



Opto Plus LED Corp

OPS-L955MBC-ZS

3.5 x 2.8 x 1.9 mm PLCC2

● **EDIT HISTORY**

Version A: Sep. 27, 2011

New color data sheet.

Manufacture	Examination	Approving



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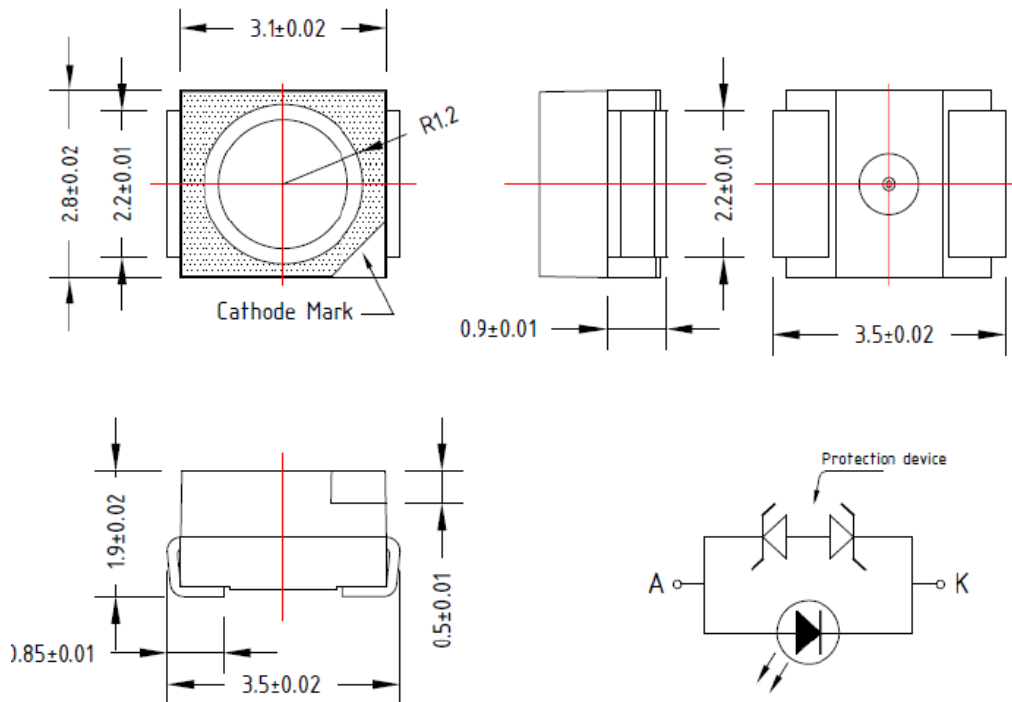
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● FEATURES

- ◆ 3.5 x 2.8 x 1.9 mm PLCC2.
- ◆ Wide viewing angle.
- ◆ Low current requirement.
- ◆ IR reflow soldering.
- ◆ I.C. compatible

● PACKAGE DIMENSIONS



NOTES:

1. All dimensions are in millimeters (inches);
2. Electrical Connection between all Cathodes is Recommended

LENS COLOR	DICE MATERIAL	LIGHT COLOR
Clear	InGaN	Blue

RoHS Compliance



Pb free.





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● ABSOLUTE MAXIMUM RATINGS AT TA=25°C

Parameter	Symbol	Ultra Bright Red	Unit
Power Dissipation	P_{AD}	72	mW
Continuous Forward Current	I_{FMAX}	30	mA
Peak Forward Current (duty cycle 1/10, 0.1ms Pulse Width)	I_{FP}	100	mA
Reverse Voltage	V_R	5	V
Operating Temperature Range	T_{OPR}	-30 to +100	°C
Storage Temperature Range	T_{STG}	-40 to +100	°C
Solder Temperature	T_{SOL}	265°C for 10sec	

