



**Opto Plus LED Corp**

**OPS-L955MBGC-Z**

**3.5 x 2.8 x 1.9 mm PLCC2**

● **EDIT HISTORY**

Version A: Sep. 27, 2011

New color data sheet.

Manufacture	Examination	Approving



# Opto Plus LED Corp

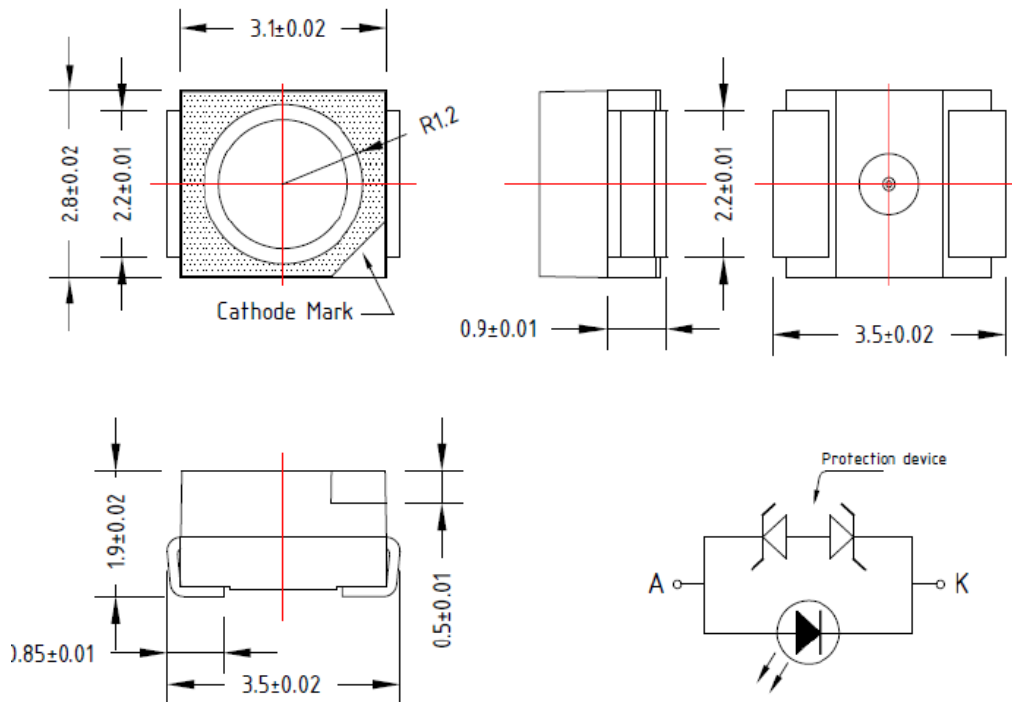
## OPS-L955MBGC-Z

3.5 x 2.8 x 1.9 mm PLCC2

### ● 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
Green	InGaN	Ice 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<sub>FP</sub> Conditions: Pulse Width ≤ 10msec and Duty ≤ 1/10

### ● ELECTRICAL OPTICAL CHARACTERISTICS AT TA=25°C

Characteristic	Symbol	Condition	Min.	Type	Max.	Unit
Forward Voltage	$V_F$	$I_F = 20mA$	-	3.1	3.5	V
Reverse Current	$I_R$	$V_R = 5V$	-	-	50	μA
Chromaticity Coordinate	X	$I_F = 25mA$	-	0.31	-	nm
Chromaticity Coordinate	Y	$I_F = 25mA$	-	0.32	-	nm
Luminous Intensity	$I_V$	$I_F = 20mA$	1800	2300	2800	mcd

