

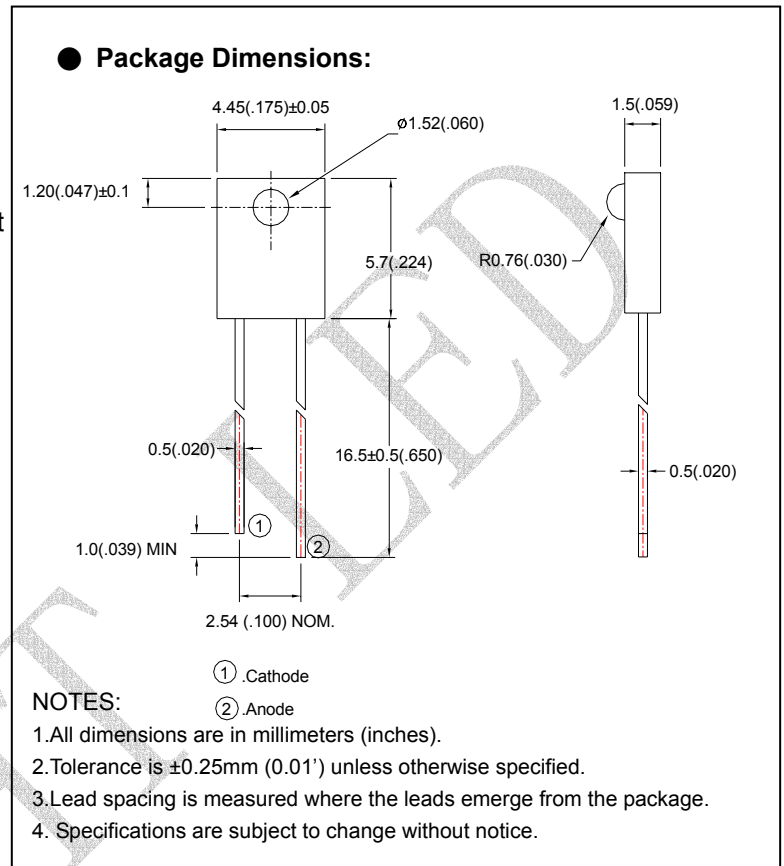
SIDE-LOOK PACKAGE LIGHT EMITTING DIODE

● Features:

1. Selected to specific on-line intensity and radiant intensity ranges.
2. Low cost, plastic side looking package
3. Lens Appearance: Water Clear.
4. This product doesn't contain restriction substance, comply RoHS standard

● Applications:

1. Mouse
2. Automatic Control System.



● Absolute Maximum Ratings(Ta=25°C)

Parameter	Symbol	Rating	Unit
Power Dissipation	Pd	150	mW
Continuous Forward Current	I _F	100	mA
Peak Forward Current ^{*1}	I _{FP}	1	A
Reverse Voltage	V _R	5	V
Operating Temperature	Topr	-40°C~85°C	-
Storage Temperature	Tstg	-45°C~85°C	-

^{*1} (300pps 10us pulse)

● Optical- Electrical Characteristics (@ $T_A=25^\circ\text{C}$)

Parameter	Symbol	Test Conditions	Min	TYP	Max	Unit
Radiant Intensity	Ee	$I_f=4\text{mA}$	0.36	0.65	-	mW/cm^2
Forward Voltage	V_F	$I_f=20\text{mA}$	-	1.25	1.5	V
Reverse Current	I_R	$V_R=5\text{V}$	-	-	100	μA
Peak Wavelength	λ_p	$I_f=50\text{mA}$	-	940	-	nm
Spectral Line Half- Width	$\Delta\lambda$	$I_f=50\text{mA}$	-	50	-	nm
Viewing Angle	$2\theta_{1/2}$	$I_f=20\text{mA}$	-	65	-	deg