I_{FP} Conditions: Pulse Width ≤ 10msec and Duty ≤ 1/10

● ELECTRICAL OPTICAL CHARACTERISTICS AT TA=25°C

Characteristic	Symbol	Condition	Min.	Type	Max.	Unit
Forward Voltage	V_F	$I_F = 20mA$	-	3.2	3.8	V
Reverse Current	I_R	$V_R = 5V$	-	-	50	μA
Peak Wavelength	λ_P	$I_F = 20mA$	-	465	-	nm
Dominant Wavelength	λ_d	$I_F = 20mA$	460	470	480	nm
Luminous Intensity	I_V	$I_F = 20mA$	180	340	-	mcd

Notes: Luminous intensity tolerance is 10%



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● LUMINOUS INTENSITY BIN LIMITS

Test condition : @20mA		
BIN Code	I _v min. (mcd)	I _v max. (mcd)
H	180	240
J	240	310
K	310	400
L	400	520

* @20mA / Ta=25°C, Tolerance: ±15%

● Color BIN LIMITS

Test condition : @20mA		
Color	Rank Code	Spec. Range (nm)
Blue	1	460 – 465
	2	465 – 470
	3	470 – 475
	4	475 – 480

* @20mA / Ta=25°C, Tolerance: ±1nm

Note

1. One delivery will include several color ranks and I_v ranks of products.
The quantity-ratio of the different rank is decided by OP.
2. Bin Name typed on the Label: IV RANK + Color Rank.
For Example, BIN K2 Means IV: 310~400mcd and Color: 465nm~470nm
3. Static Electricity or Surge Voltage damages the LEDs.
It is recommended to use a wrist band or Anti-Electrostatic glove when handling the LEDs.
4. Sander has the right to update the information without notice.
Please double confirm the Spec details before place an order.



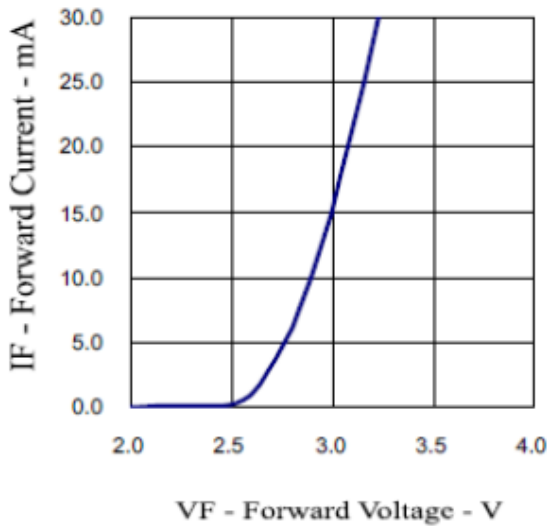
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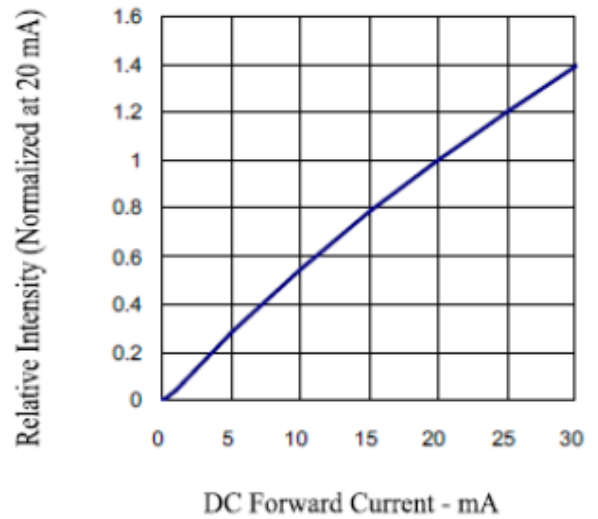
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OPTICAL CHARACTERISTIC CURVES:

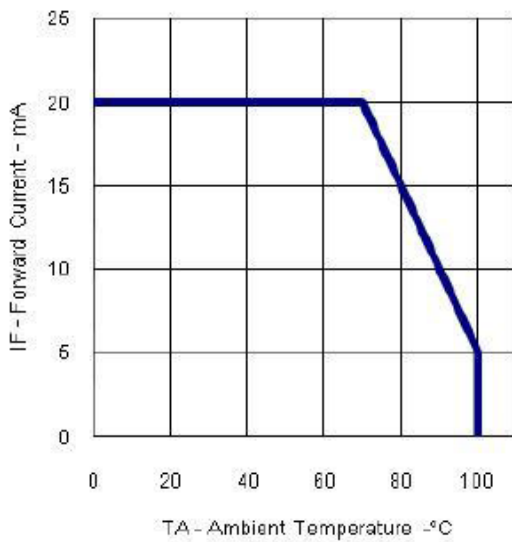
Forward Current vs. Forward Voltage



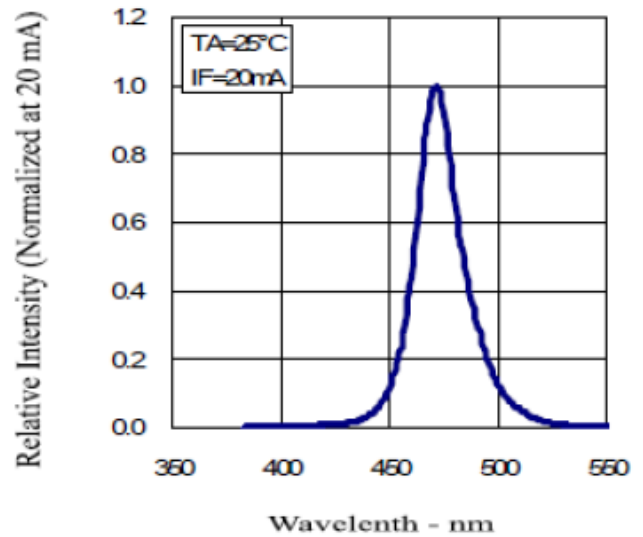
Relative Intensity vs. Forward Current



Forward Current vs. Ambient Temperature



Relative Intensity vs. Wavelength



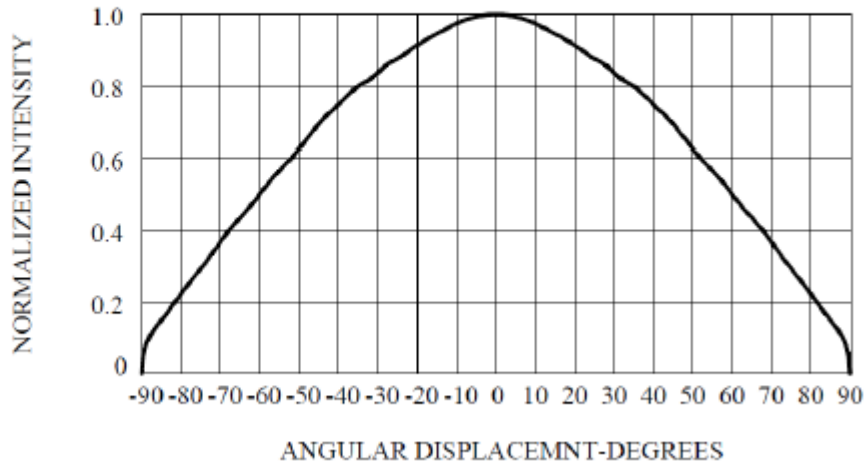


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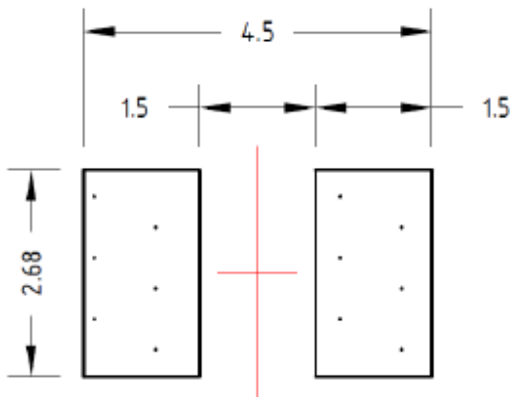
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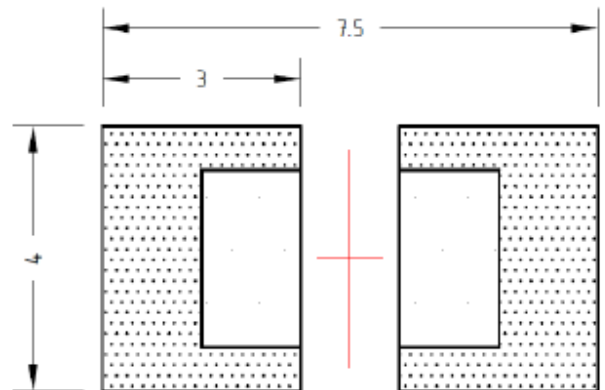
Radiation Pattern




