

Selection Guide

| Part No. | Dice | Lens Type | Iv (ucd) [1] @ 10mA | | Description |
|------------|---------------------------------|----------------|------------------------|-------|-----------------------------------|
| | | | Min. | Typ. | |
| KCSC56-101 | High Efficiency Red (GaAsP/GaP) | White Diffused | 2200 | 5400 | Common Cathode, Rt. Hand Decimal. |
| | | | *900 | *1600 | |

Notes:

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

* Luminous intensity value is traceable to the CIE127-2007 compliant national standards.

Electrical / Optical Characteristics at TA=25°C

| Symbol | Parameter | Device | Typ. | | Max. | Units | Test Conditions |
|-----------------------|--------------------------|---------------------|------|------|------|-------|---------------------------|
| λ_{peak} | Peak Wavelength | High Efficiency Red | 627 | *627 | | nm | I _F =20mA |
| λ_D [1] | Dominant Wavelength | High Efficiency Red | 625 | *617 | | nm | I _F =20mA |
| $\Delta\lambda_{1/2}$ | Spectral Line Half-width | High Efficiency Red | 45 | | | nm | I _F =20mA |
| C | Capacitance | High Efficiency Red | 15 | | | pF | V _F =0V;f=1MHz |
| V _F [2] | Forward Voltage | High Efficiency Red | 2.0 | | 2.5 | V | I _F =20mA |
| I _R | Reverse Current | High Efficiency Red | | | 10 | uA | V _R =5V |

Notes:

1.Wavelength: +/-1nm.

2. Forward Voltage: +/-0.1V.

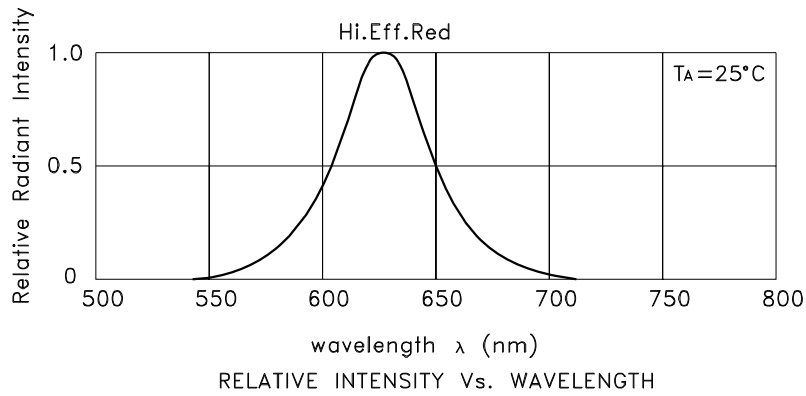
*Wavelength value is traceable to the CIE127-2007 compliant national standards.

Absolute Maximum Ratings at TA=25°C

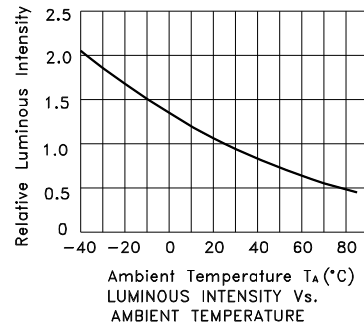
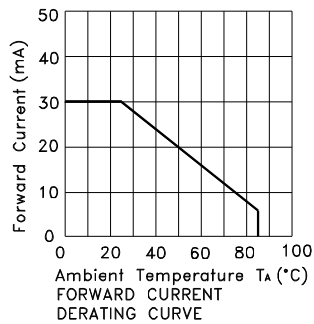
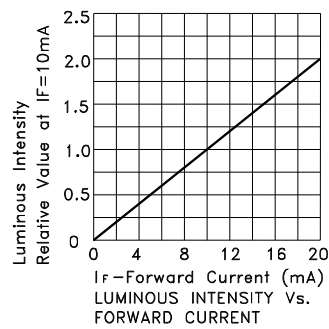
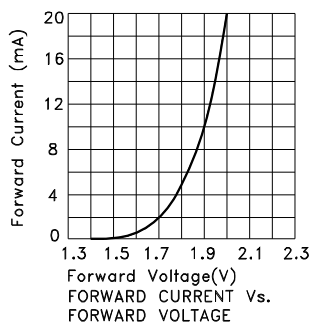
| Parameter | High Efficiency Red | Units |
|---------------------------------|---------------------|-------|
| Power dissipation | 75 | mW |
| DC Forward Current | 30 | mA |
| Peak Forward Current [1] | 160 | mA |
| Reverse Voltage | 5 | V |
| Operating / Storage Temperature | -40°C To +85°C | |

