





### Device Selection Guide

Model Number	Chip		Lens Type
	Material	Emitting Color	
PLBT3030E-YDPCA1	InGaN	PC Amber	Yellow Diffused

### Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Rating	Unit
DC Forward Current <sup>1</sup>	IF	750	mA
Pulse Forward Current <sup>2</sup>	IPF	1000	mA
Reverse Voltage	Vr	5	V
Reverse Current	IR	10	μA
Junction Temperature <sup>3</sup>	Tj	150	°C
Thermal Resistance Junction / Solder Point	Rth	100	°C/W
Storage Temperature	Tstg	-40~+100	°C
Soldering Temperature	Tsol	260	°C

### Electrical and Optical Characteristics at Ta=25°C

Luminous Flux			Typical CCT (K)	Forward Voltage (V) @350mA		Viewing Angle
Group	Min.	Max		Min.	Max	
B25	50	55	1700	2.8	3.4	120°
B26	55	60				
B27	60	65				
B28	65	70				
B29	70	75				

Notes:

1. Forward voltage (VF) ±0.05V ; Luminous flux (ΦV) ±7% ; CRI ±2 ; Viewing angle(2θ1/2) ±10°
2. IS standard testing.

<sup>1</sup> For other ambient, limited setting of current will depend on de-rating curves

<sup>2</sup> D=0.01s duty 1/10.

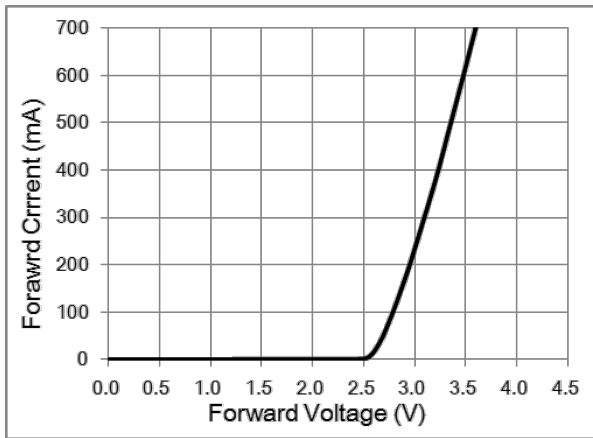
<sup>3</sup> When drive on maximum current, Tj must be kept below 150°C



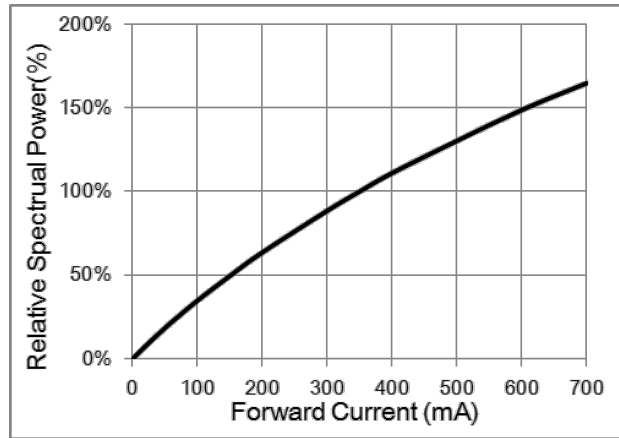


### Typical Electrical / Optical Characteristic Curves

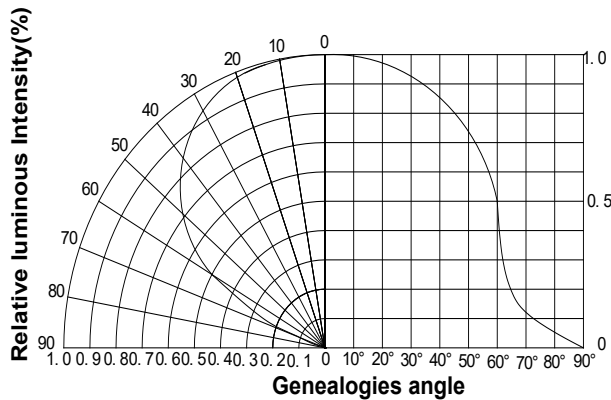
Forward Current vs. Forward Voltage ( $T_a=25^\circ\text{C}$ )