Notes: Luminous intensity tolerance is 10%



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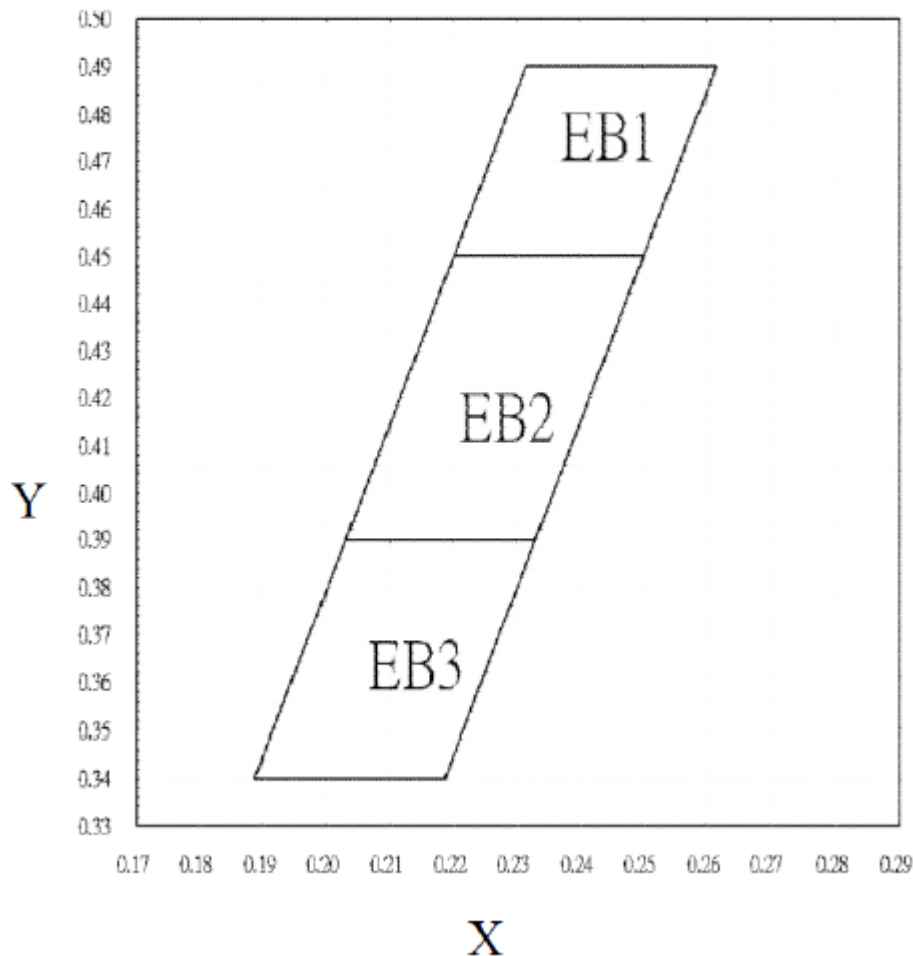
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### COLOR RANKS

BIN EB1				
<b>x</b>	0.2200	0.2314	0.2614	0.25
<b>y</b>	0.4500	0.49	0.49	0.45
BIN EB2				
<b>x</b>	0.2029	0.22	0.25	0.2329
<b>y</b>	0.3900	0.45	0.45	0.39
BIN EB3				
<b>x</b>	0.1886	0.2029	0.2329	0.2186
<b>y</b>	0.3400	0.39	0.39	0.34

### CHROMATICITY DIAGRAM:





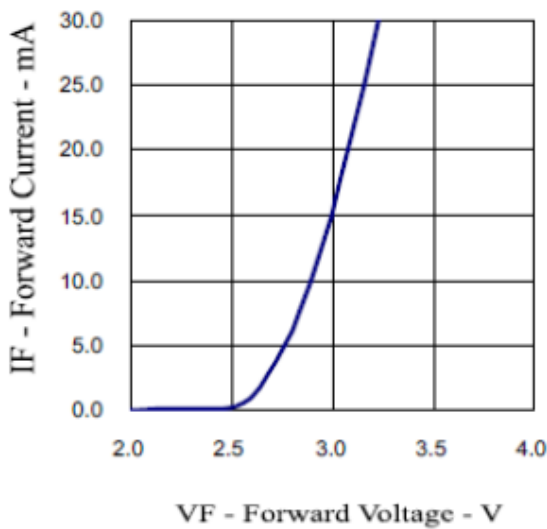
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## OPS-L955MBGC-Z

