

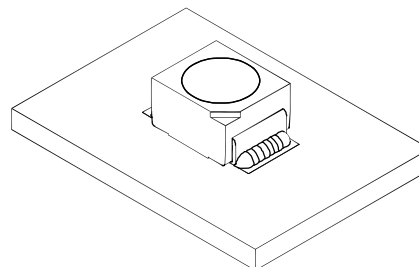
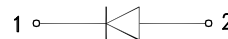
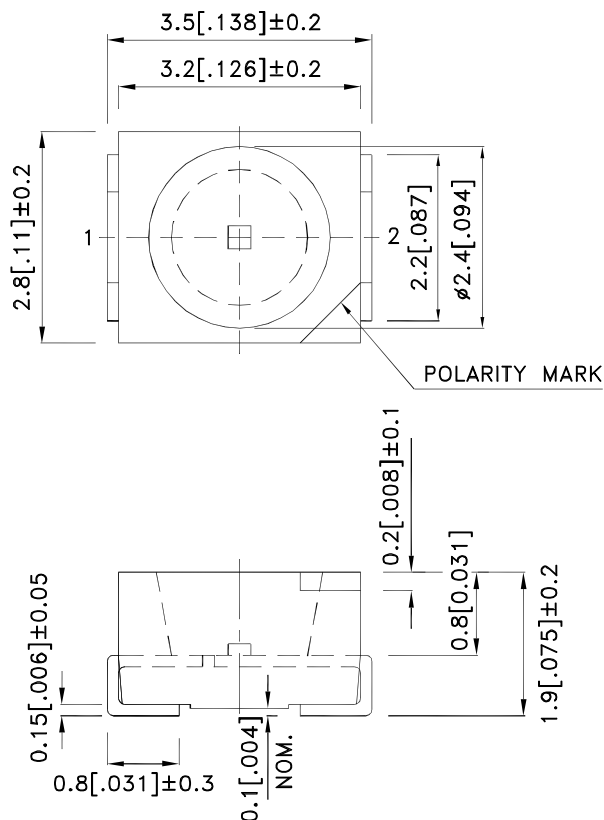
Features

- Single color.
- Suitable for all SMD assembly and solder process.
- Available on tape and reel.
- Ideal for backlighting.
- Package : 2000pcs / reel.
- Moisture sensitivity level : level 3.
- Low current IF=2mA operating.
- RoHS compliant.

Description

The Hyper Red device is based on light emitting diode chip made from AlGaInP.

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.25(0.01") unless otherwise noted.
3. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.
4. The device has a single mounting surface. The device must be mounted according to the specifications.



Selection Guide

Part No.	Emitting Color (Material)	Lens Type	Iv (mcd) [2] @ 2mA		Viewing Angle [1]
			Min.	Typ.	2θ1/2
KA-3528LVSECKT-J3	Hyper Red (AlGaInP)	Water Clear	120	180	120°
			*30	*50	

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 CIE127-2007 standards.

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Emitting Color	Typ.	Max.	Units	Test Conditions
λ _{peak}	Peak Wavelength	Hyper Red	640		nm	I _F =2mA
λ _D [1]	Dominant Wavelength	Hyper Red	625		nm	I _F =2mA
Δλ _{1/2}	Spectral Line Half-width	Hyper Red	20		nm	I _F =2mA
C	Capacitance	Hyper Red	27		pF	V _F =0V;f=1MHz
V _F [2]	Forward Voltage	Hyper Red	1.8	2.1	V	I _F =2mA
I _R	Reverse Current	Hyper Red		10	uA	V _R =5V

Notes:

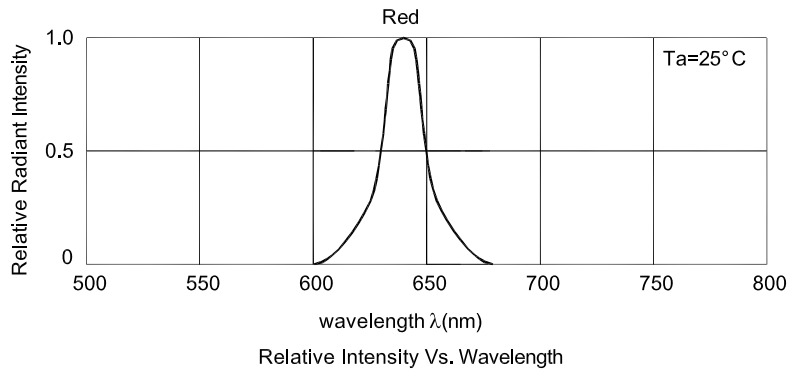
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.
3. Wavelength value is traceable to CIE127-2007 standards.
4. Excess driving current and / or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