Recommended Soldering Pad Pattern



(Unit:mm)



 Solder resist (Unit:mm)

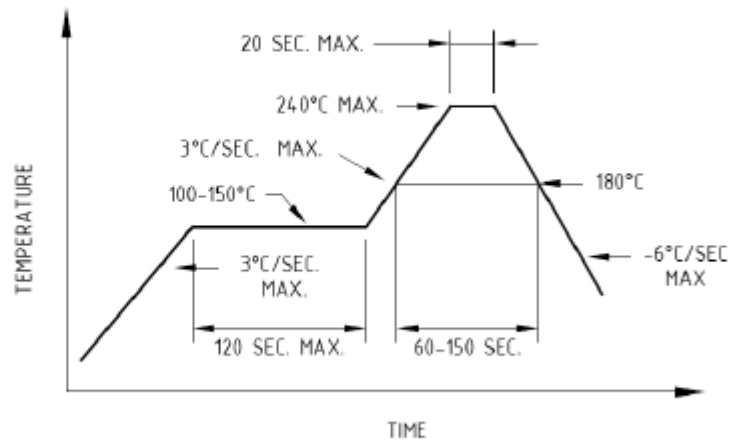


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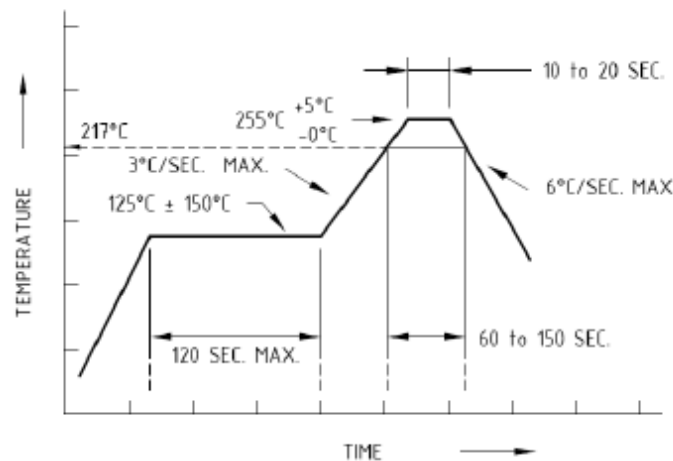
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Soldering Conditions:



Recommended reflow soldering profile



Recommended Pb-free reflow soldering profile

- Repairing should not be done after the LEDs have been soldered. When repairing is unavoidable, a double-head soldering iron should be used. It should be confirmed beforehand whether the characteristics of the LEDs will or will not be damaged by repairing.
- Reflow soldering should not be done more than two times.
- When soldering, do not put stress on the LEDs during heating.
- After soldering, do not warp the circuit board.