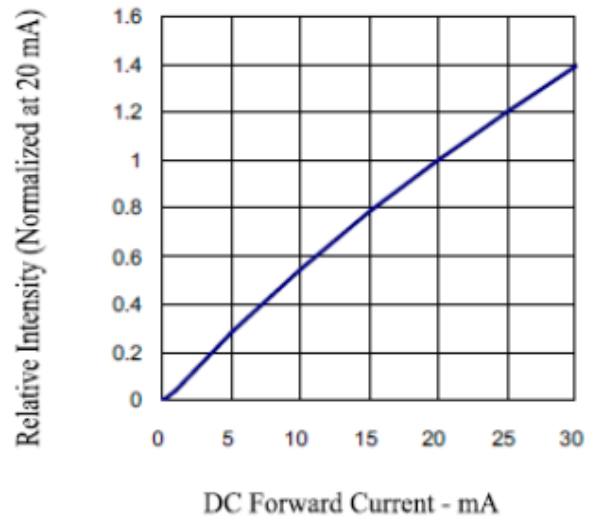
3.5 x 2.8 x 1.9 mm PLCC2

### OPTICAL CHARACTERISTIC CURVES:

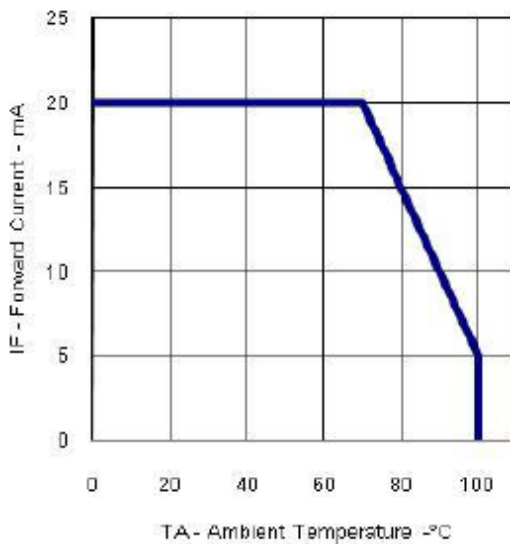
Forward Current vs. Forward Voltage



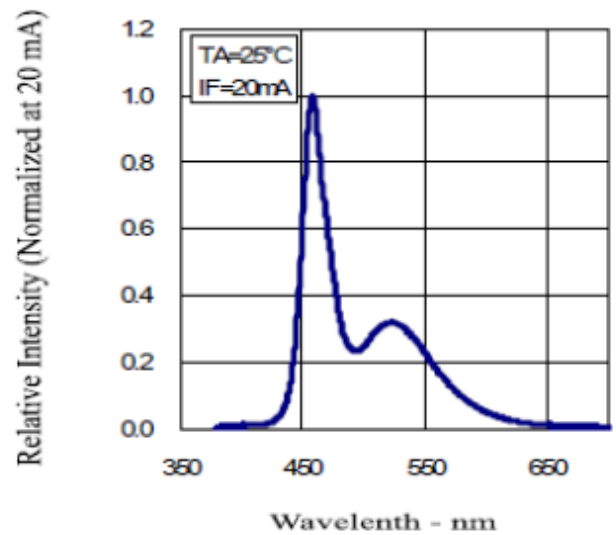
Relative Intensity vs. Forward Current



Forward Current vs. Ambient Temperature



Relative Intensity vs. Wavelength



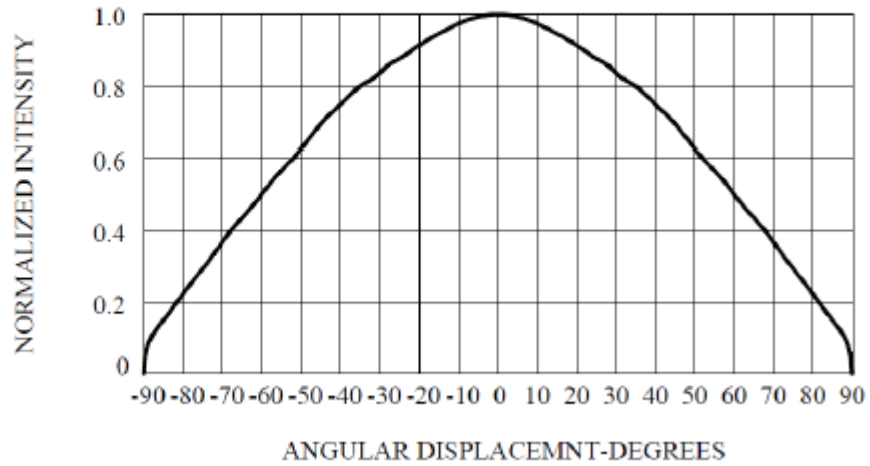


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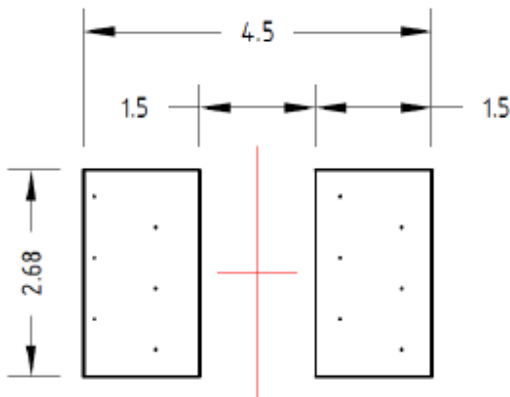
