



Opto Plus LED Corp.

OPL-BP1033WP-05C

1.8mm Round Subminiature Solid State Rt. Angle Bend

● EDIT HISTORY

Version : Oct. 3, 2012

New color data sheet.

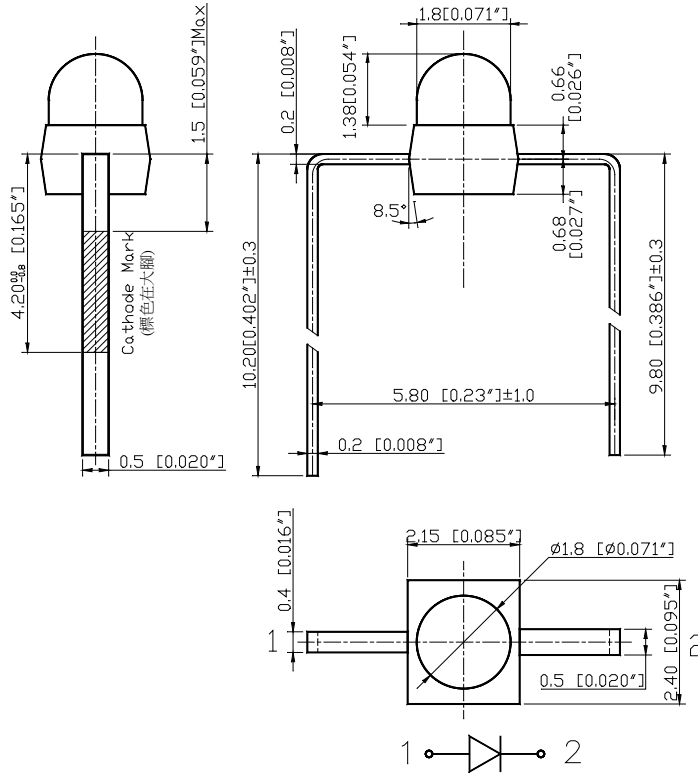


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● PACKAGE DIMENSIONS



ITEM	MATERIALS
Resin (mold)	Epoxy
Bonding wire	□ 25 μm Au
Lens color	White diff.
Dice	InGaN/SiC
Emitted color	Blue

NOTES:

1. All dimensions are in millimeters (inches);
2. Tolerances are ±0.2mm (0.008inch) unless otherwise noted.

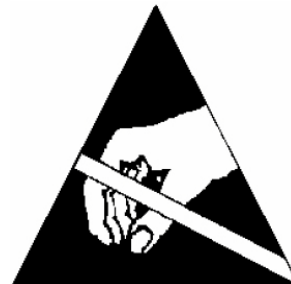
RoHS Compliance



Pb free.



ESD





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● ABSOLUTE MAXIMUM RATINGS AT TA=25°C

Parameter	Symbol	Blue	Unit
Power Dissipation	P_{AD}	120	mW
Forward Current	I_F	30	mA
Peak Pulsing Current (duty cycle 1/8, f=1KHz)	I_{FP}	125	mA
Reverse Voltage	V_R	5	V
Operating Temperature Range	T_{OPR}	-40 to +80	°C
Storage Temperature Range	T_{STG}	-40 to +85	°C

● ELECTRICAL OPTICAL CHARACTERISTICS AT TA=25°C

Characteristic	Symbol	Condition	Min.	Type	Max.	Unit
Forward Voltage	V_F	$I_F = 20\text{mA}$	-	3.5	4.0	V
Reverse Current	I_R	$V_R = 5\text{V}$	-	-	10	μA
Peak Wavelength	λ_P	$I_F = 20\text{mA}$	-	468	-	nm
Dominant Wavelength	λ_d	$I_F = 20\text{mA}$	-	473	-	nm
Luminous Intensity	I_v	$I_F = 20\text{mA}$	50	90	-	mcd
Viewin angle at 50% I_v	$2\theta_{1/2}$	$I_F = 10\text{mA}$	--	160	--	Deg

* Remark: Luminous intensity tolerance is $\pm 10\%$.