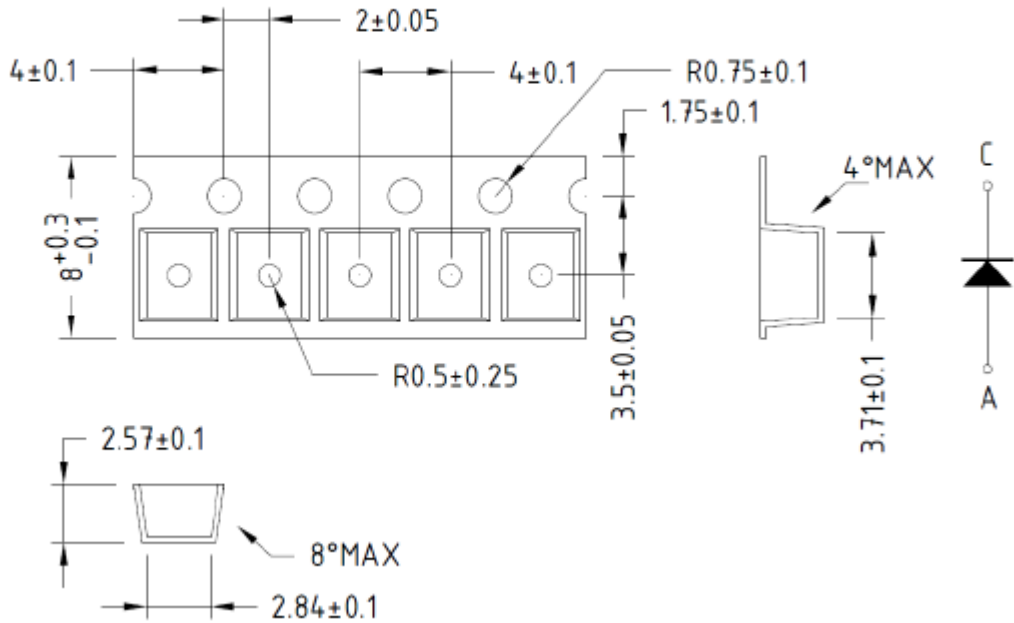


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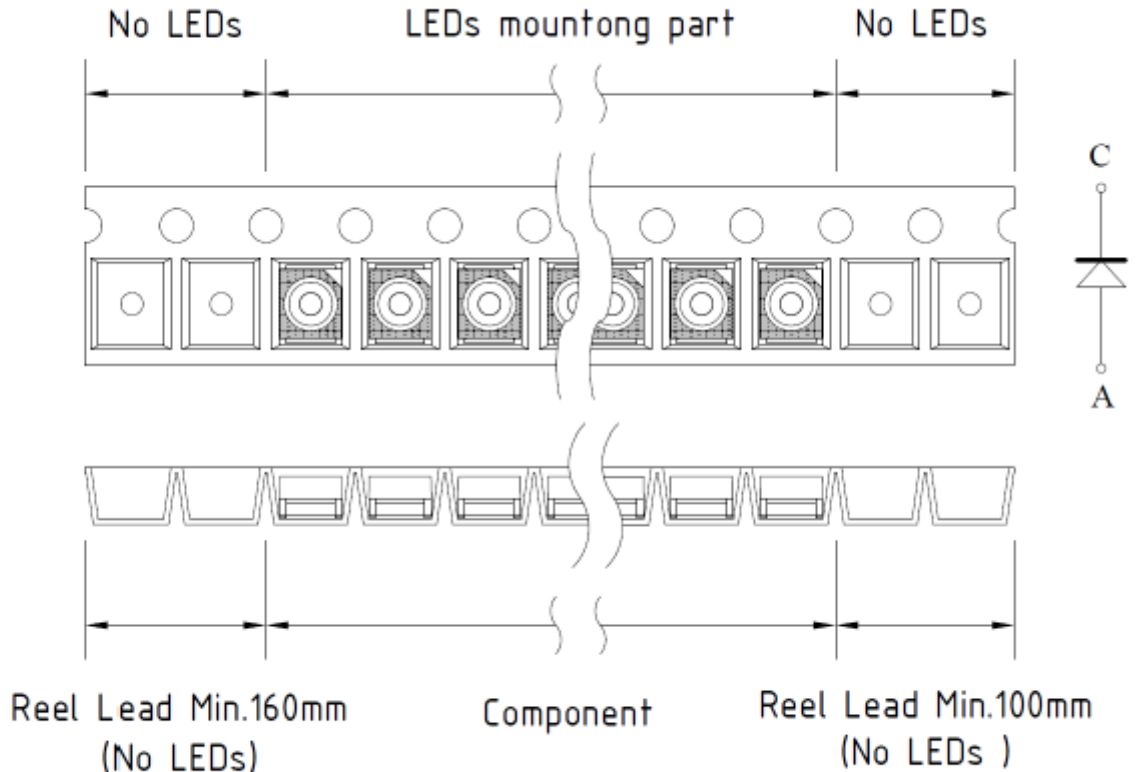
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Tape Dimension



