

## Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Typ.	2θ1/2
KA-3528SECKT-J3	Hyper Red (AlGaInP)	Water Clear	1000	1500	120°
			*300	*450	

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
λpeak	Peak Wavelength	Hyper Red	640		nm	IF=20mA
λD [1]	Dominant Wavelength	Hyper Red	625		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Hyper Red	20		nm	IF=20mA
C	Capacitance	Hyper Red	27		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Hyper Red	2.2	2.8	V	IF=20mA
IR	Reverse Current	Hyper Red		10	uA	VR=5V

Notes:

1.Wavelength: +/-1nm.

2. Forward Voltage: +/-0.1V.

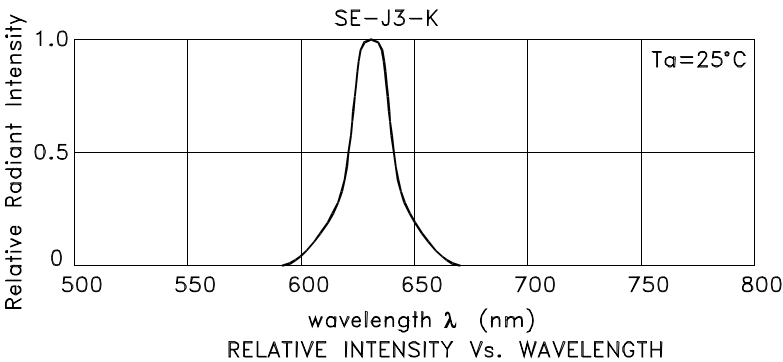
3. Wavelength value is traceable to the CIE127-2007 compliant national standards.

## Absolute Maximum Ratings at TA=25°C

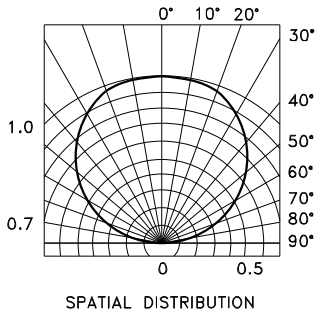
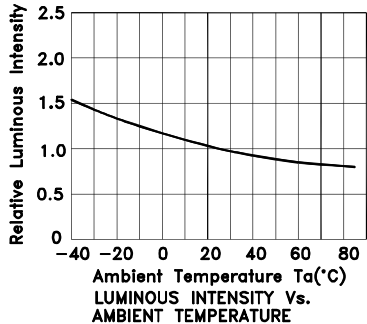
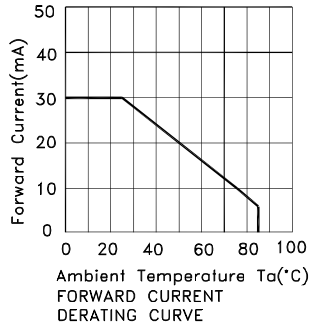
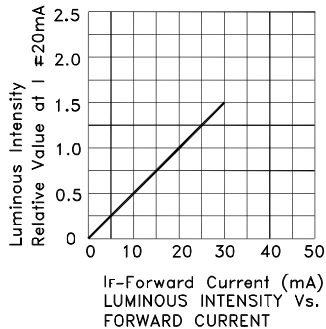
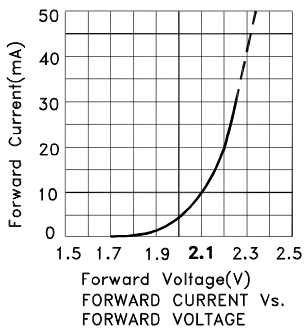
Parameter	Hyper Red	Units
Power dissipation	84	mW
DC Forward Current	30	mA
Peak Forward Current [1]	150	mA
Reverse Voltage	5	V
Operating Temperature	-40°C To +85°C	
Storage Temperature	-40°C To +85°C	

Note:

1. 1/10 Duty Cycle, 0.1ms Pulse Width.



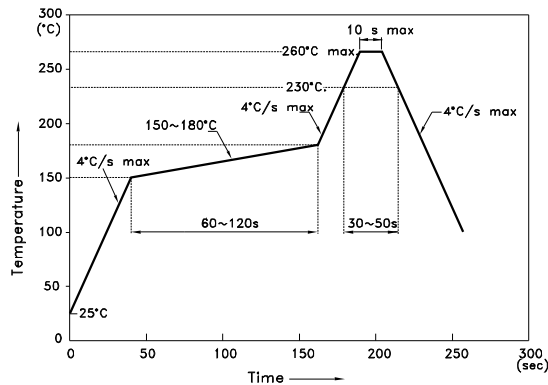
Hyper Red KA-3528SECKT-J3



## KA-3528SECKT-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.

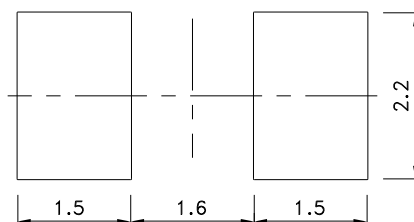
Reflow Soldering Profile For Lead-free SMT Process.



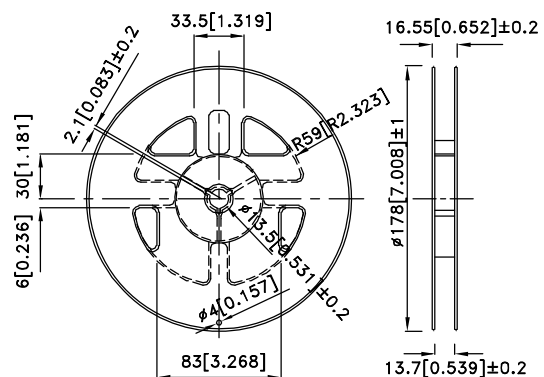
### NOTES:

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.