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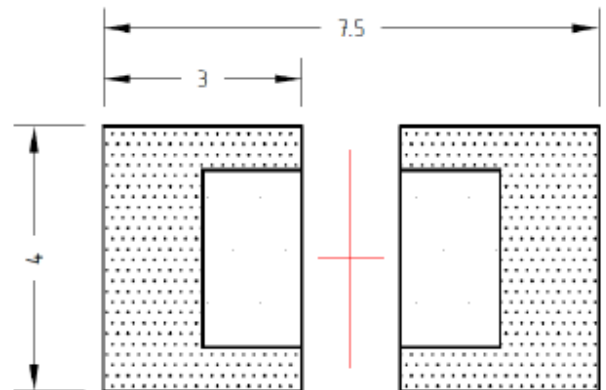
### Radiation Pattern




### Recommended Soldering Pad Pattern



(Unit:mm)



 Solder resist (Unit:mm)

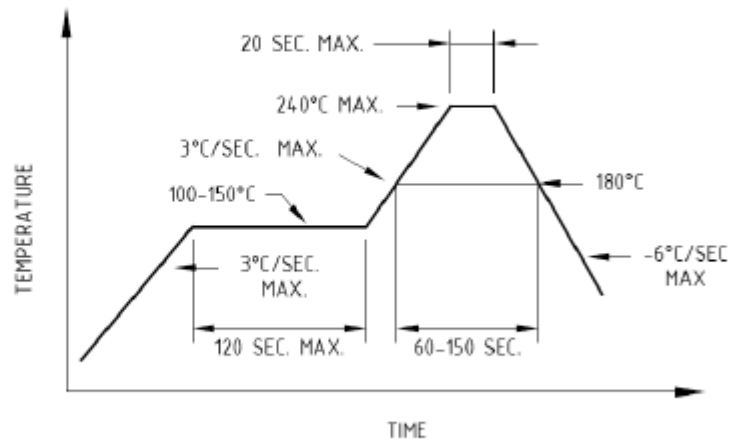


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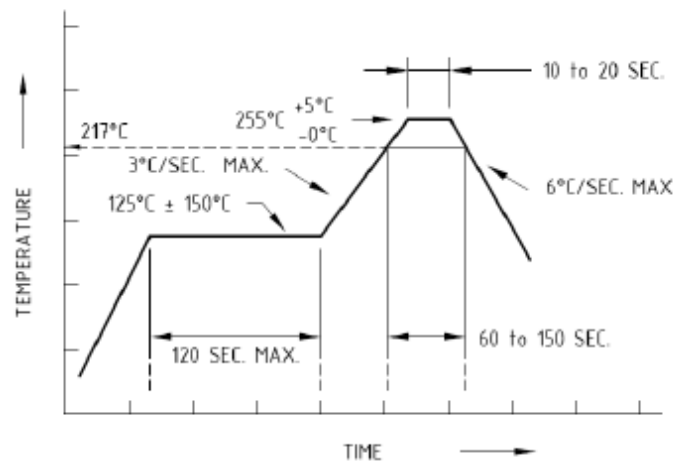
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## Soldering Conditions:



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.