Tape Leader and Trailer Dimension



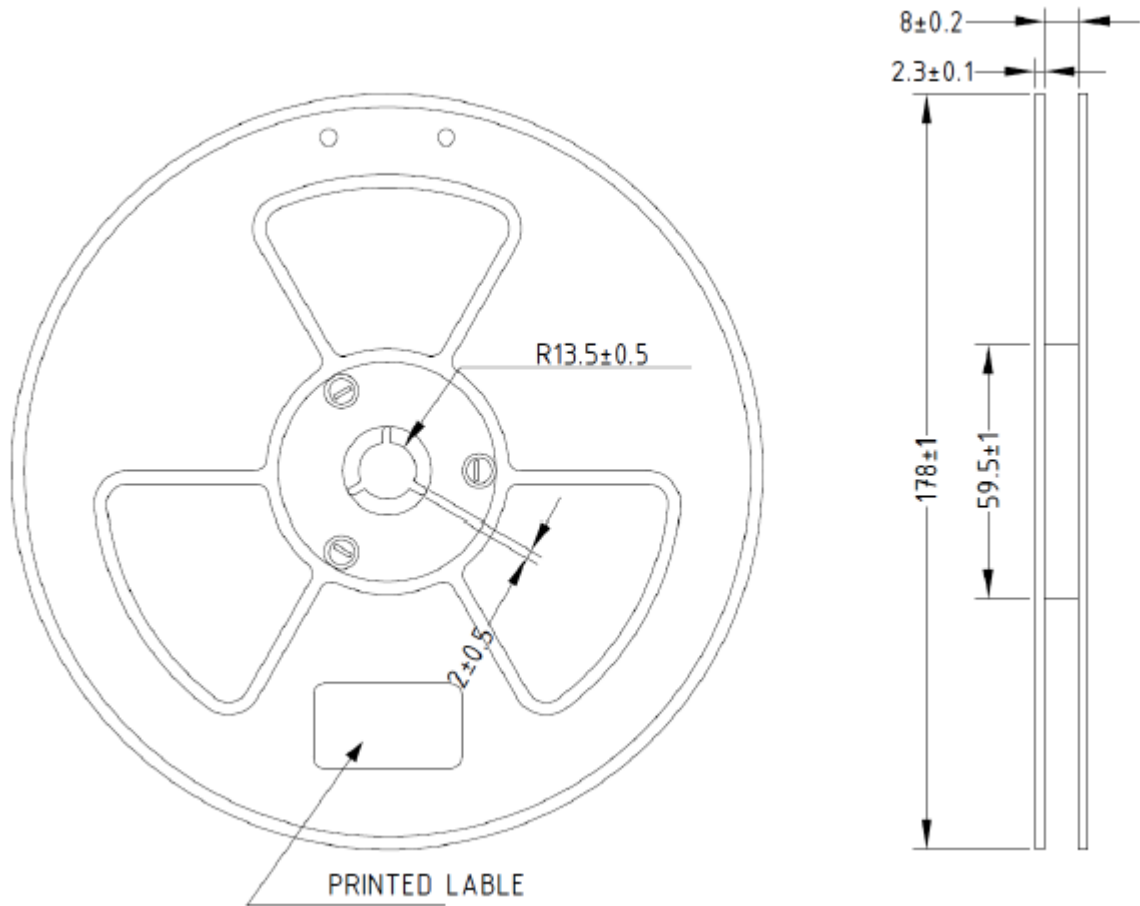


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● PACKAGE DIMENSIONS OF REEL



Note: Baking is required under the following conditions:
The pack has been opened for more than four weeks.
Baking recommended conditions:
 60 ± 5 °C for 20 hours.