

Kingbright

SURFACE MOUNT DISPLAY

Part Number: ACSC03-41SURKWA-F01

Hyper Red

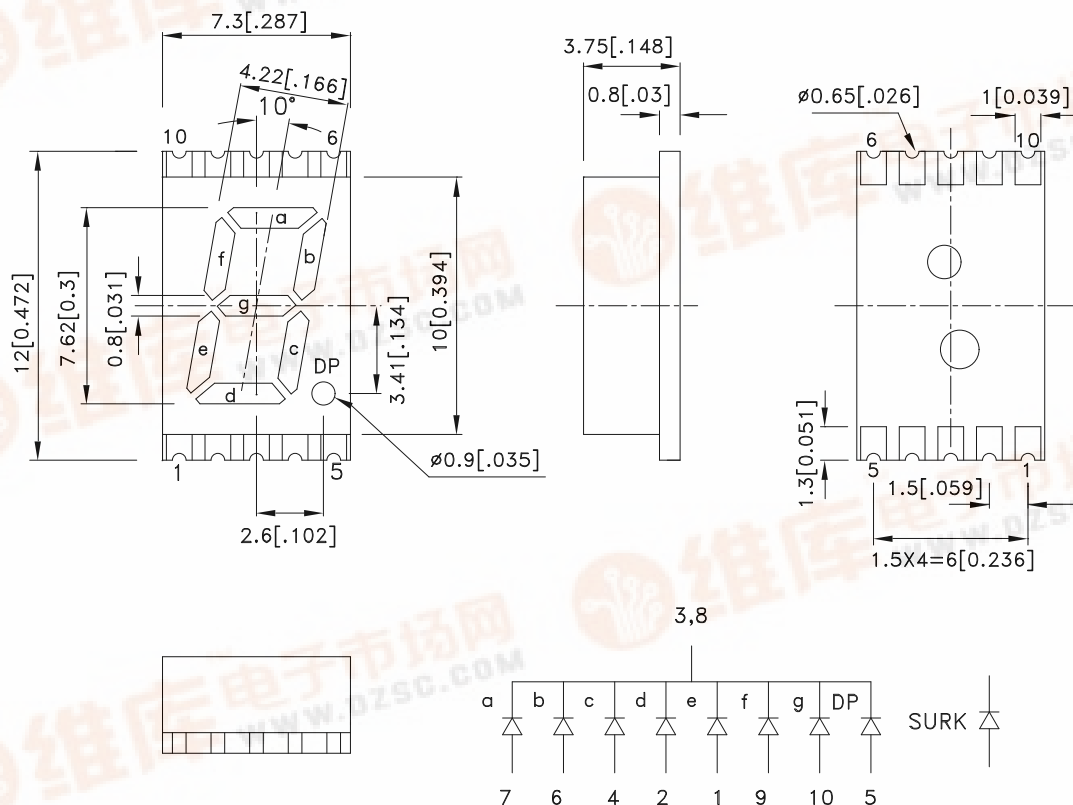
Features

- 0.3 INCH DIGIT HEIGHT.
- LOW CURRENT OPERATION.
- EXCELLENT CHARACTER APPEARANCE.
- I.C. COMPATIBLE.
- MECHANICALLY RUGGED.
- GRAY FACE, WHITE SEGMENT.
- PACKAGE : 550PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 4.
- RoHS COMPLIANT.

Description

The Hyper Red source color devices are made with InGaAlP on GaAs substrate Light Emitting Diode.

Package Dimensions& Internal Circuit Diagram



1. All dimensions are in millimeters (inches), Tolerance is $\pm 0.25(0.01")$ unless otherwise noted.
2. Specifications are subject to change without notice.
3. The gap between the reflector and PCB shall not exceed 0.25mm



Selection Guide

Part No.	Dice	Lens Type	Iv (ucd) [1] @ 10mA		Description
			Min.	Typ.	
ACSC03-41SURKWA-F01	Hyper Red (InGaAlP)	WHITE DIFFUSED	8000	27000	Common Cathode, Rt. Hand Decimal.

Note:

1. Luminous intensity/ luminous Flux: +/-15%.

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	Hyper Red	650		nm	IF=20mA
λ_D [1]	Dominant Wavelength	Hyper Red	635		nm	IF=20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Hyper Red	28		nm	IF=20mA
C	Capacitance	Hyper Red	35		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Hyper Red	1.95	2.5	V	IF=20mA
IR	Reverse Current	Hyper Red		10	uA	VR=5V

Notes:

1.Wavelength: +/-1nm.