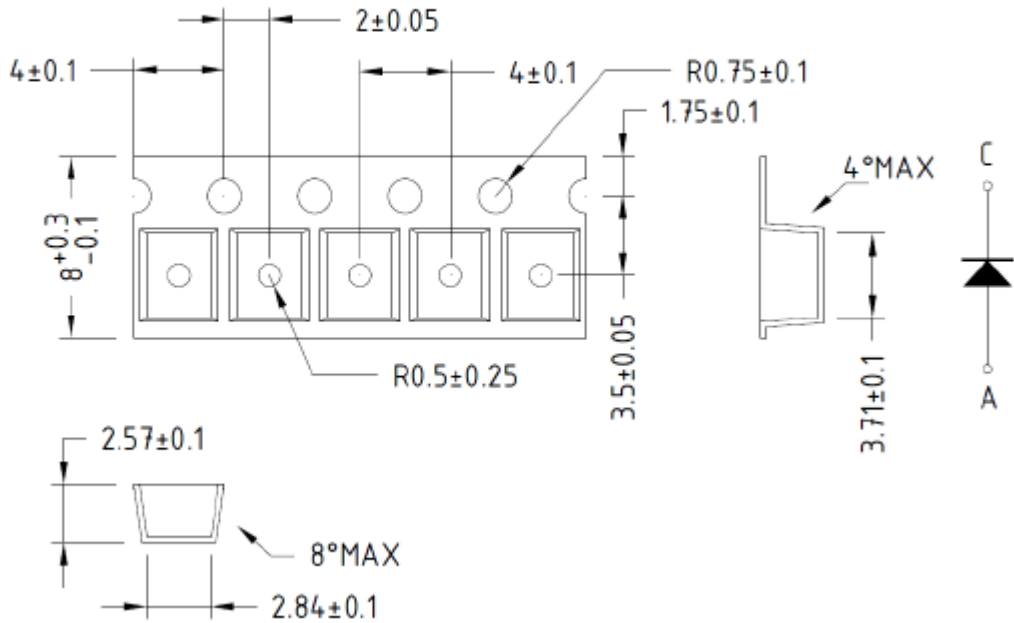


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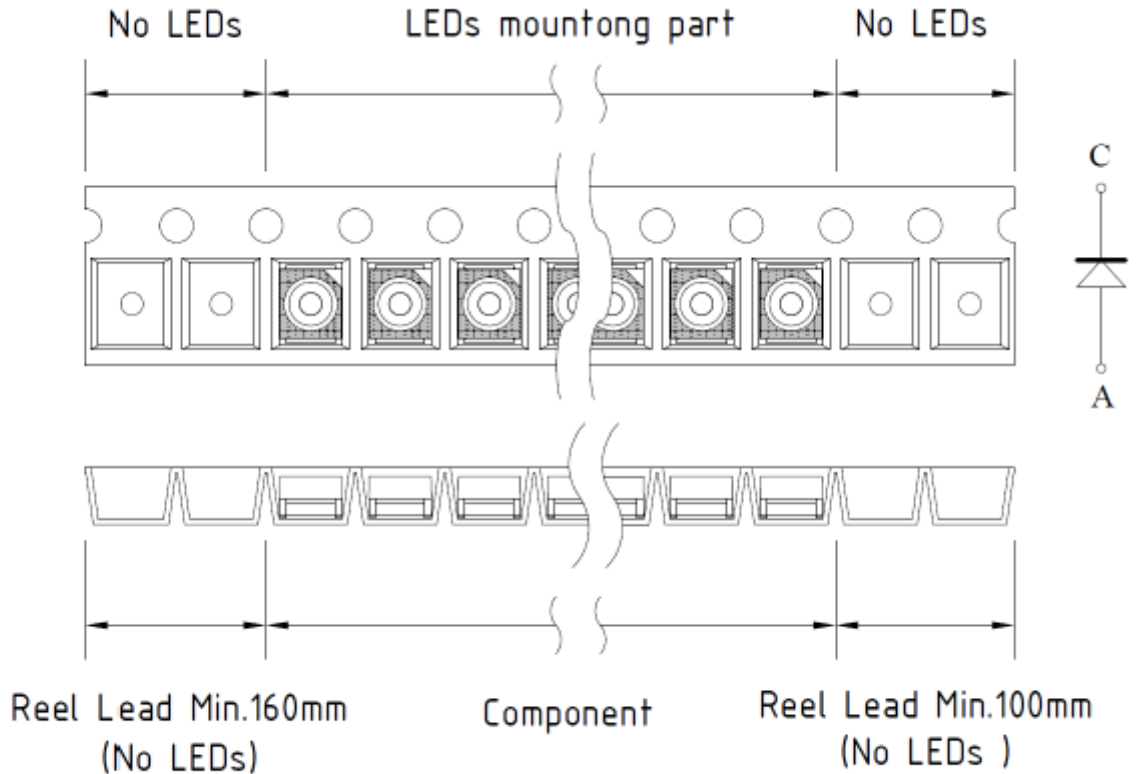
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### Tape Dimension