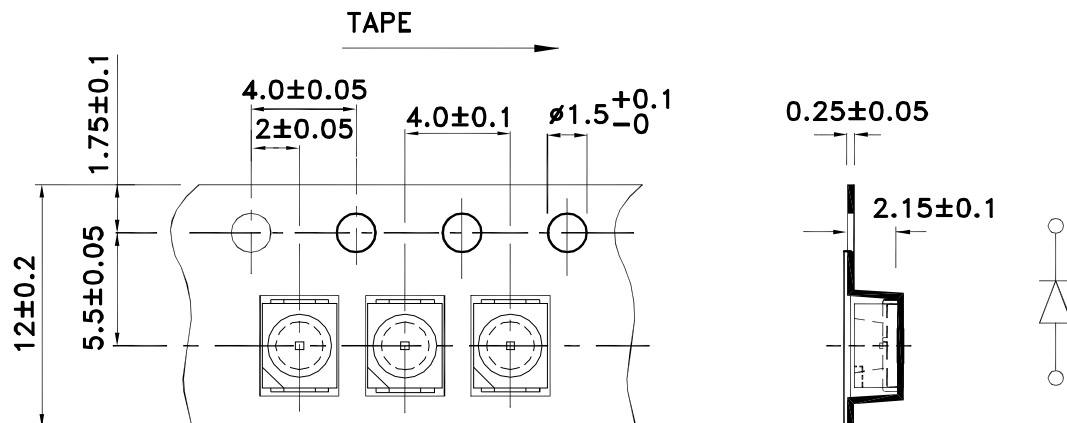
## Recommended Soldering Pattern (Units : mm; Tolerance: $\pm 0.1$ )



## Reel Dimension

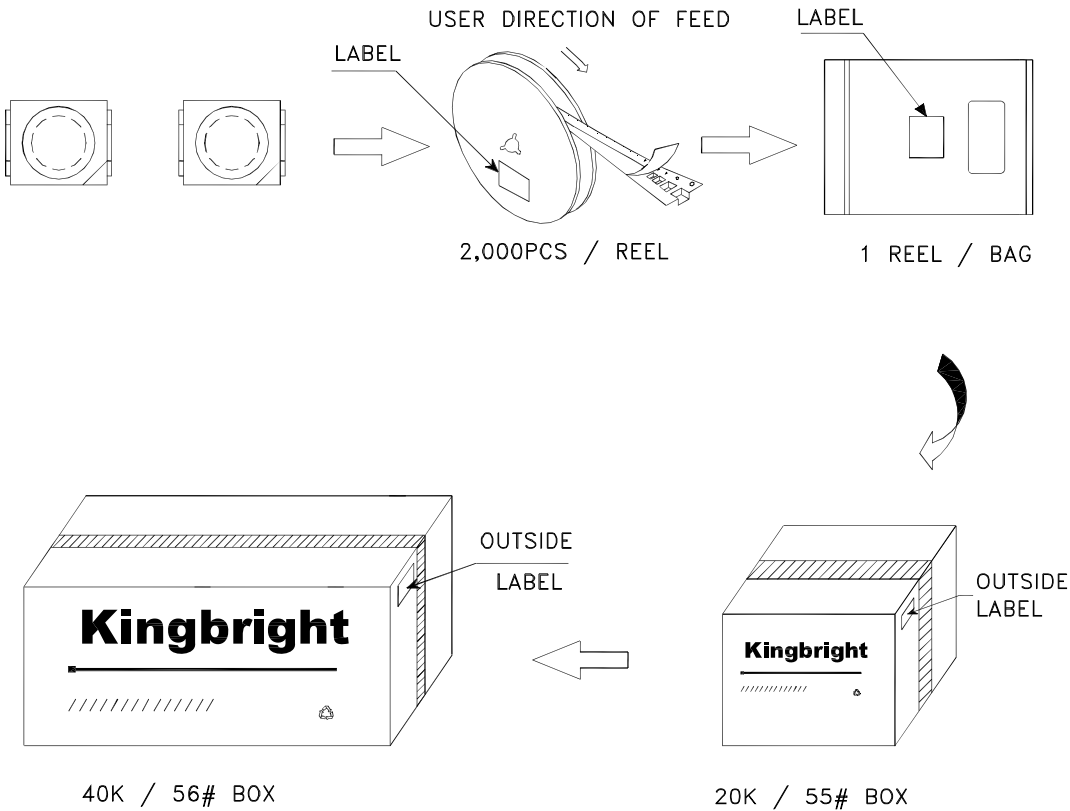



## Tape Dimensions (Units : mm)



## PACKING & LABEL SPECIFICATIONS

KA-3528SECKT-J3



<b>Kingbright</b>				
P/NO: KA-3528xxx				
QTY: 2,000 pcs	Q.C. <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				
S/N: XXXX				
CODE: XXX				
LOT NO:				
 xxxxxxxxxxxxxxxxxxxxxxxxxx				
RoHS Compliant				

Detailed application notes are listed on our website.  
[http://www.kingbright.com/application\\_notes](http://www.kingbright.com/application_notes)