



## Selection Guide

| Part No.   | Dice                | Lens Type      | Iv (ucd) [1]<br>@ 10mA |       | Description                       |
|------------|---------------------|----------------|------------------------|-------|-----------------------------------|
|            |                     |                | Min.                   | Typ.  |                                   |
| KCDC56-105 | HYPER RED (InGaAlP) | WHITE DIFFUSED | 4700                   | 30000 | 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 |
|-----------------------|--------------------------|-----------|------|------|-------|-----------------|
| $\lambda_{peak}$      | Peak Wavelength          | Hyper Red | 650  |      | nm    | IF=20mA         |
| $\lambda_D$ [1]       | Dominant Wavelength      | Hyper Red | 635  |      | nm    | IF=20mA         |
| $\Delta\lambda_{1/2}$ | Spectral Line Half-width | Hyper Red | 28   |      | nm    | IF=20mA         |
| C                     | Capacitance              | Hyper Red | 35   |      | pF    | VF=0V;f=1MHz    |
| VF [2]                | Forward Voltage          | Hyper Red | 1.95 | 2.5  | V     | IF=20mA         |
| IR                    | Reverse Current          | Hyper Red |      | 10   | uA    | VR = 5V         |

Notes:

1. Wavelength: +/-1nm.

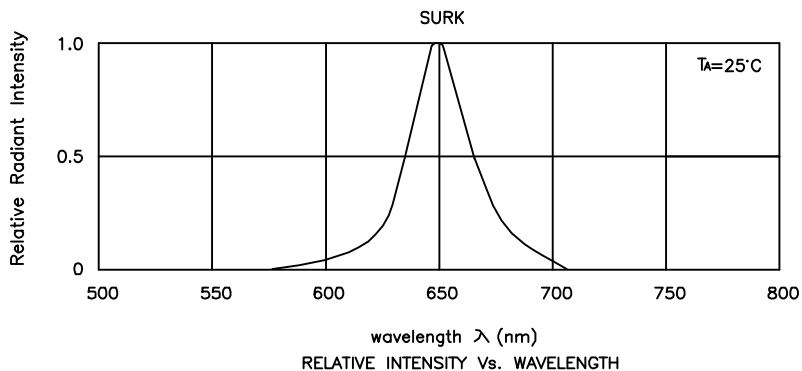
2. Forward Voltage: +/-0.1V.

## 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 |       |

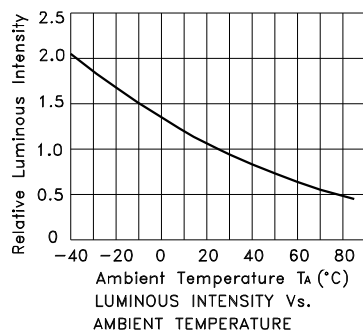
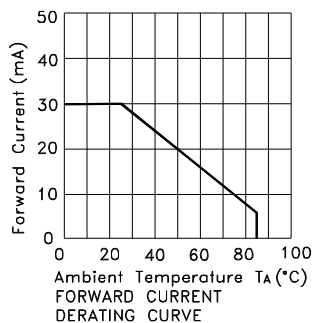
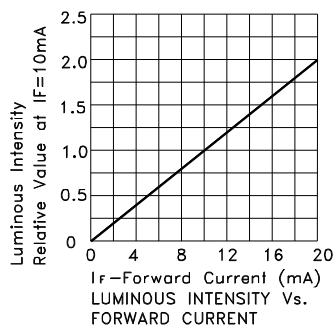
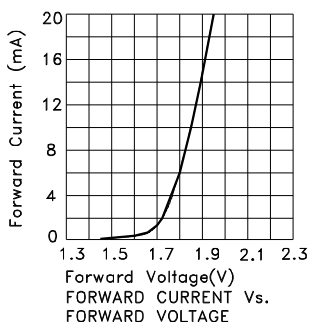
Note:

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



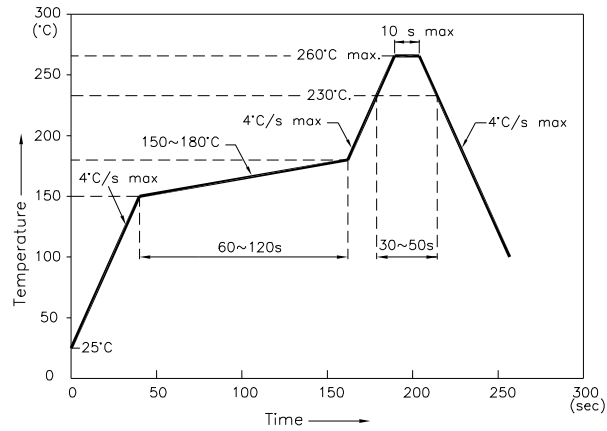
## Hyper Red

### KCDC56-105



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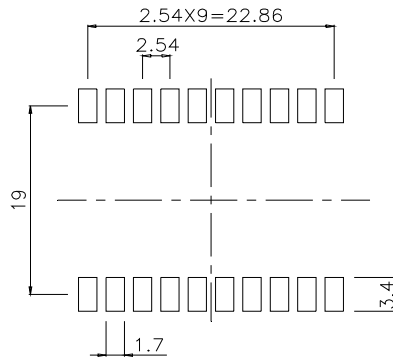
Reflow Soldering Profile For Lead-free SMT Process.



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)