Relative Radiant Power vs. Forward Current ( $T_a=25^\circ\text{C}$ )

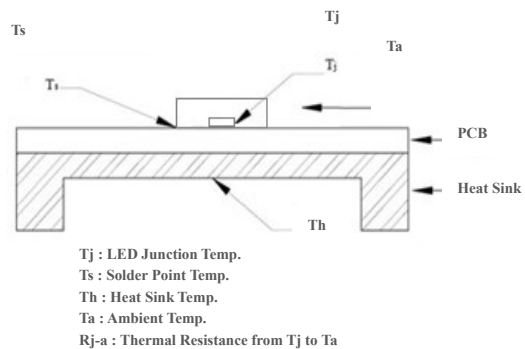
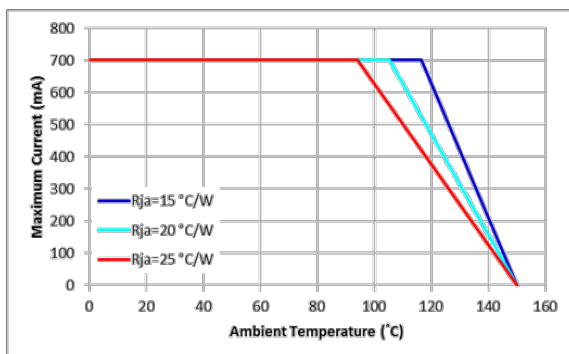


### Typical Spatial Distribution



### Thermal Design for De-rating

The maximum forward current is determined by the thermal resistance between the LED junction and ambient. It is crucial for the end product to be designed in a manner that minimizes the thermal resistance from the solder point to ambient in order to optimize lamp life and optical characteristics.



*IR Reflow Soldering Profile*

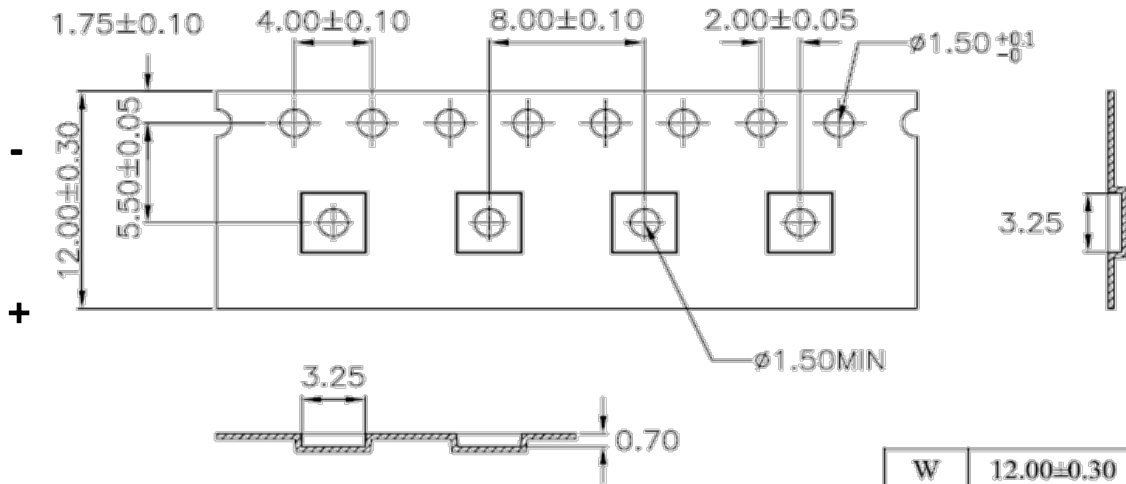
Notes:

1. Do not stress the silicone resin while it is exposed to high temperature.
2. The reflow process should not exceed 2 times.