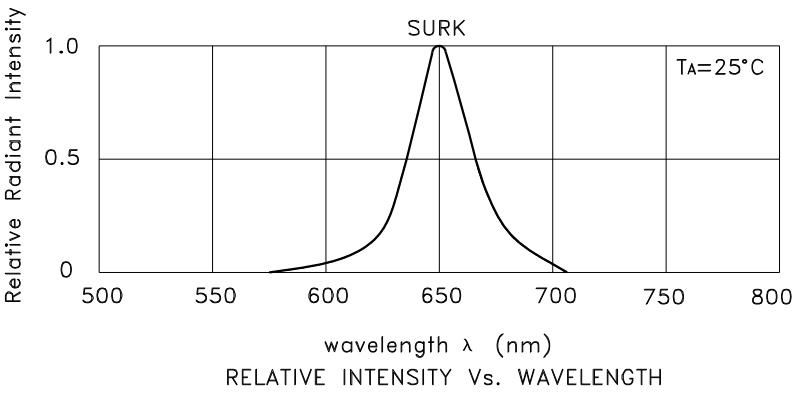
2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

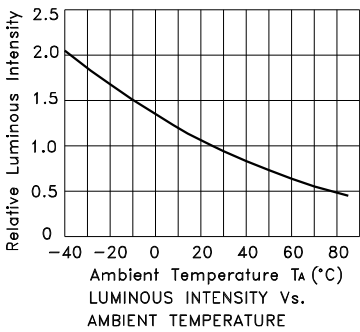
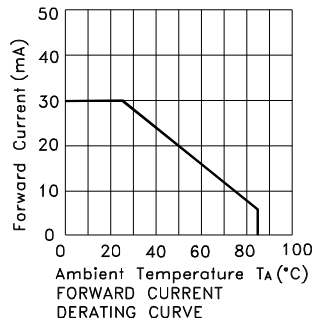
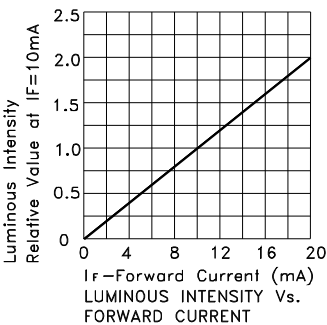
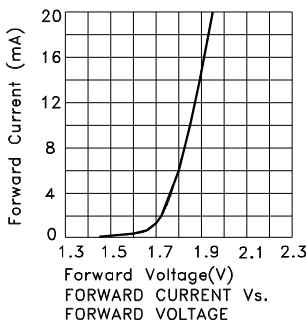
Parameter	Hyper Red	Units
Power dissipation	75	mW
DC Forward Current	30	mA
Peak Forward Current [1]	185	mA
Reverse Voltage	5	V
Operating / Storage Temperature	-40°C To +85°C	

Note:

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

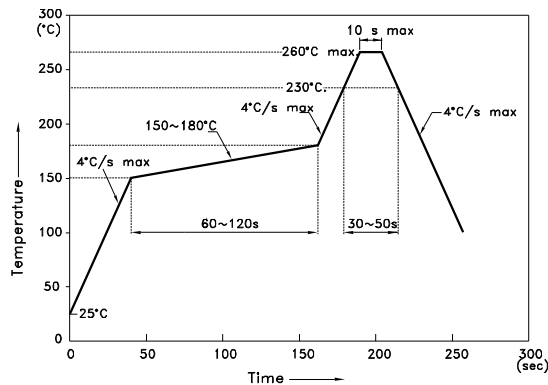


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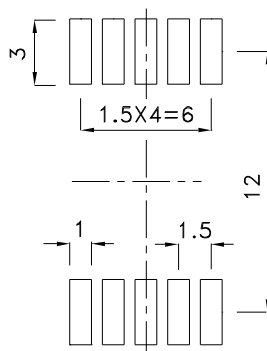
Reflow Soldering Profile For Lead-free SMT Process.



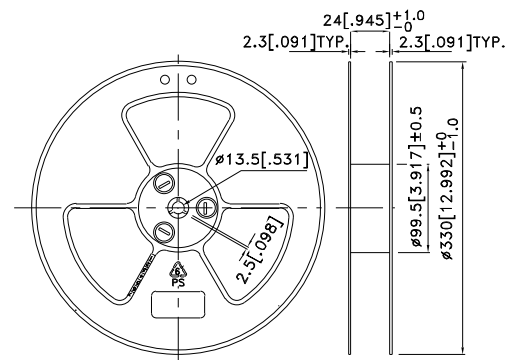
NOTES:

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.

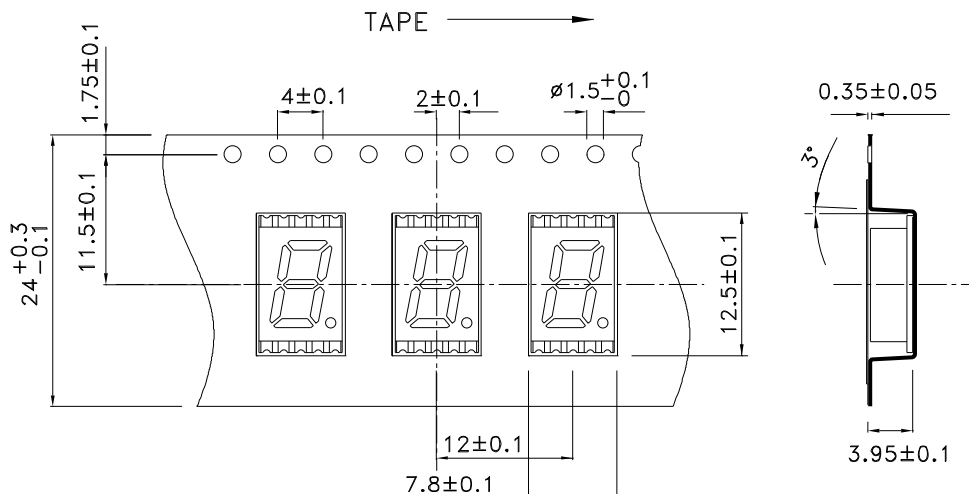
Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.15)



