

AP23SURC-F

HYPER RED

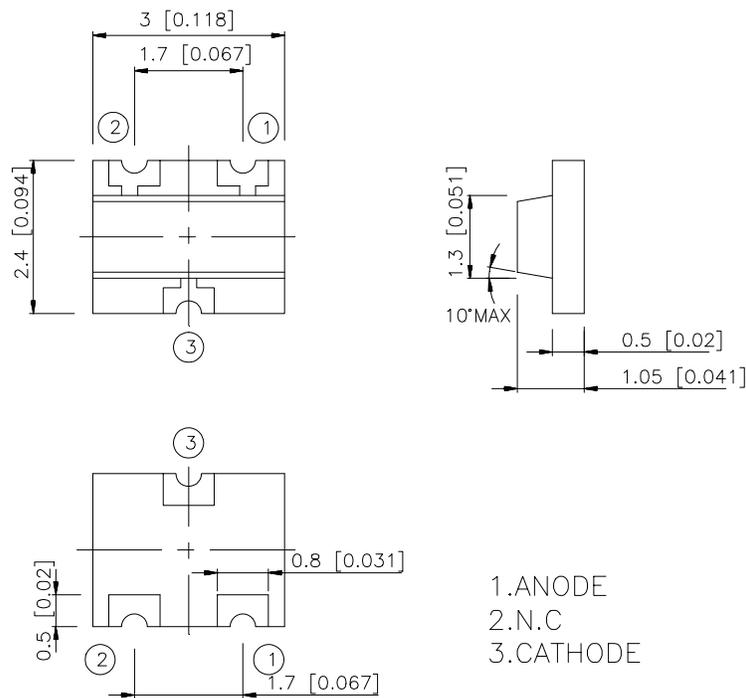
Features

- 3mmx2.4mm SMT LED, 1.05mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 2000PCS / REEL.

Description

The Hyper Red source color devices are made with DH InGaAlP on GaAs substrate Light Emitting Diode.

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.2 (0.008") unless otherwise noted.
3. Lead spacing is measured where the lead emerge package.
4. Specifications are subject to change without notice.

Selection Guide

| Part No. | Dice | Lens Type | Iv (mcd) @ 20 mA | | Viewing Angle |
|------------|---------------------|-------------|---------------------|------|------------------|
| | | | Min. | Typ. | θ1/2 |
| AP23SURC-F | HYPER RED (InGaAlP) | WATER CLEAR | 110 | 250 | 120° |

Note:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

Electrical / Optical Characteristics at T_A=25°C

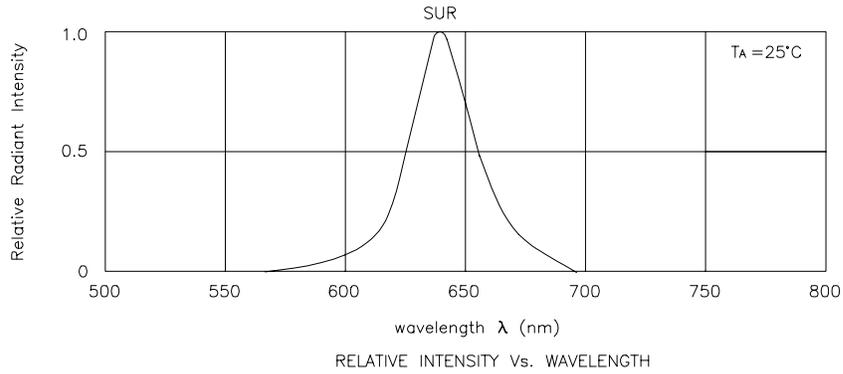
| Symbol | Parameter | Device | Typ. | Max. | Units | Test Conditions |
|-------------------|--------------------------|-----------|------|------|-------|---------------------------|
| λ _{peak} | Peak Wavelength | Hyper Red | 640 | | nm | I _F =20mA |
| λ _D | Dominate Wavelength | Hyper Red | 628 | | nm | I _F =20mA |
| Δλ _{1/2} | Spectral Line Half-width | Hyper Red | 27 | | nm | I _F =20mA |
| C | Capacitance | Hyper Red | 45 | | pF | V _F =0V;f=1MHz |
| V _F | Forward Voltage | Hyper Red | 1.9 | 2.5 | V | I _F =20mA |
| I _R | Reverse Current | Hyper Red | | 10 | uA | V _R =5V |