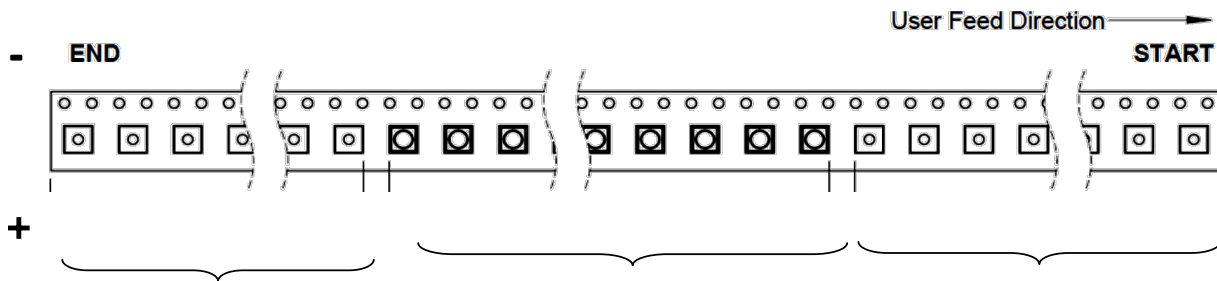
*Test Items and Results of Reliability*

### Tape and Reel Dimensions



1. 10 sprocket hole pitch cumulative tolerance  $\pm 0.20$ .
2. Carrier camber is within 1 mm in 250 mm.
3. Material : Black Conductive Polystyrene Alloy.
4. All dimensions meet EIA-481-D requirements.
5. Thickness :  $0.30 \pm 0.05$ mm.

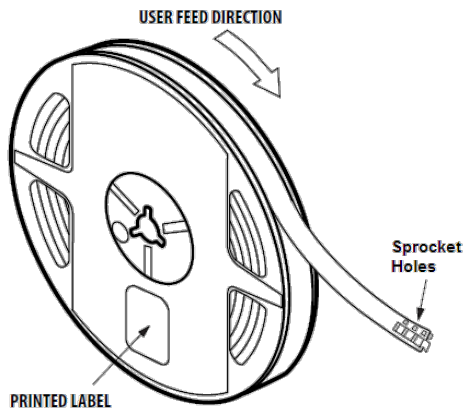
W	12.00±0.30
A0	3.25±0.10
B0	3.25±0.10
K0	0.70±0.10



Trailer 160(min) of empty pockets sealed with tape

Loaded Pockets (2000 pcs)

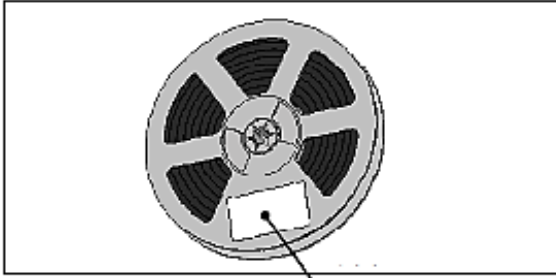
Leader 400mm (min) of empty pockets sealed with tape