Note:

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

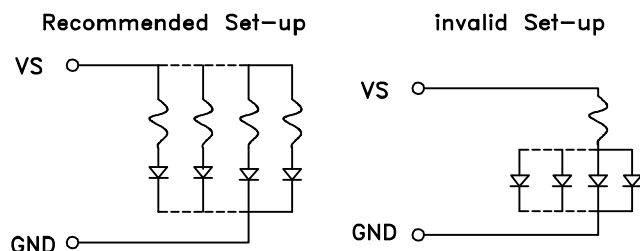


High Efficiency Red KCSC56-101



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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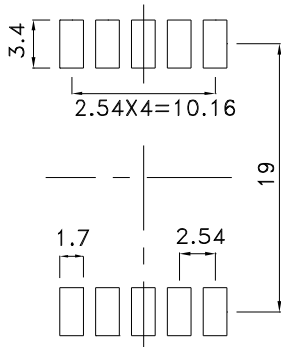
Reflow Soldering Profile For Lead-free SMT Process.



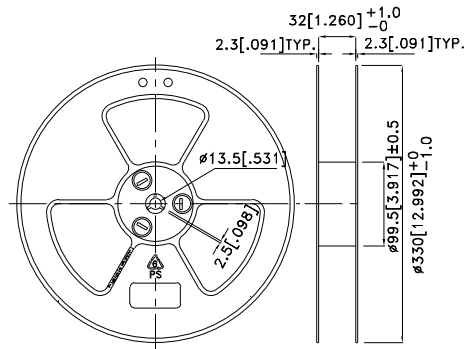
NOTES:

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.

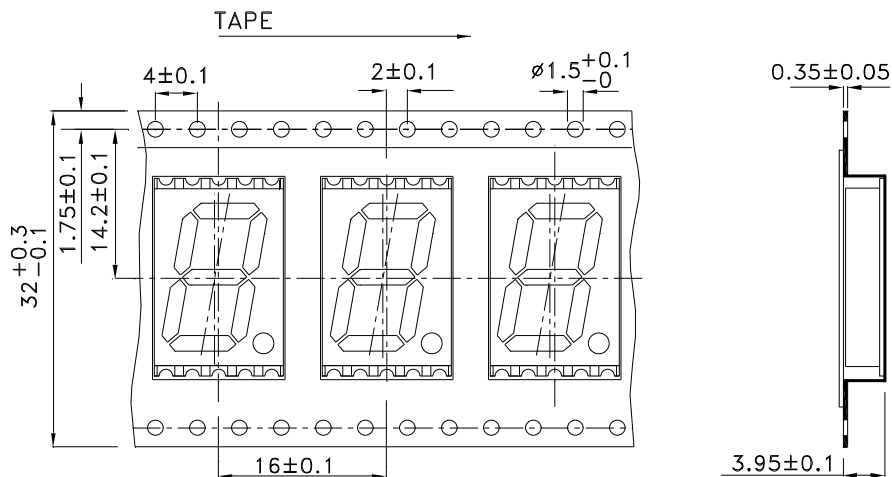
Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.15)



Reel Dimension



Tape Specifications (Units : mm)



PACKING & LABEL SPECIFICATIONS

KCSC56-101