● Typical Optical-Electrical Characteristic Curves

FIG.1 Spectral Distribution

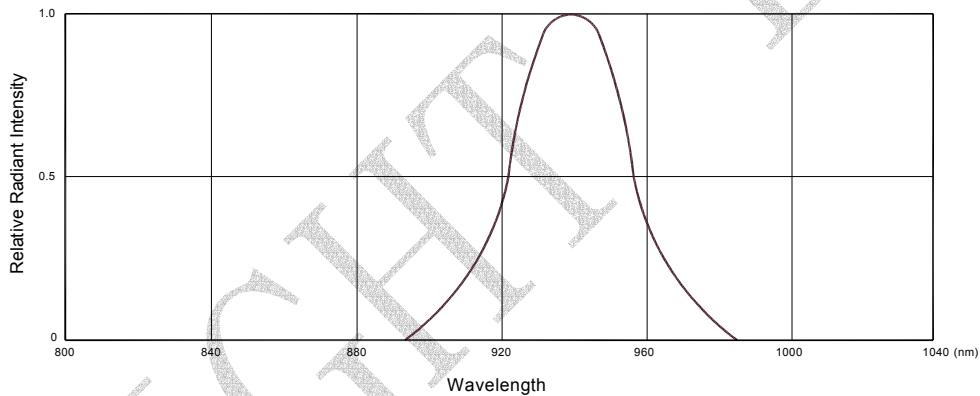


FIG.2 Forward Current Vs. Forward Voltage

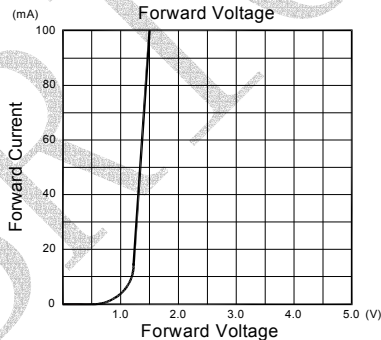


FIG.3 Relative Radiant Intensity Vs. Ambient Temperature

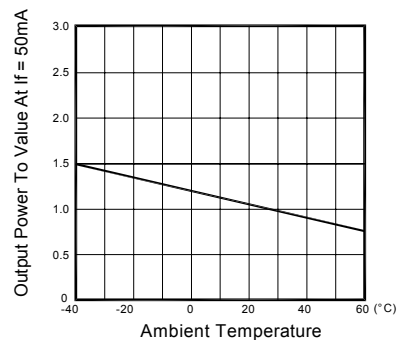


FIG.4 Relative Radiant Intensity Vs. Forward Current

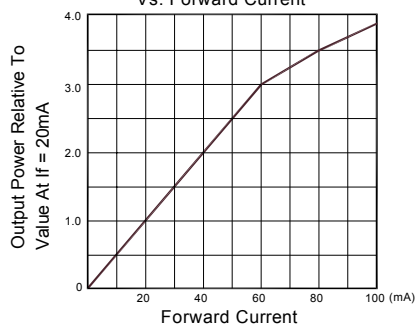
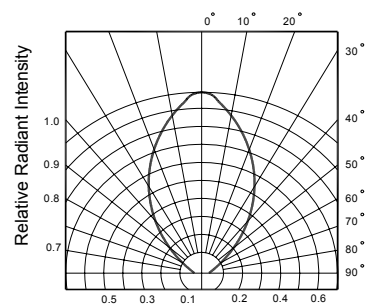
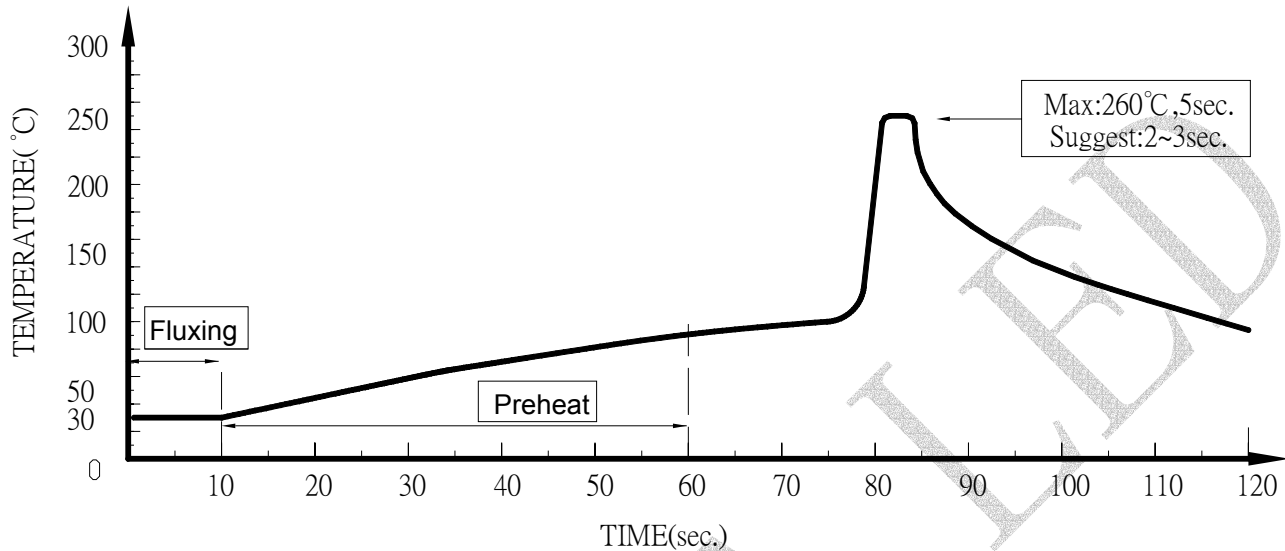


FIG.5 Radiant Diagram



● Dip Soldering

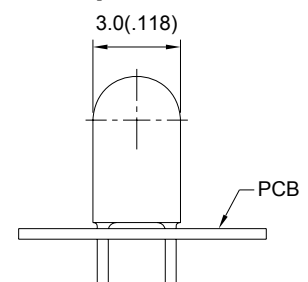