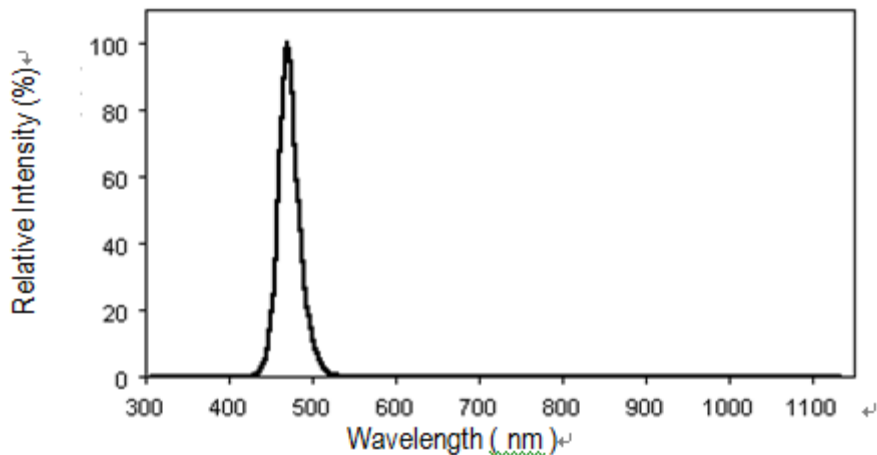
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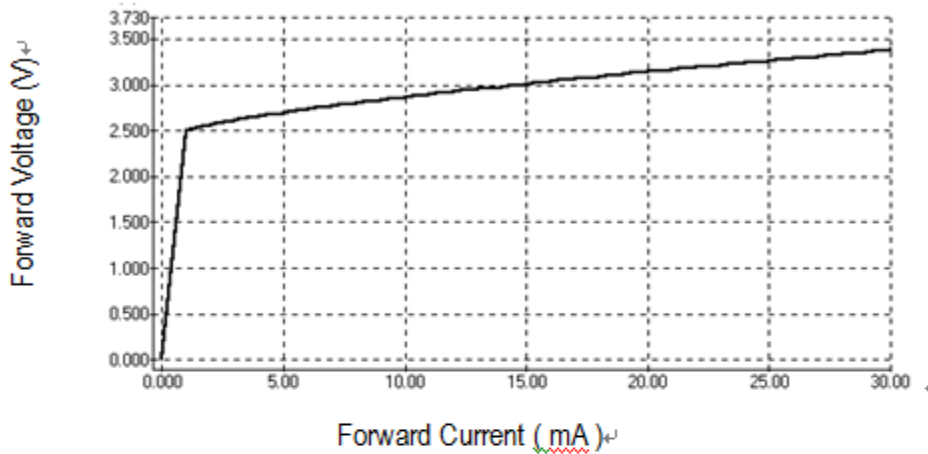
1.8mm Round Subminiature Solid State Rt. Angle Bend

● OPTICAL CHARACTERISTIC CURVES

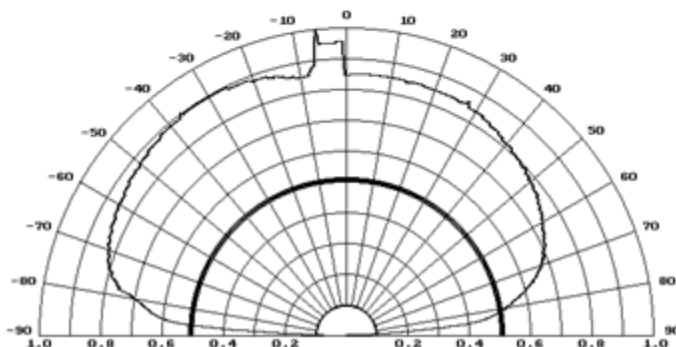
Relative Intensity vs. Wavelength



Forward Current vs. Forward Voltage



Directive Characteristics





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● Test circuit and handling precautions

↵

■ Test circuit ↵

↵

↵

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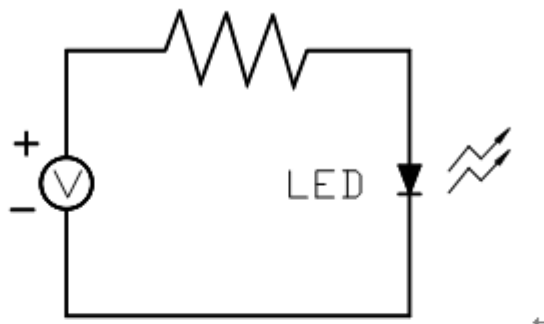
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■ Handling precautions ↵

