

Part Number: TA20-11SURKWA

Hyper Red

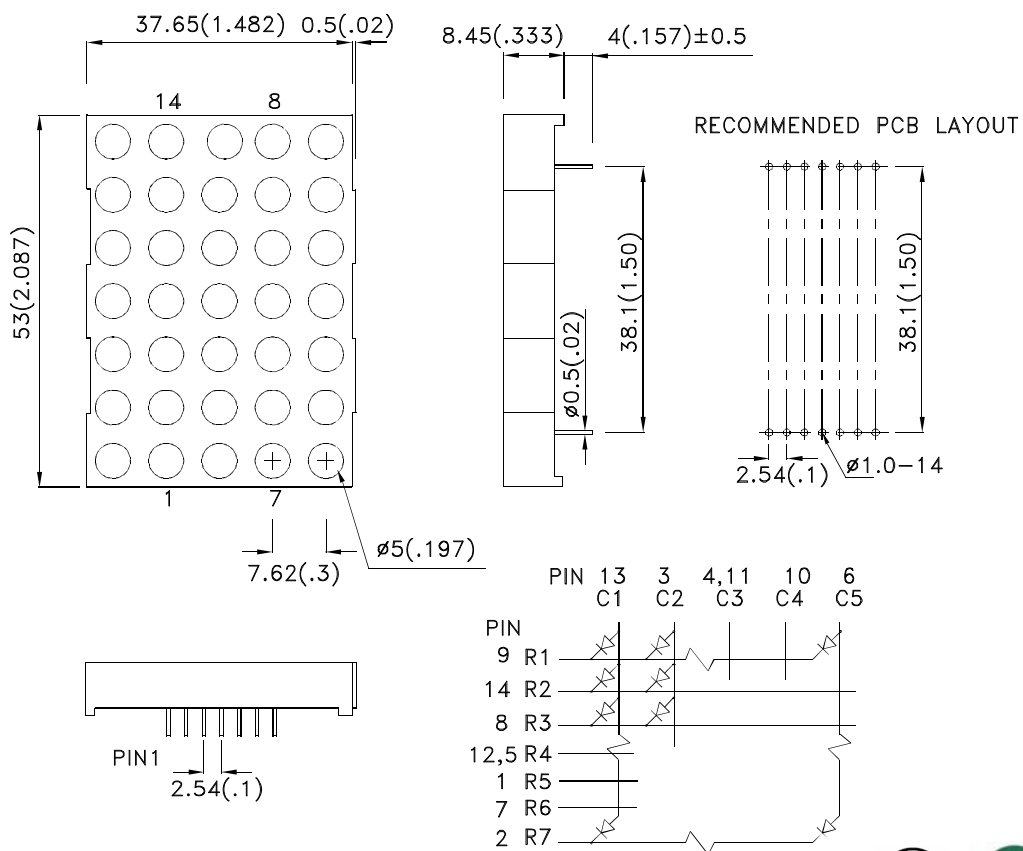
### Features

- 2.0 inch matrix height.
- Dot size 5mm.
- Low current operation.
- High contrast and light output.
- Stackable horizontally.
- Easy mounting on P.C. boards or sockets.
- Categorized for luminous intensity.
- Mechanically rugged.
- Standard : gray face, white dot.
- RoHS compliant.

### Description

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

### Package Dimensions & Internal Circuit Diagram



**Notes:**

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



## Selection Guide

Part No.	Dice	Lens Type	Iv (ucd) [1] @ 10mA		Description
			Min.	Typ.	
TA20-11SURKWA	Hyper Red (AlGaInP)	White Diffused	52000	130000	Column Anode

Note:

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

## Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
$\lambda_{peak}$	Peak Wavelength	Hyper Red	650		nm	I <sub>F</sub> =20mA
$\lambda_D$ [1]	Dominant Wavelength	Hyper Red	630		nm	I <sub>F</sub> =20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Hyper Red	28		nm	I <sub>F</sub> =20mA
C	Capacitance	Hyper Red	35		pF	V <sub>F</sub> =0V;f=1MHz
V <sub>F</sub> [2]	Forward Voltage	Hyper Red	1.95	2.5	V	I <sub>F</sub> =20mA
I <sub>R</sub>	Reverse Current	Hyper Red		10	uA	V <sub>R</sub> =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	
Lead Solder Temperature[2]	260°C For 3-5 Seconds	

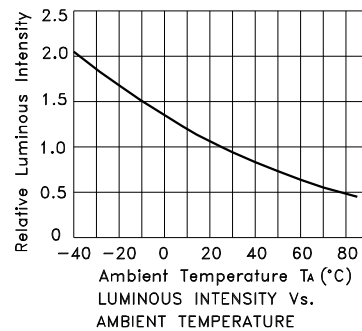
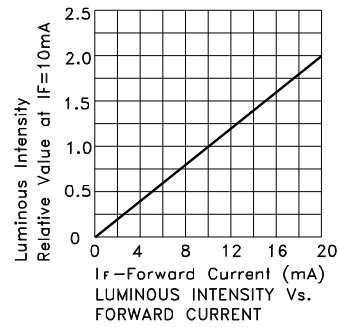
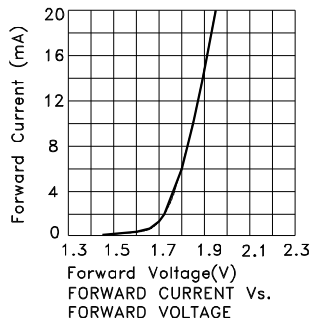
Notes:

1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 2mm below package base.

