

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) [2] @ 10mA		Viewing Angle [1]
			Min.	Typ.	2θ1/2
L-934SB/111Y2GD	High Efficiency Red (GaAsP/GaP)	Red Diffused	12	30	40°
			*10	*20	
	Yellow (GaAsP/GaP)	Yellow Diffused	8	15	40°
			*8	*15	
	Green (GaP)	Green Diffused	10	25	40°
			*10	*25	

Notes:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.
2. Luminous intensity/ Luminous Flux: +/-15%.
- *Luminous intensity value is traceable to the CIE127-2007 compliant national standards.

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	High Efficiency Red Yellow Green	627 590 565		nm	I _F =20mA
λ_D [1]	Dominant Wavelength	High Efficiency Red Yellow Green	617 588 568		nm	I _F =20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	High Efficiency Red Yellow Green	45 35 30		nm	I _F =20mA
C	Capacitance	High Efficiency Red Yellow Green	15 20 15		pF	V _F =0V;f=1MHz
V _F [2]	Forward Voltage	High Efficiency Red Yellow Green	2 2.1 2.2	2.5 2.5 2.5	V	I _F =20mA
I _R	Reverse Current	High Efficiency Red Yellow Green		10 10 10	uA	V _R =5V

Notes:

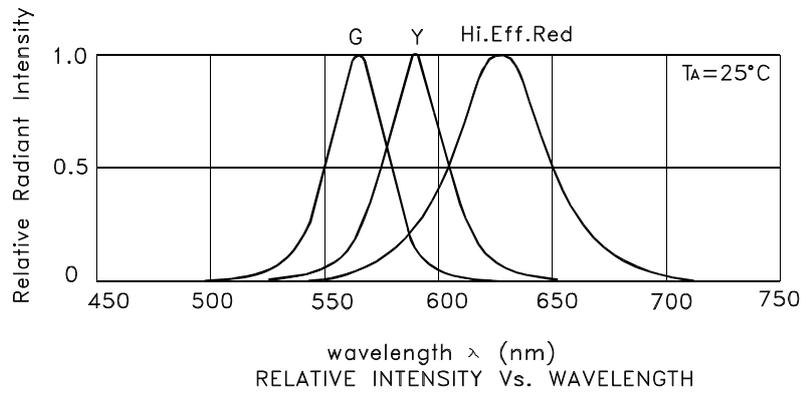
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.
3. Wavelength value is traceable to the CIE127-2007 compliant national standards.

Absolute Maximum Ratings at TA=25°C

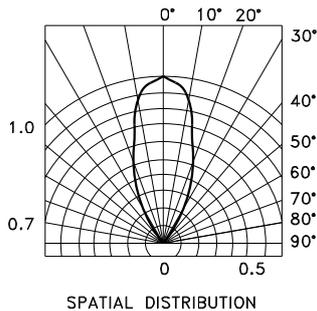
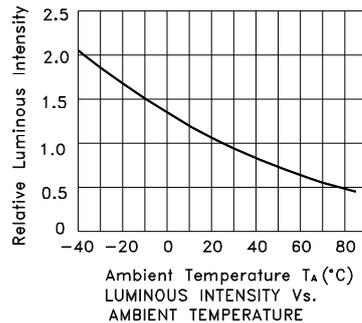
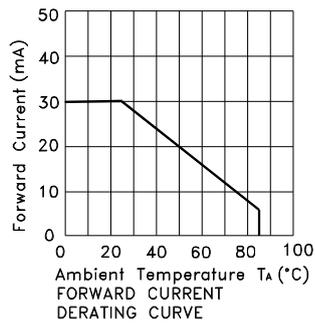
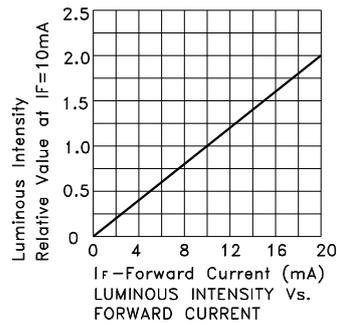
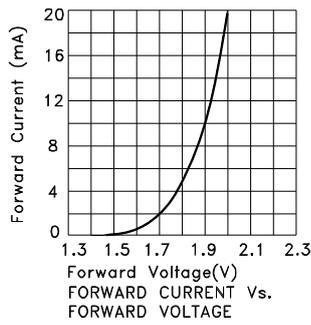
Parameter	High Efficiency Red	Yellow	Green	Units
Power dissipation	75	75	62.5	mW
DC Forward Current	30	30	25	mA
Peak Forward Current [1]	160	140	140	mA
Reverse Voltage	5			V
Operating/Storage Temperature	-40°C To +85°C			
Lead Solder Temperature [2]	260°C For 3 Seconds			
Lead Solder Temperature [3]	260°C For 5 Seconds			

Notes:

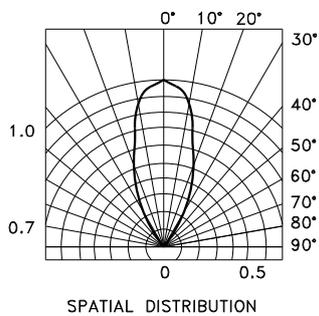
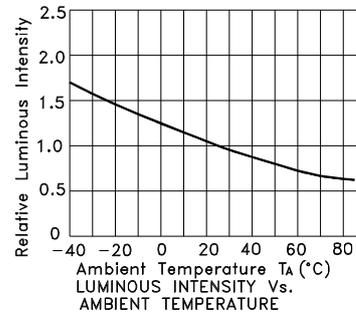
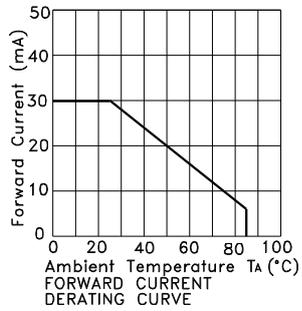
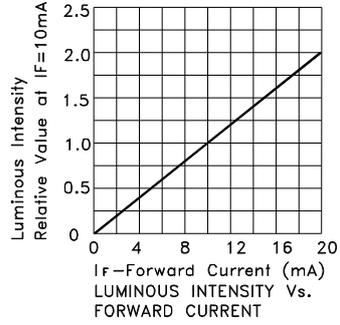
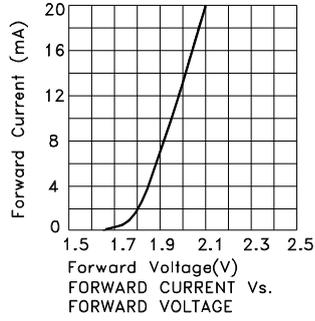
1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 2mm below package base.
3. 5mm below package base.



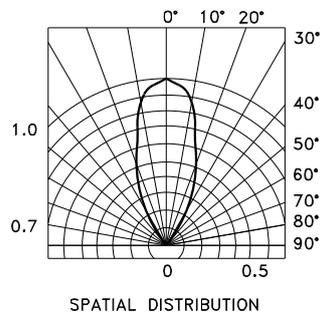
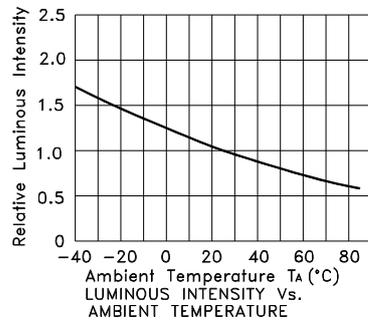
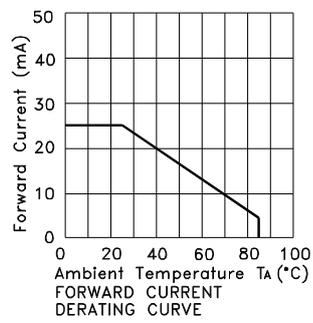
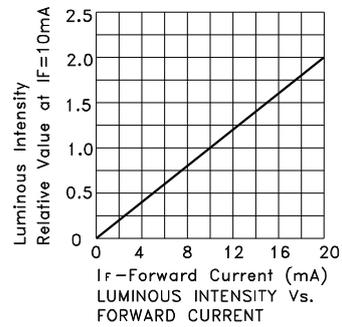
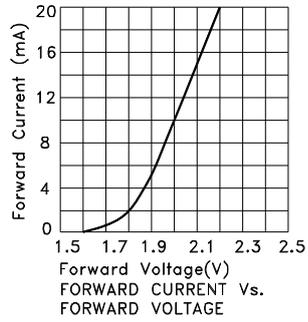
L-934SB/111Y2GD High Efficiency Red