1. Over-current-proof ↵

Customer must apply resistors for protection; otherwise slight voltage shift will cause ↵
big current change (Burn out will happen). ↵

2. Storage ↵

2.1 It is recommended to store the products in the following conditions: ↵

Humidity: 60% R.H. Max. ↵

Temperature : $5^{\circ}\text{C} \sim 30^{\circ}\text{C}$ ($41^{\circ}\text{F} \sim 86^{\circ}\text{F}$) ↵

2.2 Shelf life in sealed bag: 12 month at $< 5^{\circ}\text{C} \sim 30^{\circ}\text{C}$ and $< 30\%$ R.H. after the package is ↵

Opened, the products should be used within a week or they should be keeping to stored at ↵
 ≤ 20 R.H. with zip-lock sealed. ↵

3. Baking ↵

It is recommended to baking before soldering when the pack is unsealed after 72hrs. The ↵

Conditions are as followings: ↵

3.1 $60 \pm 3^{\circ}\text{C}$ x(12~24hrs) and $< 5\%$ RH, taped reel type ↵

3.2 $100 \pm 3^{\circ}\text{C}$ x(45min~1hr), bulk type ↵

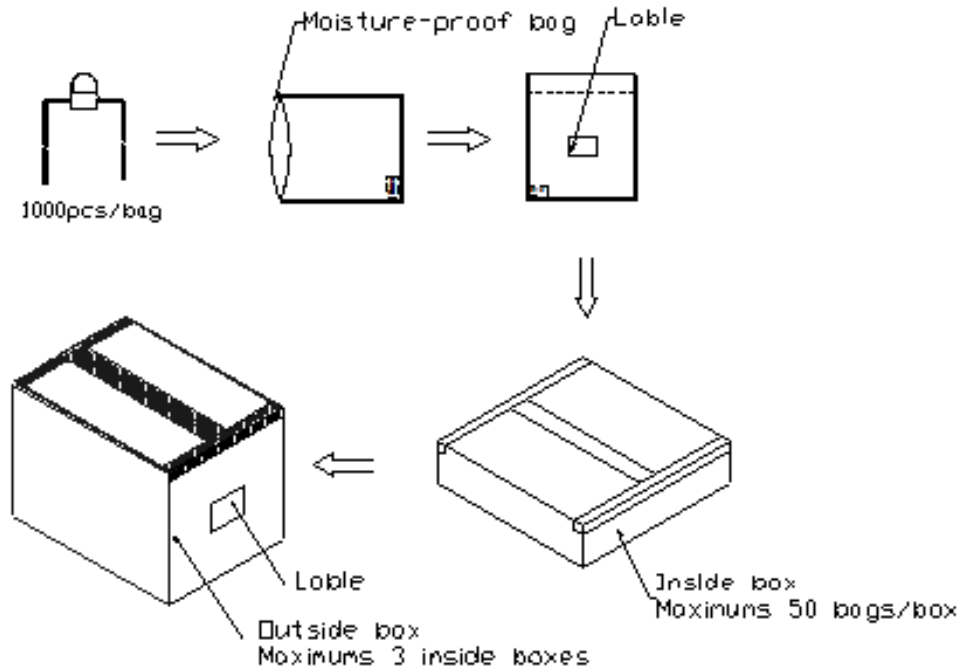
3.3 $130 \pm 3^{\circ}\text{C}$ x(15~30min), bulk type ↵



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● 1.8mm Round Subminiature Axial LEDs Packaging Specifications



NOTES:

Products (numbers of products are 1,000pcs) packed in a seal off moisture-proof bag along with a desiccant one by one, 50 moisture-proof bag of maximums (total maximum number of products are 50,000pcs) packed in an inside box (size: about 350mm x about 300mm x about 105mm) and three inside boxes of maximums are put in the outside box (size: about 360mm x about 320mm x about 330mm) Together with buffer material, and it is packed. (Part No., Lot No., quantity should appear on the label on the moisture-proof bag, part No. And quantity should appear on the label on the cardboard box.)

The number of the loading steps of outside box (cardboard box) has it to three steps.