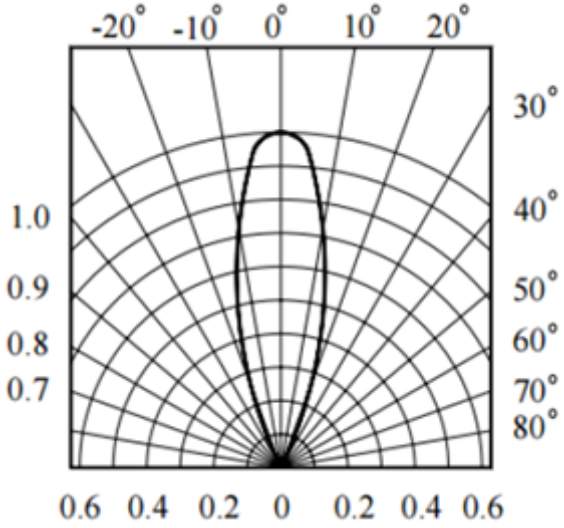
Forward Current vs.Ambient Temperature



Relative Luminous Intensity vs Forward Current



Radiation Diagram



Bin Range of Luminous Intensity				
Bin Code	Min.	Max.	unit	Condition
L1	200	300	mcd	IF = 20mA
L2	300	400		

Note: Tolerance of Luminous Intensity: ±15%

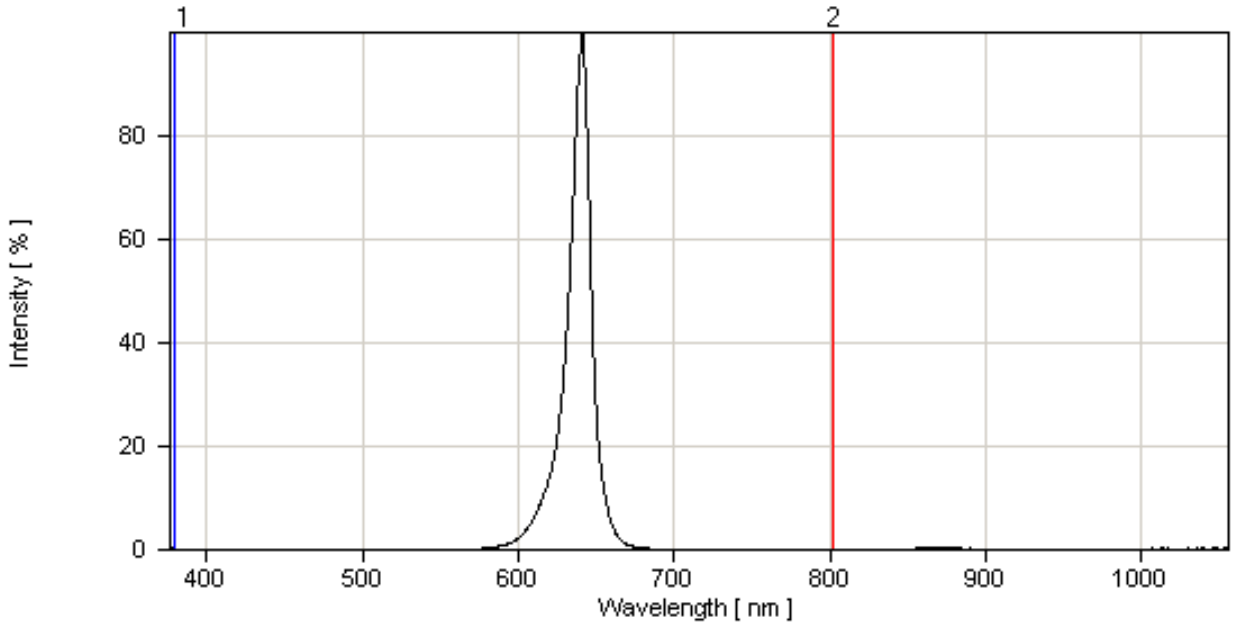
Bin Range of Dominant Wavelength				
Bin Code	Min.	Max.	unit	Condition
R1	618	620	nm	IF = 20mA
R2	620	622		
R3	622	624		
R4	624	626		
R5	626	628		