1. Please avoid any external stress applied to the lead-frames and epoxy while the LEDs are at high temperature, especially during soldering
2. DIP soldering and hand soldering should not be done more than one time.
3. After soldering, avoid the epoxy lens from mechanical shock or vibration until the LEDs are back to room temperature.
4. Avoid rapid cooling during temperature ramp-down process
5. Although the soldering condition is recommended above, soldering at the lowest possible temperature is feasible for the LEDs

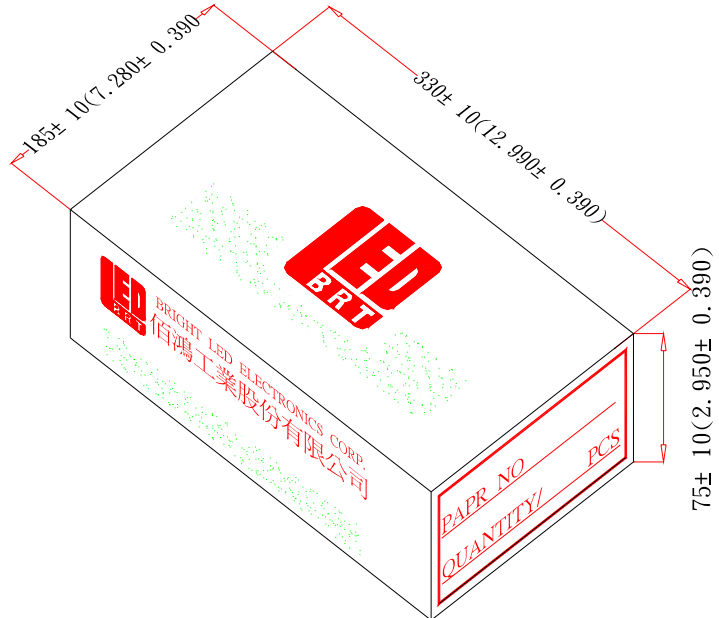
● IRON Soldering

A: Max: 350°C Within 3 sec. One time only.

