

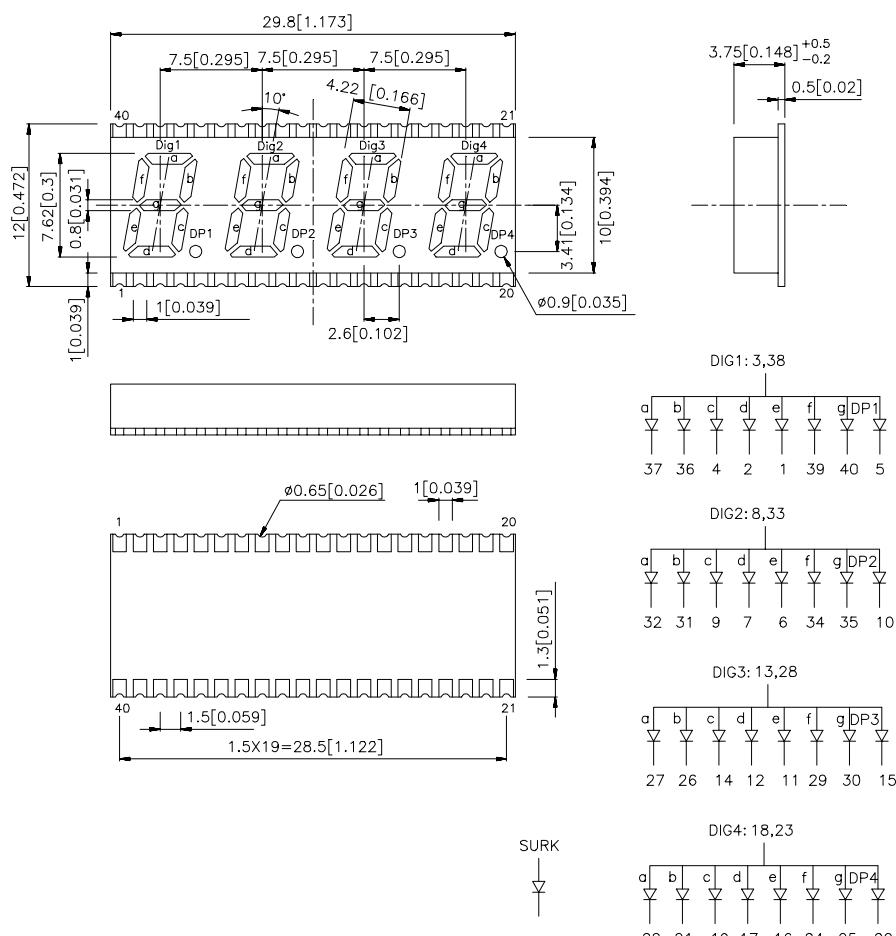
### Features

- 0.3INCH DIGIT HEIGHT.
- LOW CURRENT OPERATION.
- EXCELLENT CHARACTER APPEARANCE.
- I.C. COMPATIBLE.
- MECHANICALLY RUGGED.
- GRAY FACE,WHITE SEGMENT.
- PACKAGE : 800PCS / REEL.

### Description

The Hyper Red source color devices are made with DH InGaAlP 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. Specifications are subject to change without notice.

## Selection Guide

Part No.	Dice	Lens Type	IV (ucd) @ 10 mA		Description
			Min.	Typ.	
KPCA03-105	HYPER RED (InGaAlP)	WHITE DIFFUSED	3000	14800	Common Anode, Rt. Hand Decimal

## Electrical / Optical Characteristics at $T_A=25^\circ C$

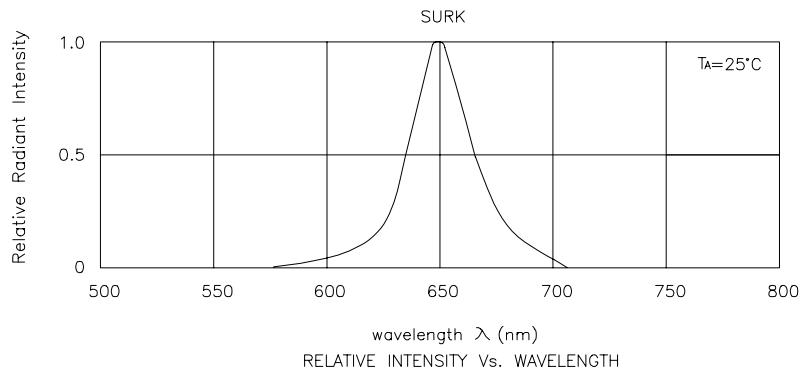
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
$\lambda_{peak}$	Peak Wavelength	Hyper Red	650		nm	$I_F=20mA$
$\lambda D$	Dominate Wavelength	Hyper Red	635		nm	$I_F=20mA$
$\Delta\lambda/2$	Spectral Line Half-width	Hyper Red	28		nm	$I_F=20mA$
C	Capacitance	Hyper Red	35		pF	$V_F=0V; f=1MHz$
$V_F$	Forward Voltage	Hyper Red	1.95	2.5	V	$I_F=20mA$
$I_R$	Reverse Current	Hyper Red		10	uA	$V_R = 5V$