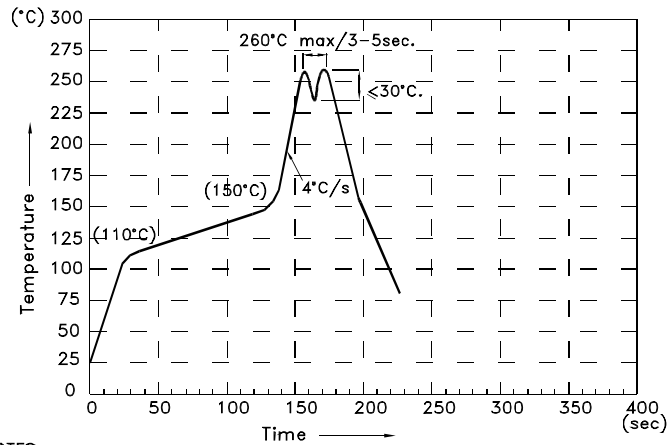


## Hyper Red

### TA20-11SURKWA



Wave Soldering Profile For Lead-free Through-hole LED.

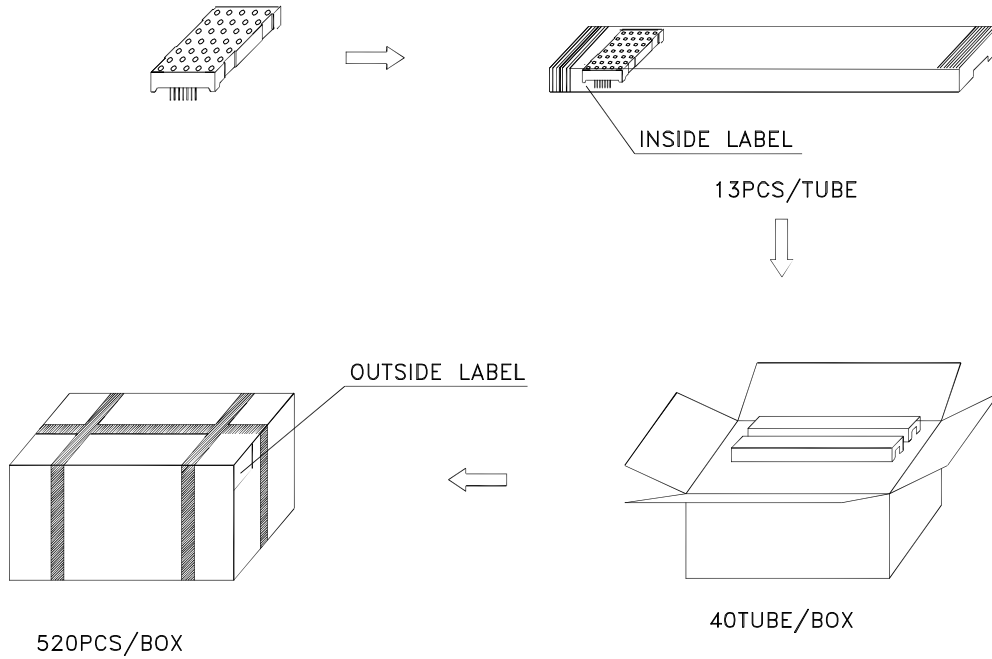


NOTES:

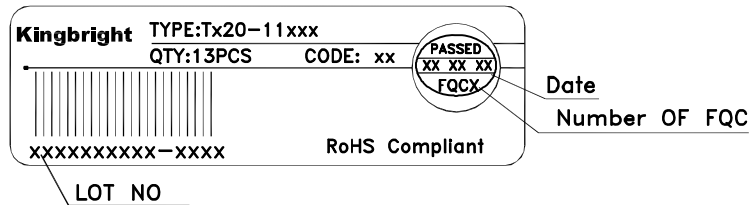
1. Recommend the wave temperature 245°C~260°C. The maximum soldering temperature should be less than 260°C.
2. Do not apply stress on epoxy resins when temperature is over 85°C.
3. The soldering profile apply to the lead free soldering (Sn/Cu/Ag alloy).
4. During wave soldering, the PCB top-surface temperature should be kept below 105°C.
5. No more than once.

## PACKING & LABEL SPECIFICATIONS

## TA20-11SURKWA



### Inside Label On IC-tube



### Outside Label On Box

