

Part Number: KCDC04-101 HIGH EFFICIENCY RED

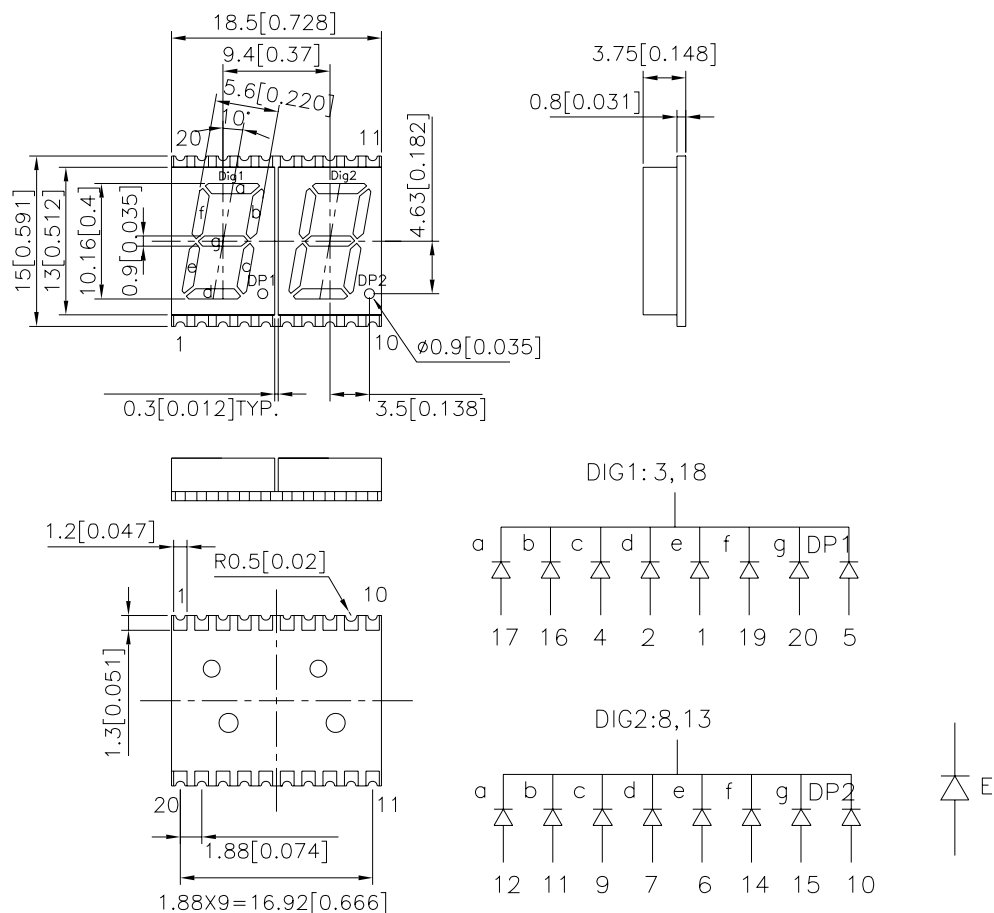
Features

- 0.4 INCH DIGIT HEIGHT.
- LOW CURRENT OPERATION.
- EXCELLENT CHARACTER APPEARANCE.
- I.C. COMPATIBLE.
- MECHANICALLY RUGGED.
- GRAY FACE, WHITE SEGMENT.
- PACKAGE: 250 PCS/ REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 4.
- RoHS COMPLIANT.

Description

The High Efficiency Red source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange 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.
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.	
KCDC04-101	HIGH EFFICIENCY RED(GaAsP/GaP)	WHITE DIFFUSED	1200	5000	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	High Efficiency Red	627		nm	IF=20mA
λ_D [1]	Dominant Wavelength	High Efficiency Red	625		nm	IF=20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	High Efficiency Red	45		nm	IF=20mA
C	Capacitance	High Efficiency Red	15		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	High Efficiency Red	2.0	2.5	V	IF=20mA
IR	Reverse Current	High Efficiency Red		10	uA	VR = 5V

Notes:

1. Wavelength: +/-1nm.

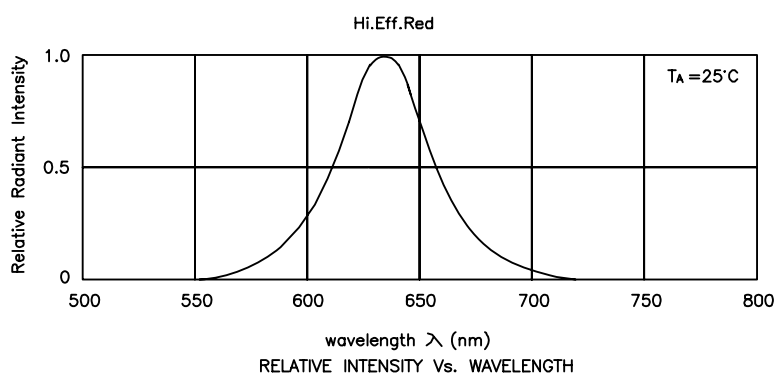
2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

Parameter	High Efficiency Red	Units
Power dissipation	75	mW
DC Forward Current	30	mA
Peak Forward Current [1]	160	mA
Reverse Voltage	5	V
Operating / Storage Temperature	-40°C To +85°C	

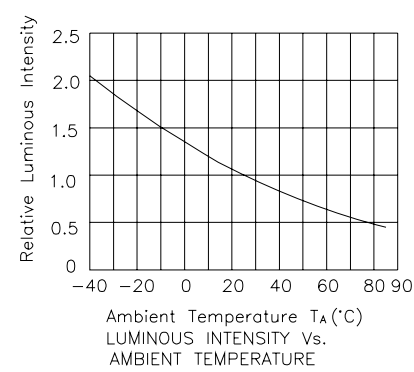
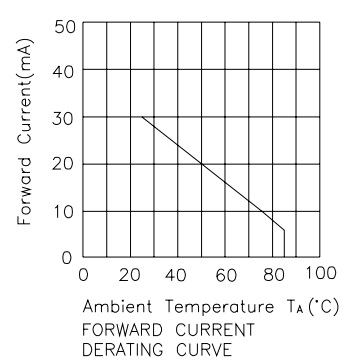
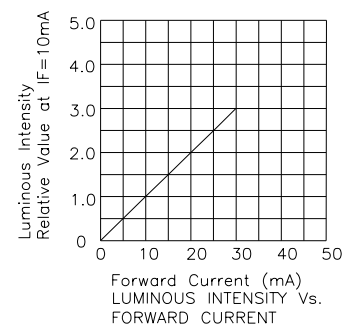
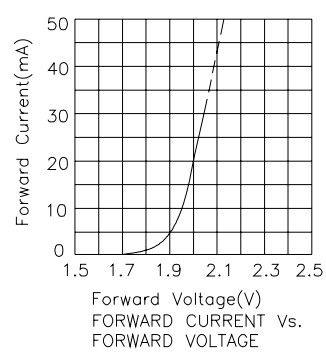
Note:

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



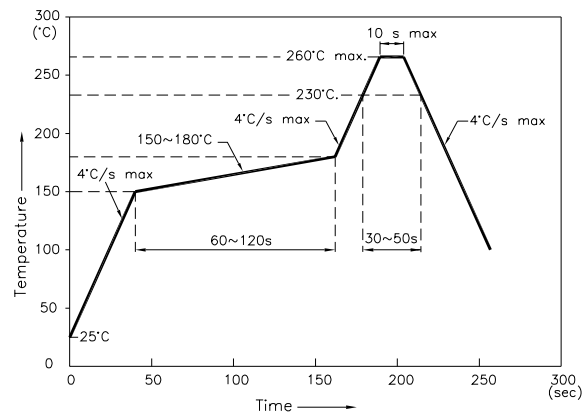
High Efficiency Red

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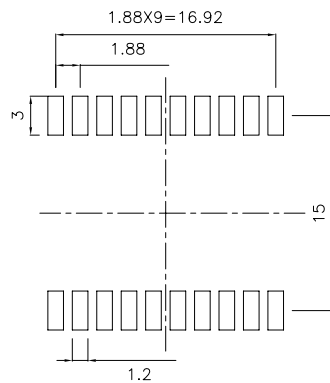
Reflow Soldering Profile For Lead-free SMT Process.



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)



Tape Specifications (Units : mm)