Absolute Maximum Ratings at TA=25°C

Parameter	Values	Units
Power dissipation	105	mW
DC Forward Current	50	mA
Peak Forward Current [1]	150	mA
Reverse Voltage	5	V
Operating Temperature	-40°C To +85°C	
Storage Temperature	-40°C To +85°C	

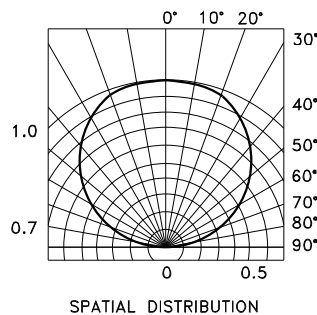
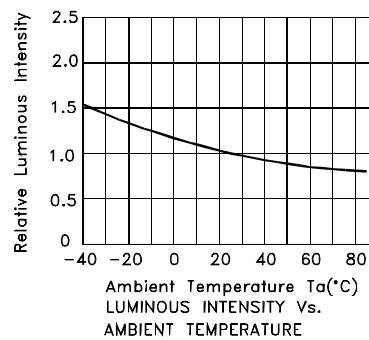
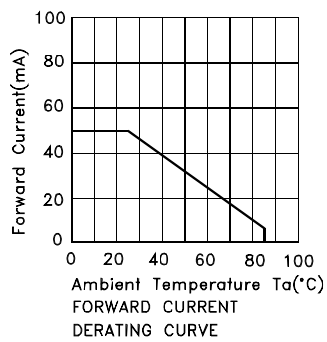
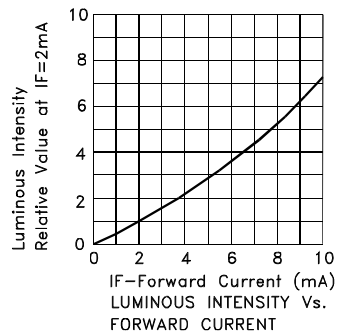
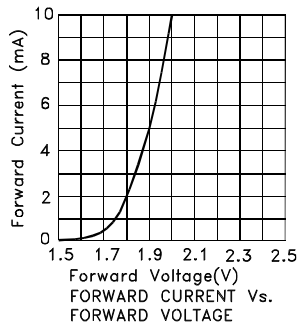
Notes:

1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. Relative humidity levels maintained between 40% and 60% in production area are recommended to avoid the build-up of static electricity – Ref JEDEC/JESD625-A and JEDEC/J-STD-033.



Hyper Red

KA-3528LVSECKT-J3



KA-3528LVSECKT-J3

Reflow soldering is recommended and the soldering profile is shown below.
Other soldering methods are not recommended as they might cause damage to the product.

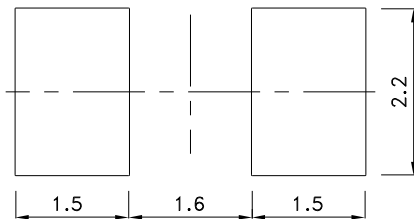
Reflow Soldering Profile For Lead-free SMT Process.



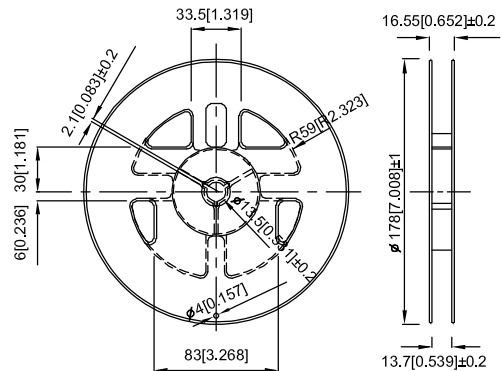
NOTES:

1. We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.
2. Don't cause stress to the epoxy resin while it is exposed to high temperature.
3. Number of reflow process shall be 2 times or less.

Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)

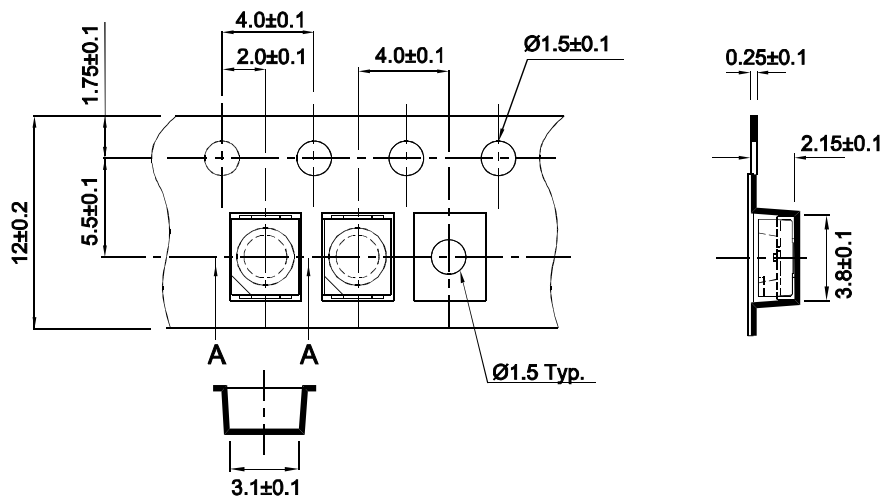


Reel Dimension



Tape Dimensions (Units : mm)

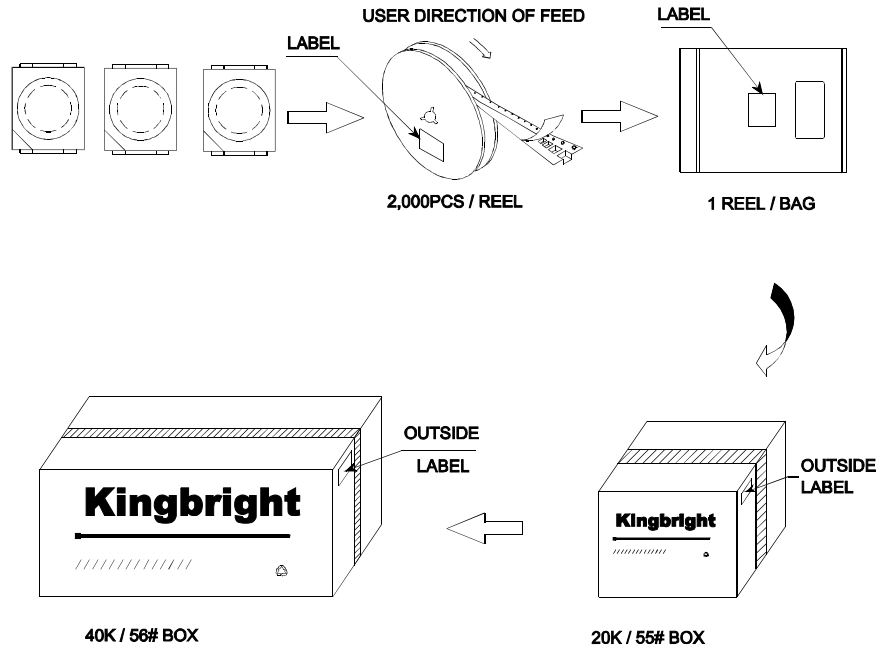
Tape



A-A Section

PACKING & LABEL SPECIFICATIONS

KA-3528LVSECKT-J3



Kingbright				
P/NO: KA-3528xxx				
QTY: 2,000 pcs	Q.C.			
S/N: XXXX	<table border="1"> <tr> <td>Q.C.</td> </tr> <tr> <td>XX:XX:XXXX</td> </tr> <tr> <td>PASSED</td> </tr> </table>	Q.C.	XX:XX:XXXX	PASSED
Q.C.				
XX:XX:XXXX				
PASSED				
CODE: XXX				
LOT NO:				
RoHS Compliant				

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