Note: Tolerance of Dominant Wavelength: ±1nm

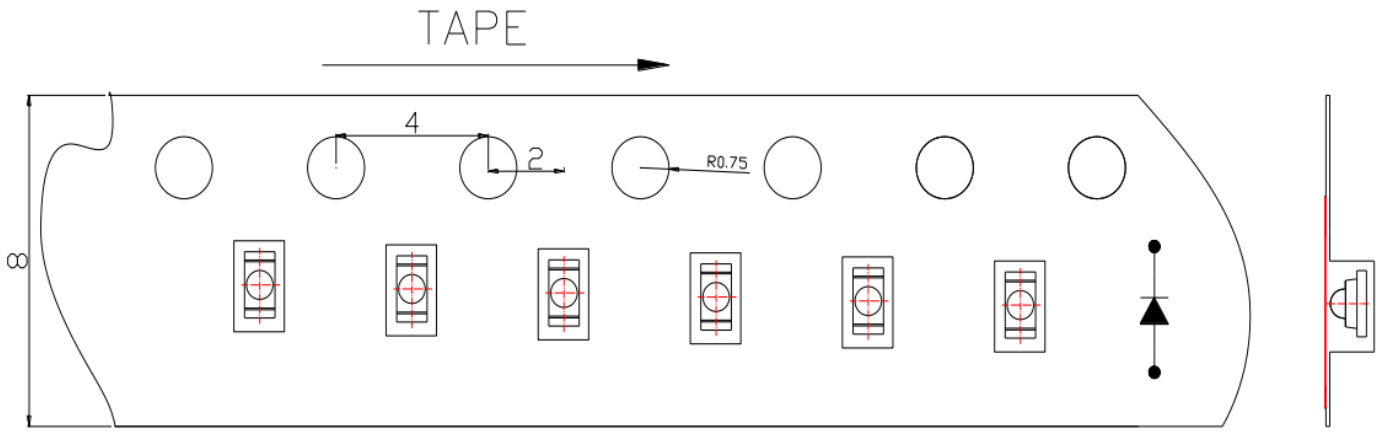
Bin Range of Forward Voltage				
Bin Code	Min.	Max.	unit	Condition
V1	1.9	2.0	V	IF = 20mA
V2	2.0	2.1		
V3	2.1	2.2		
V4	2.2	2.3		
V5	2.3	2.4		