### Tape Leader and Trailer Dimension



USER FEED DIRECTION →



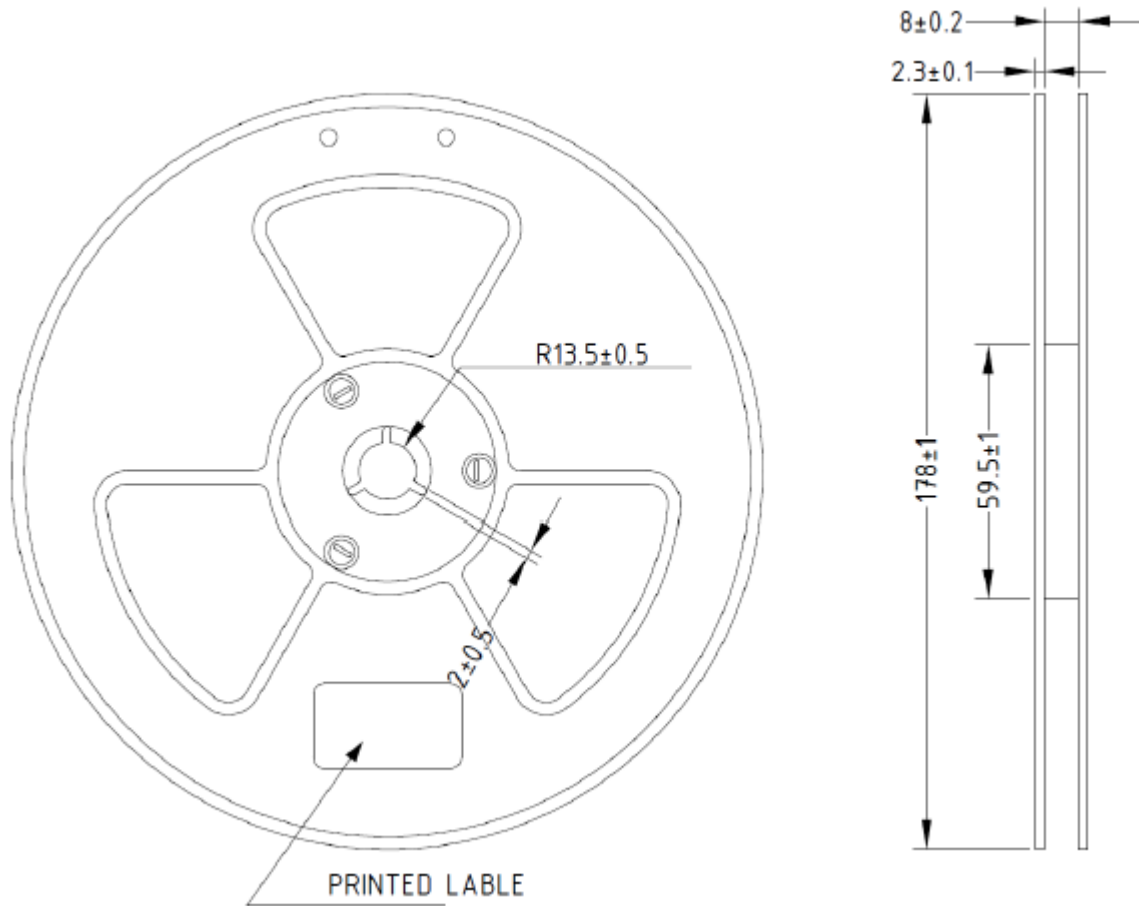


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● PACKAGE DIMENSIONS OF REEL



Note: Baking is required under the following conditions:  
The pack has been opened for more than four weeks.  
Baking recommended conditions:  
 $60 \pm 5 \text{ }^\circ\text{C}$  for 20 hours.