Absolute Maximum Ratings at T_A=25°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 | |

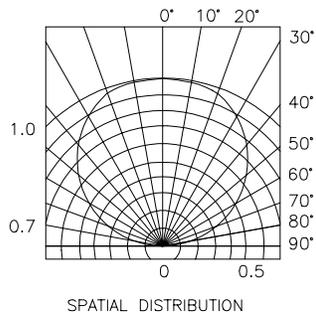
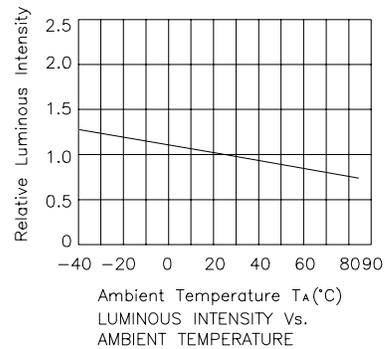
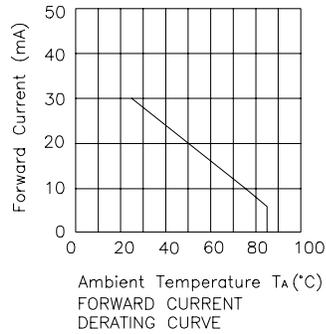
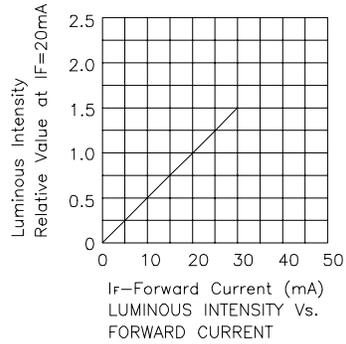
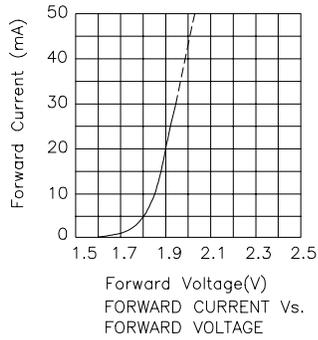
Note:

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



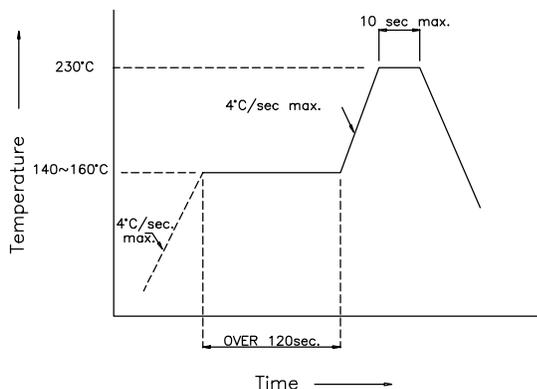
Hyper Red

AP23SURC-F

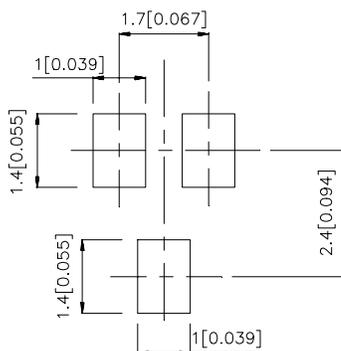


AP23SURC-F SMT Reflow Soldering Instructions

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 Specifications (Units : mm)

