

SURFACE MOUNT DISPLAY

Part Number: ACDC02-41SURKWA-F01 Hyper Red

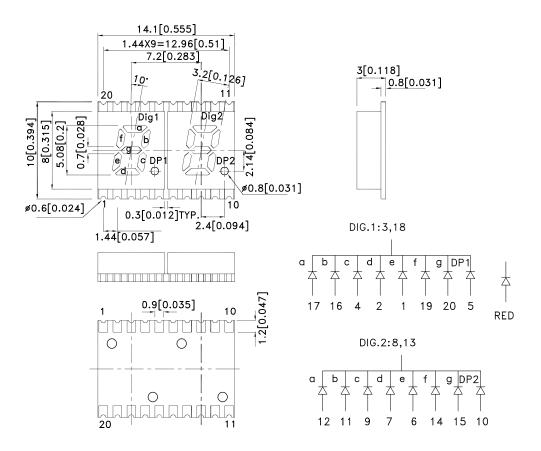
Features

- 0.2 inch digit height.
- Low current operation.
- Excellent character appearance.
- Mechanically rugged.
- Package:300pcs/reel.
- Gray face, white segment.
- Moisture sensitivity level : level 2a.
- RoHS compliant.

Description

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

Package Dimensions& Internal Circuit Diagram





- 1. All dimensions are in millimeters (inches), Tolerance is ±0.25(0.01")unless otherwise noted.
- 2. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.

3. The gap between the reflector and PCB shall not exceed 0.25mm.

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 APPROVED: WYNEC
 CHECKED: Joe Lee
 DRAWN: Q.M.Chen
 ERP: 1352000308

Selection Guide

Part No.	o. Dice Lens Type		Iv (ucd) [1] @ 10mA		Description
			Min.	Тур.	
ACDC02-41SURKWA-F01	Hyper Red (AlGalnP)	White Diffused	14000	30000	Common Cathode, Rt. Hand Decimal.
			*3600	*8100	

Note:

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions			
λpeak	Peak Wavelength	Hyper Red	645		nm	IF=20mA			
λD [1]	Dominant Wavelength	Hyper Red	630		nm	IF=20mA			
Δλ1/2	Spectral Line Half-width	Hyper Red	28		nm	IF=20mA			
С	Capacitance	Hyper Red	35		pF	VF=0V;f=1MHz			
VF [2]	Forward Voltage	Hyper Red	1.95	2.5	V	IF=20mA			
lr	Reverse Current	Hyper Red		10	uA	V _R =5V			

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

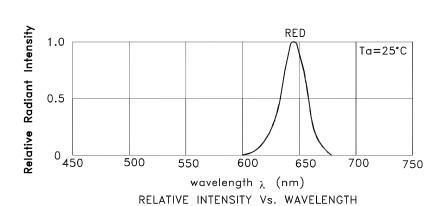
Absolute Maximum Ratings at TA=25°C

Parameter	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.

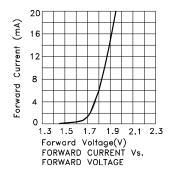
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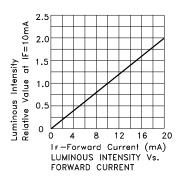
Luminous intensity/ luminous Flux: +/-15%.
 *Luminous intensity value is traceable to the CIE127-2007 compliant national standards.

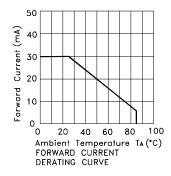


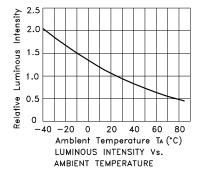
Hyper Red

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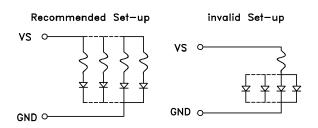






CIRCUIT DESIGN NOTES

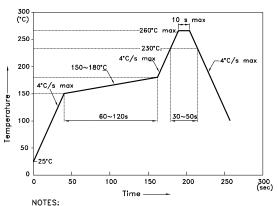
- 1.Protective current—limiting resistors may be necessary to operate the Displays.
- 2.LEDs mounted in parallel should each be placed in series with its own current—limiting resistor.



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Reflow Soldering Profile For Lead-free SMT Process.



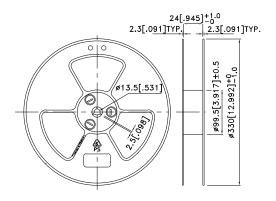
- NOTES:

 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.

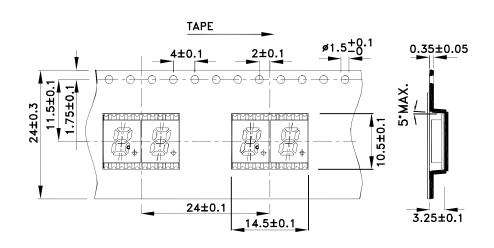
Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.15)

└─ 1.44 1.44X9=12.96

Reel Dimension



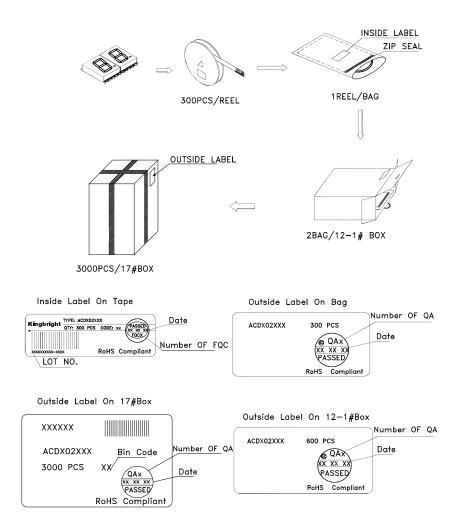
Tape Specifications (Units: mm)



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PACKING & LABEL SPECIFICATIONS

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