Note: Tolerance of Forward Voltage: ±0.1V

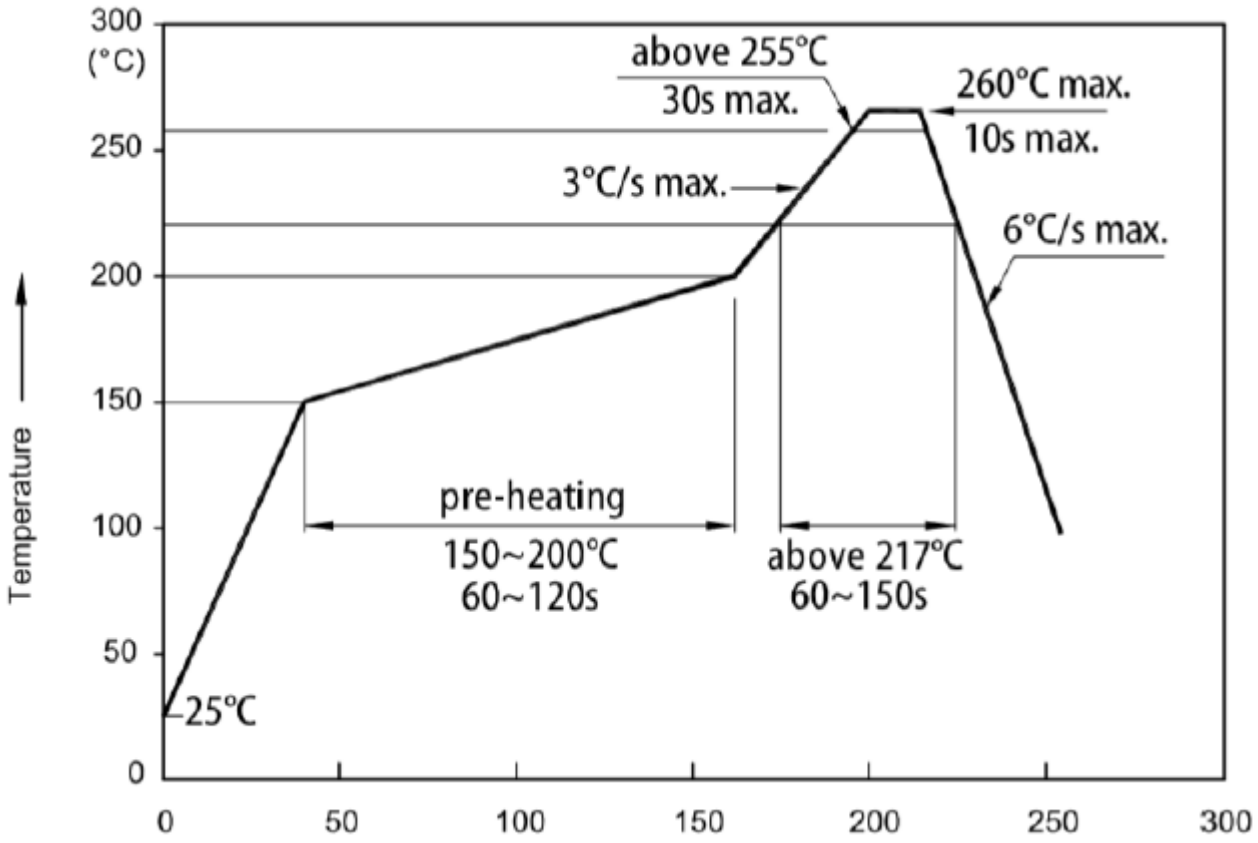
Spectrum Distribution



TapeSpecification:3,000pcs/Reel



Reflow Soldering Profile for Lead-Free SMD Process



●Don't cause stress to the LEDs while it is exposed to high temperature.

●The maximum number of reflow soldering passes is 2 times.

●Reflow soldering is recommended. Other soldering methods are not recommended as they might cause damage to the product.

Precautions

1.Storage

- Moisture proof andanti-electrostatic package with moisture absorbent material is used, to keep moisture to aminimum.

- Before opening the package, the product should be kept at 30℃or less and humidity less than 60% RH, and beused within a year.

- After opening the package, the product should be stored at 30℃or less and humidity less than 10%RH, and besoldered within 24 hours (1day). It is recommended that theproduct be operated at the workshop condition of 30℃or less and humidity less than 60%RH.

- If the moisture absorbent material has fade away or the LEDs have exceeded the storage time, baking treatment should be performed based on the following condition: (70±5)℃for 24 hours.

2.Static Electricity

Static electricity or surge voltage damages the LEDs. Damaged LEDs will show some unusual characteristic such as the forward voltage becomes lower, or the LEDs do not light at the low current. even not light.
All devices, equipment and machinery must be properly grounded. At the same time, it is recommended that wrist bands or anti-electrostatic gloves, anti-electrostatic containers be used when dealing with the LEDs.

3.Vulcanization

LED curing is due to sulfur being in bracket and the +1 price of silver in the chemical reaction generated Ag2S in the process. It will lead to the capacity of reflecting of silver layer reducing, light color temperature drift and serious decline ,seriously affecting the performance of the product.So we should take corresponding measures to avioding vulcanization, such as to avoid using sulphurvolatile substances and keeping away from high sulphur content of the material.