## Absolute Maximum Ratings at $T_A=25^\circ C$

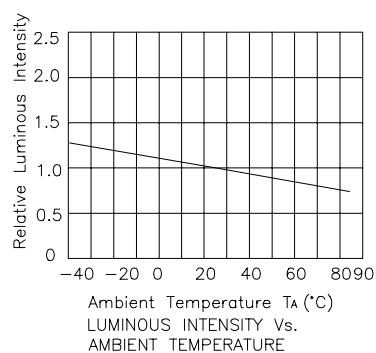
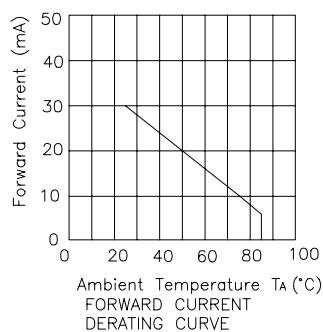
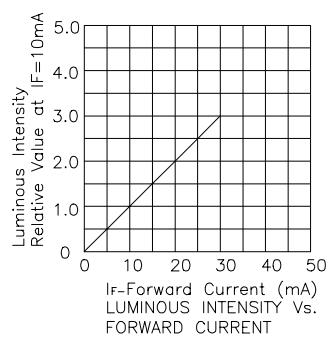
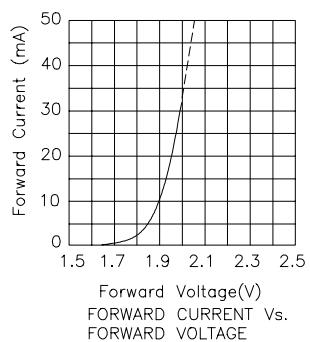
Parameter	Hyper Red	Units
Power dissipation	170	mW
DC Forward Current	30	mA
Peak Forward Current [1]	185	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	

Note:

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

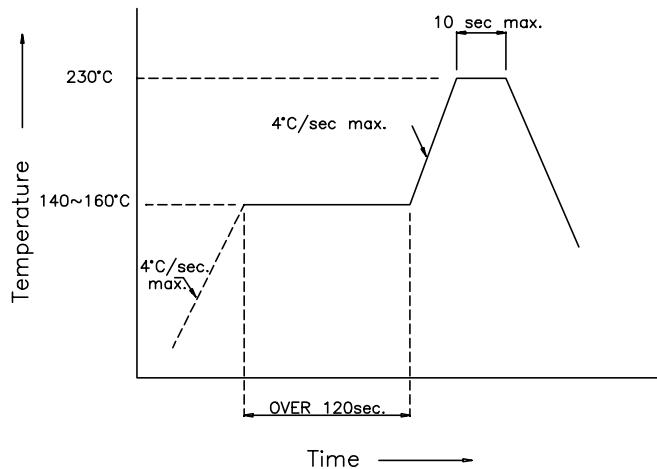


## Hyper Red      KPCA03-105

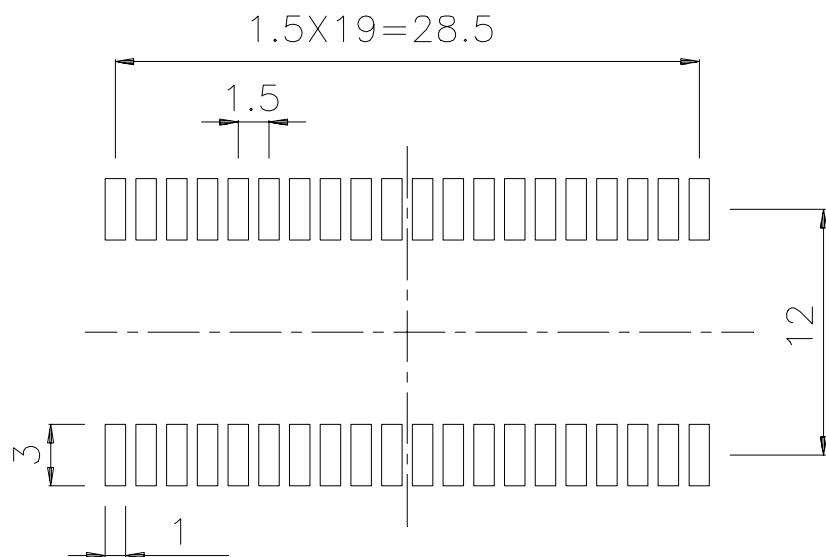


## KPCA03-105 SMT Reflow Soldering Instructions

Number of reflow process shall be less than 2 times and cooling process to normal temperature is required between first and second soldering process.



### Recommended Soldering Pattern (Units : mm)



**Tape Specification**  
(Units : mm)