Reel Dimension

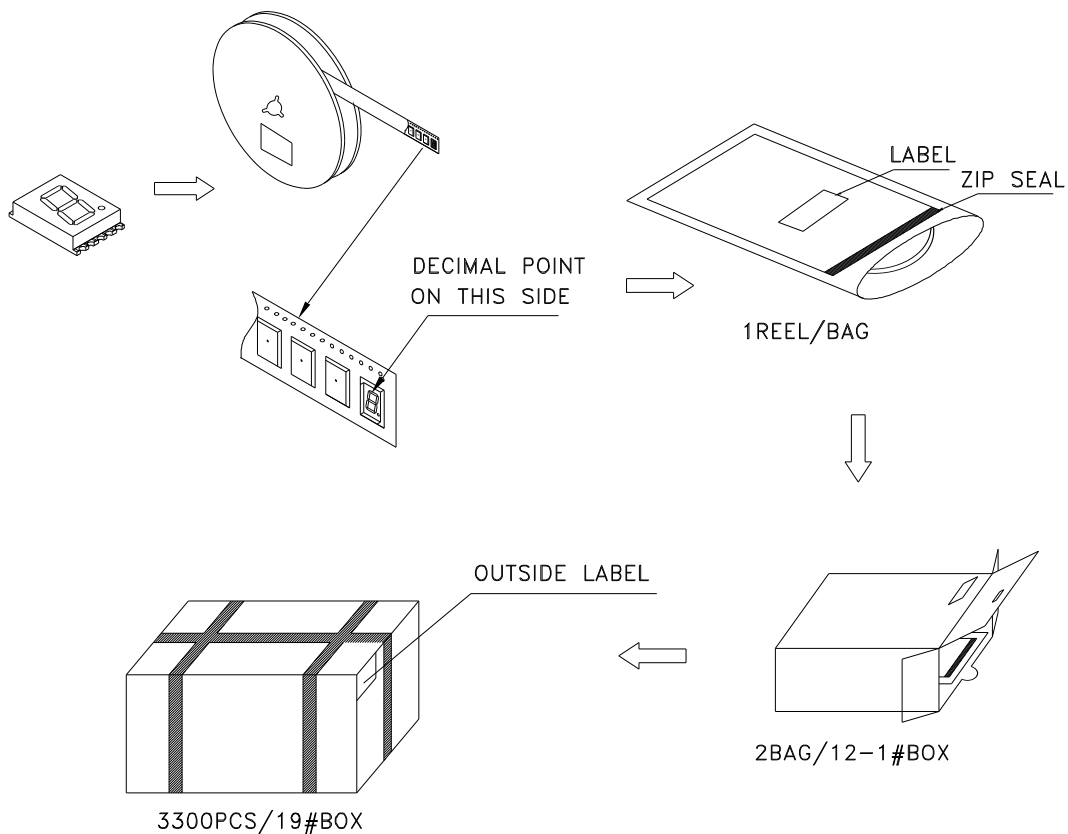


Tape Specifications (Units : mm)

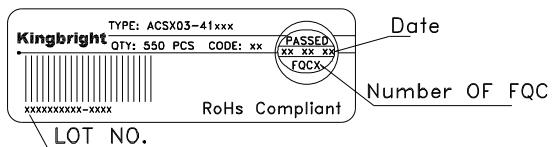


PACKING & LABEL SPECIFICATIONS

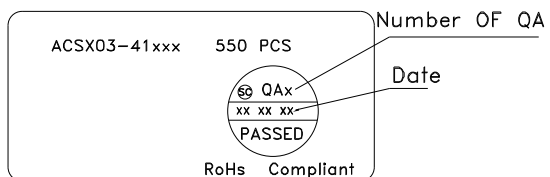
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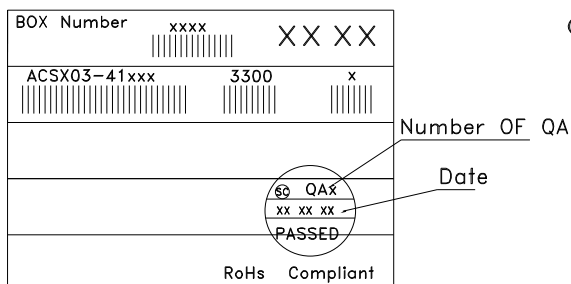
Inside LABEL Paste On The Type pipe



Outside LABEL Paste On The BAG



Outside LABEL Paste On The 19#Box



Outside LABEL Paste On The 12-1#Box