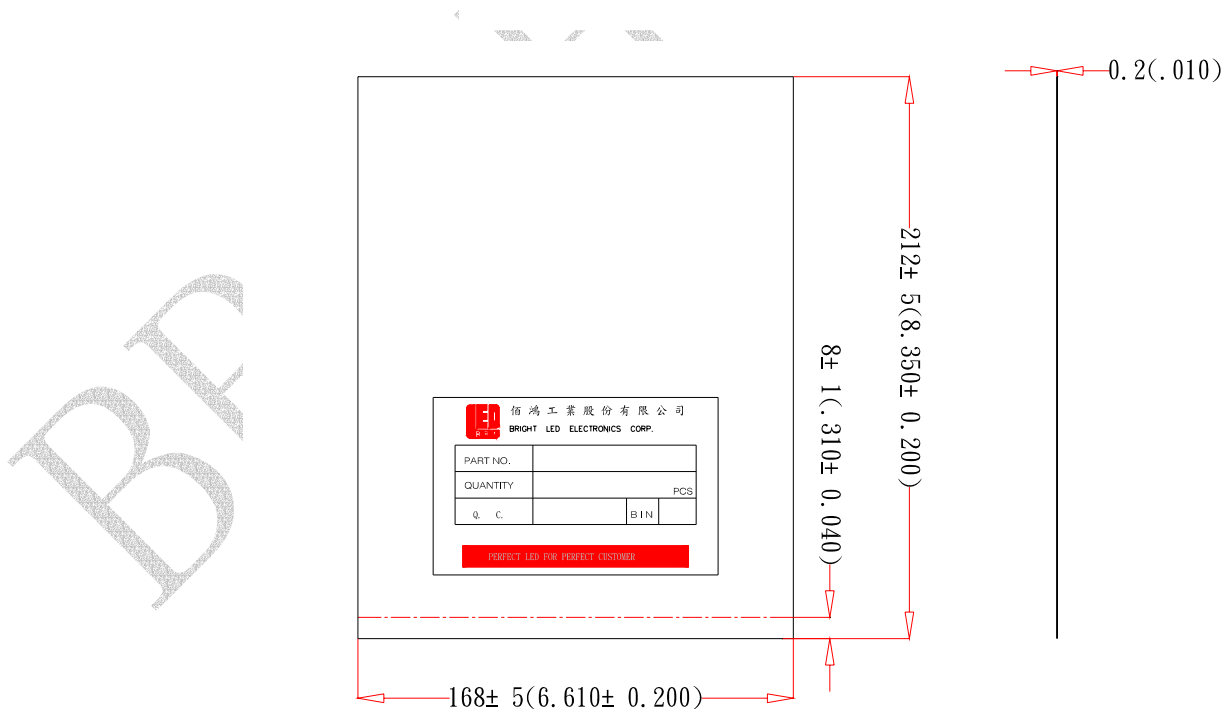
B: The products of 3mm without flange, welding condition of flat plate PCB Max: 350°C Within 2 sec. One time only



● Tapping and packaging specifications(Units: mm)



● Packaging Bag Dimensions



Notes:

- 1 · 1000pcs per bag, 8Kpcs per box.
- 2 · All dimensions are in millimeters(inches).
- 3 · Specifications are subject to change without notice.



Infrared Emitting Diode Specification

- Commodity: Infrared emitting diode
- Intensity Bin Limits (At 4mA)

BIN CODE	Min.(mW/cm ²)	Max.(mW/cm ²)
R2	0.36	0.44
R3	0.44	0.48
R4	0.48	0.52
R5	0.52	0.56
R6	0.56	0.60
R7	0.60	0.64
R8	0.64	0.68
R9	0.68	0.72

NOTES: Tolerance of measurement of Radiant Intensity :±15%