Yellow

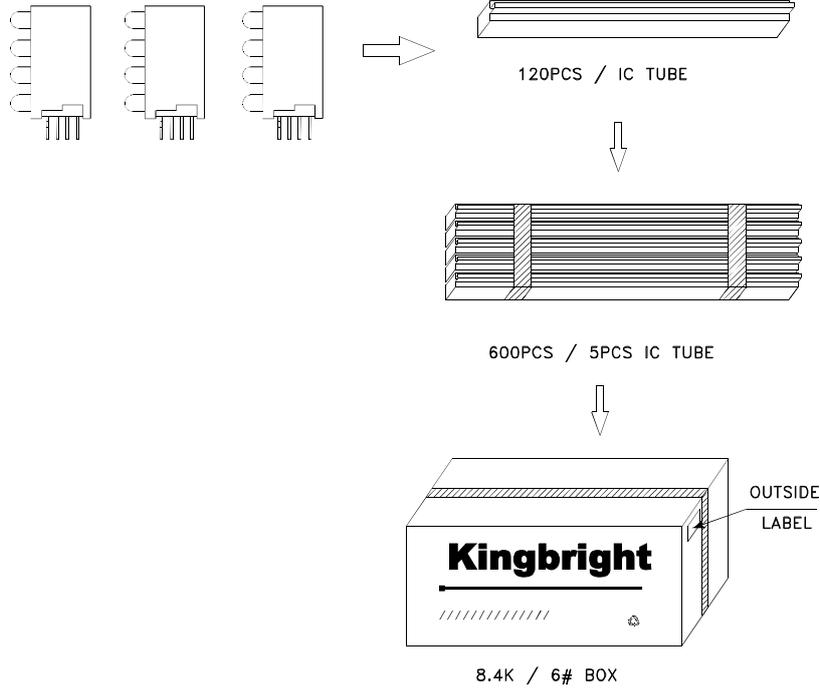


Green



PACKING & LABEL SPECIFICATIONS

L-934SB/111Y2GD



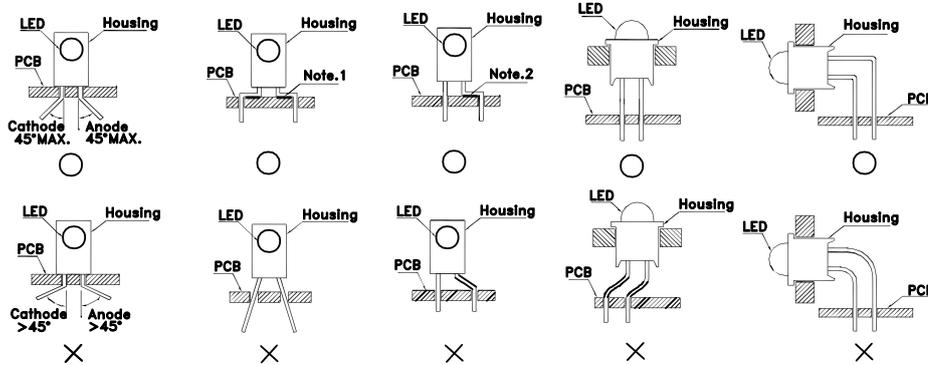
Kingbright	
P/NO: L-934SBxxx	
QTY: 600 pcs	Q.C. Q C XX XX XXXX PASSED
S/N: XXXX	
CODE: XXX	
LOT NO:	
 xxxxxxxxxxxxxxxxxxxxxxxx	
RoHS Compliant	

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PRECAUTIONS

- The lead pitch of the LED must match the pitch of the mounting holes on the PCB during component placement. Lead-forming may be required to insure the lead pitch matches the hole pitch. Refer to the figure below for proper lead forming procedures.

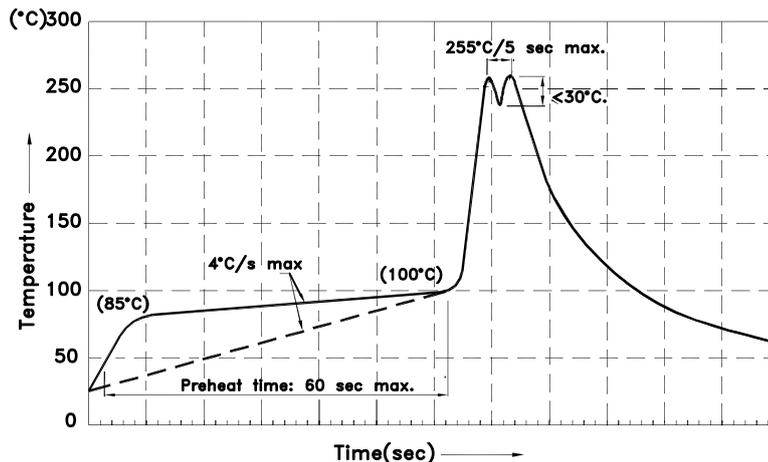


“○” Correct mounting method “×” Incorrect mounting method

- During soldering, component covers and holders should leave clearance to avoid placing damaging stress on the LED during soldering.



- The tip of the soldering iron should never touch the lens epoxy.
- Through-hole LEDs are incompatible with reflow soldering.
- If the LED will undergo multiple soldering passes or face other processes where the part may be subjected to intense heat, please check with Kingbright for compatibility.
- Recommended Wave Soldering Profiles:



Notes:

- Recommend pre-heat temperature of 105°C or less (as measured with a thermocouple attached to the LED pins) prior to immersion in the solder wave with a maximum solder bath temperature of 260°C
- Peak wave soldering temperature between 245°C ~ 255°C for 3 sec (5 sec max).
- Do not apply stress to the epoxy resin while the temperature is above 85°C.
- Fixtures should not incur stress on the component when mounting and during soldering process.
- SAC 305 solder alloy is recommended.
- No more than one wave soldering pass.