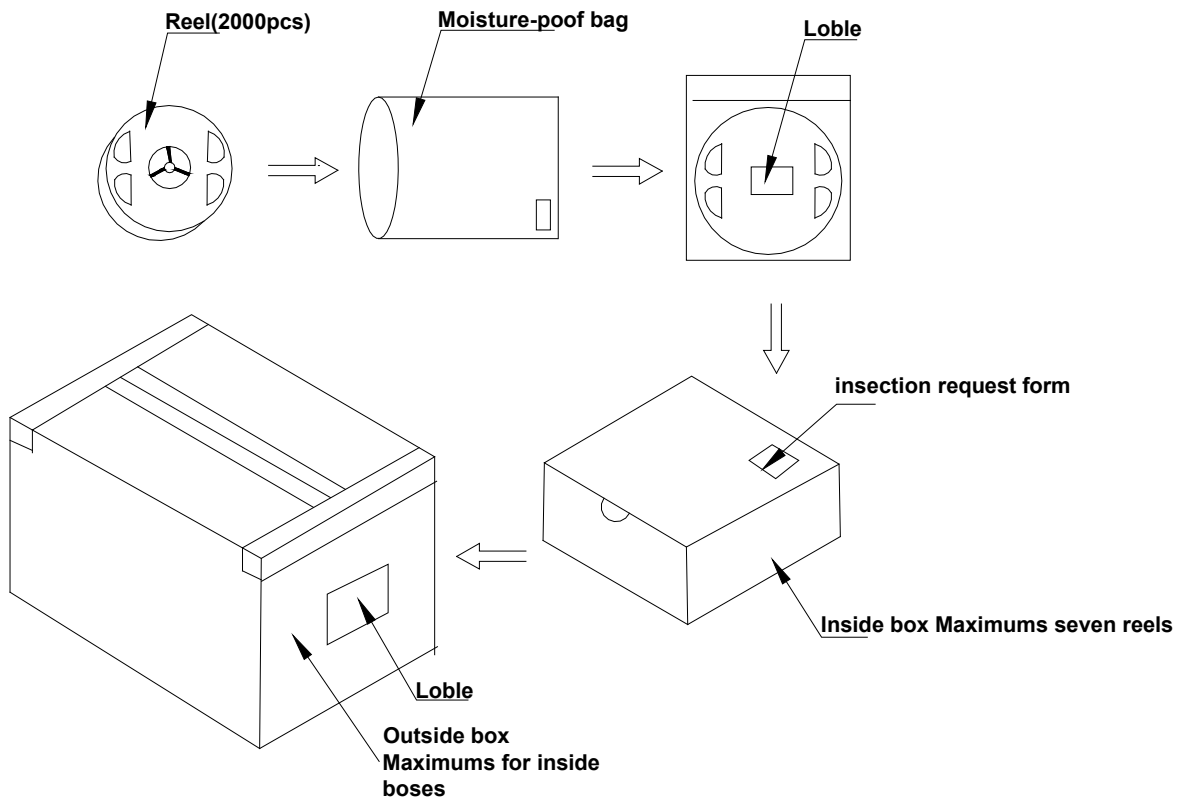
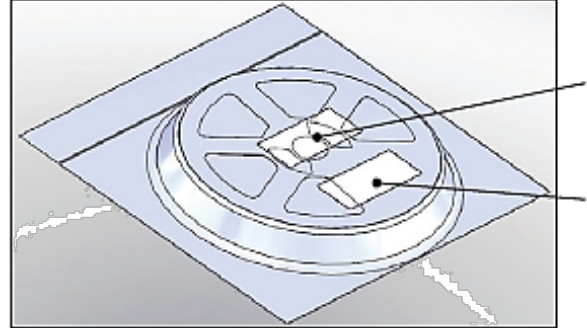


### *Packing and Label Specifications*

**Unpackaged Reel**



**Packaged Reel**



**Notes:**

1. Each reel (minimum number of pieces is 500 and maximum is 2000 for flat product) is packed in a moisture-proof bag along with a packs of desiccant and a humidity indicator card.
2. A maximum of 7 moisture-proof bags are packed in an inner box (size: 260mm x 230mm x 100mm ±5mm).
3. A maximum of 4 inner boxes are put in an outer box (size: 480mm x 275mm x 215mm ±5mm).
4. Part No., Lot No., quantity should be indicated on the label of the moisture-proof bag and the cardboard box.



<b>PLBT3030E-YDPCA1</b>  <b>Customer Approval Signatures</b>	<b>Approved By</b>

<b>Record Of Revisions</b>			
<b>Rev.</b>	<b>Comments</b>	<b>Page</b>	<b>Date</b>
0	Released Spec	--	06/25/19