

SURFACE MOUNT DISPLAY

Part Number: ACDC04-41SURKWA-F01 Hyper Red

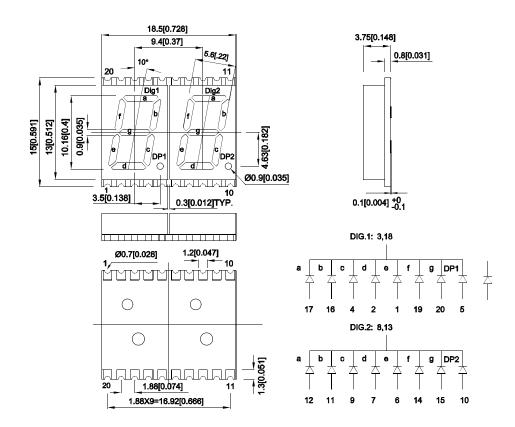
Features

- 0.4 inch digit height.
- Low current operation.
- Excellent character appearance.
- Mechanically rugged.
- Gray face, white segment.
- Package: 250pcs/ reel.
- Moisture sensitivity level : level 2a.
- RoHS compliant.

Description

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

Package Dimensions& Internal Circuit Diagram





SPEC NO: DSAG0251

APPROVED: Wynec

- 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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Selection Guide

Part No.	Emitting Color (Material)	Lens Type	lv (ucd) [1] @ 10mA		Description
			Min.	Тур.	_ = ====
ACDC04-41SURKWA-F01	Hyper Red (AlGaInP)	White Diffused	21000	54000	Common Cathode, Rt. Hand Decimal.
NOBOUT TIEGRAWAT OT	, , , , , , , , , , , , , , , , , ,	TTIMO BINGOO	*9000	*20000	

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Emitting Color	Тур.	Max.	Units	Test Conditions			
λpeak	Peak Wavelength	Hyper Red	645		nm	IF=10mA			
λD [1]	Dominant Wavelength	Hyper Red	630		nm	IF=10mA			
Δλ1/2	Spectral Line Half-width	Hyper Red	28		nm	IF=10mA			
С	Capacitance	Hyper Red	35		pF	VF=0V;f=1MHz			
VF [2]	Forward Voltage	Hyper Red	1.85	2.5	V	IF=10mA			
lR	Reverse Current	Hyper Red		10	uA	VR=5V			

- 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	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	

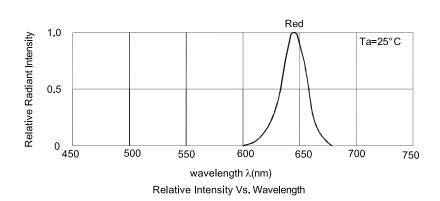
Notes:

- 1.1/10 Duty Cycle, 0.1ms Pulse Width.
 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.

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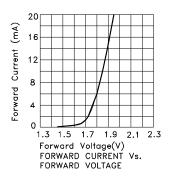
^{1.}Luminous intensity/ luminous Flux: +/-15%.

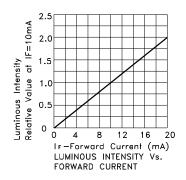
^{*}Luminous intensity value is traceable to CIE127-2007 standards.

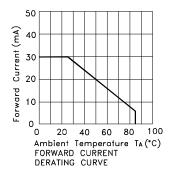


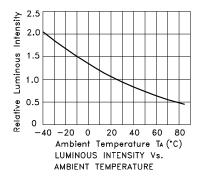
Hyper Red

ACDC04-41SURKWA-F01



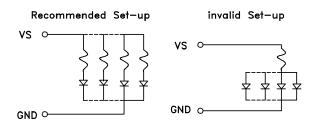






CIRCUIT DESIGN NOTES

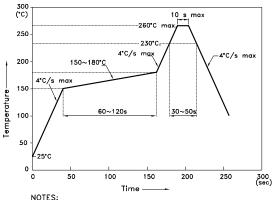
- 1.Protective current—limiting resistors may be necessary to operate the Displays.
- 2.LEDs mounted in parallel should each be placed in series with its own current—limiting resistor.



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Reflow Soldering Profile For Lead-free SMT Process.



- NOTES:

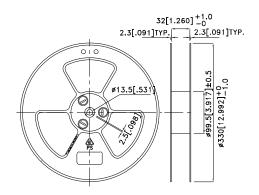
 1.We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.

 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)

1.88X9=16.92 1.88X9=16.92 1.88X9=16.92

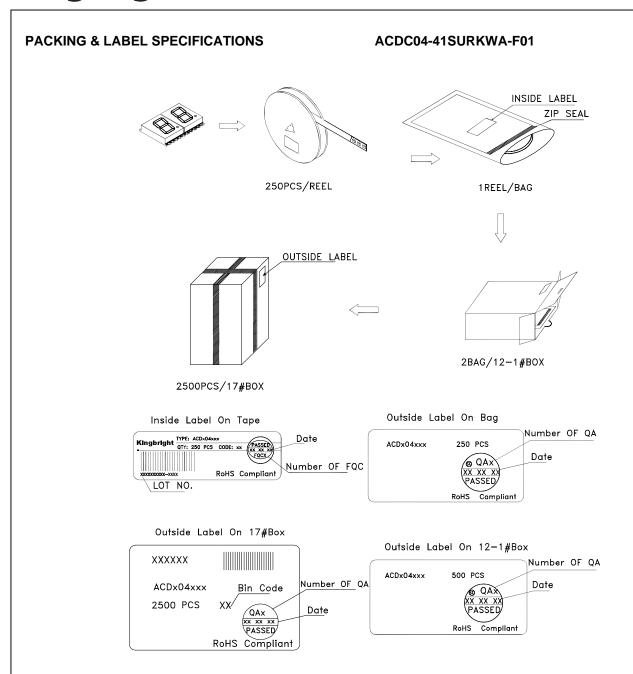
Reel Dimension



Tape Specifications (Units: mm)

TAPE -0.35±0.1 4±0.1 2±0.1 14.2 ± 0.1 1.75 ± 0.1 수 우 우 우 15.5 32 +0.3 $\overline{}$ - Θ 0-19 ^{+0.10} _{-0.10} 3.95 ± 0.1 24 ± 0.1 1.5±0.1

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