

Features

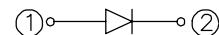
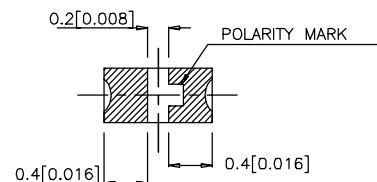
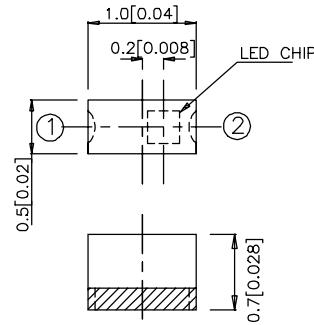
- 1.0mmx0.5mm SMT LED, 0.7mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.

APH1005EC

APH1005SGC

APH1005YC

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.1(0.004")$ unless otherwise noted.
3. Lead spacing is measured where the lead emerge package.
4. Specifications are subjected to change without notice.

Selection Guide

| Part No. | Dice | Lens Type | I _v (mcd) @ 20 mA | | Viewing Angle |
|------------|---------------------------------|-------------|------------------------------|------|---------------|
| | | | Min. | Typ. | |
| APH1005EC | HIGH EFFICIENCY RED (GaAsP/GaP) | WATER CLEAR | 8 | 16 | 120° |
| APH1005SGC | SUPER BRIGHT GREEN (GaP) | WATER CLEAR | 7 | 14 | 120° |
| APH1005YC | YELLOW (GaAsP/GaP) | WATER CLEAR | 3 | 5 | 120° |

Note:

1. θ_{1/2} is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

Electrical / Optical Characteristics at $T_A=25^\circ\text{C}$

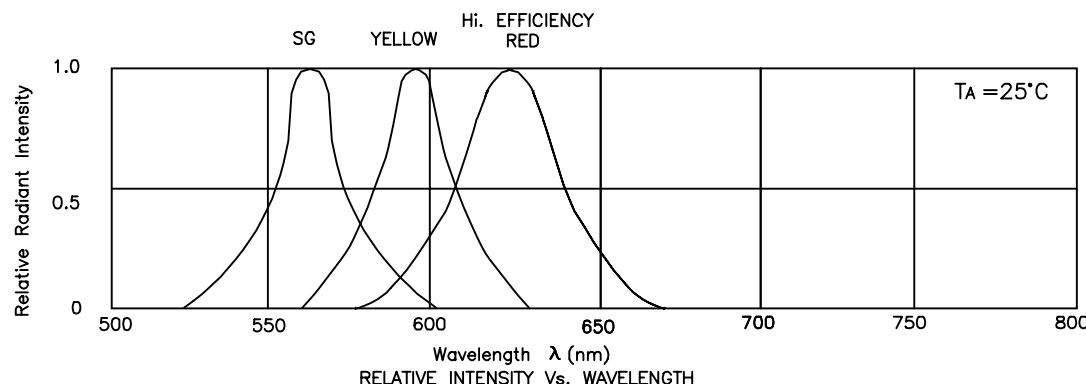
| Symbol | Parameter | Device | Typ. | Max. | Units | Test Conditions |
|-------------------------|-------------------------|---|-------------------|-------------------|-------|-----------------|
| λ_{peak} | Peak Wavelength | High Efficiency Red Super Bright Green Yellow | 625 565 590 | | nm | IF=20mA |
| $\Delta\lambda_{1/2}$ | Spectral Line Halfwidth | High Efficiency Red Super Bright Green Yellow | 45 30 35 | | nm | IF=20mA |
| C | Capacitance | High Efficiency Red Super Bright Green Yellow | 12 45 10 | | pF | VF=0V;f=1MHz |
| V_F | Forward Voltage | High Efficiency Red Super Bright Green Yellow | 2.0 2.2 2.1 | 2.5 2.5 2.5 | V | IF=20mA |
| I_R | Reverse Current | All | | 10 | uA | VR = 5V |

Absolute Maximum Ratings at $T_A=25^\circ\text{C}$

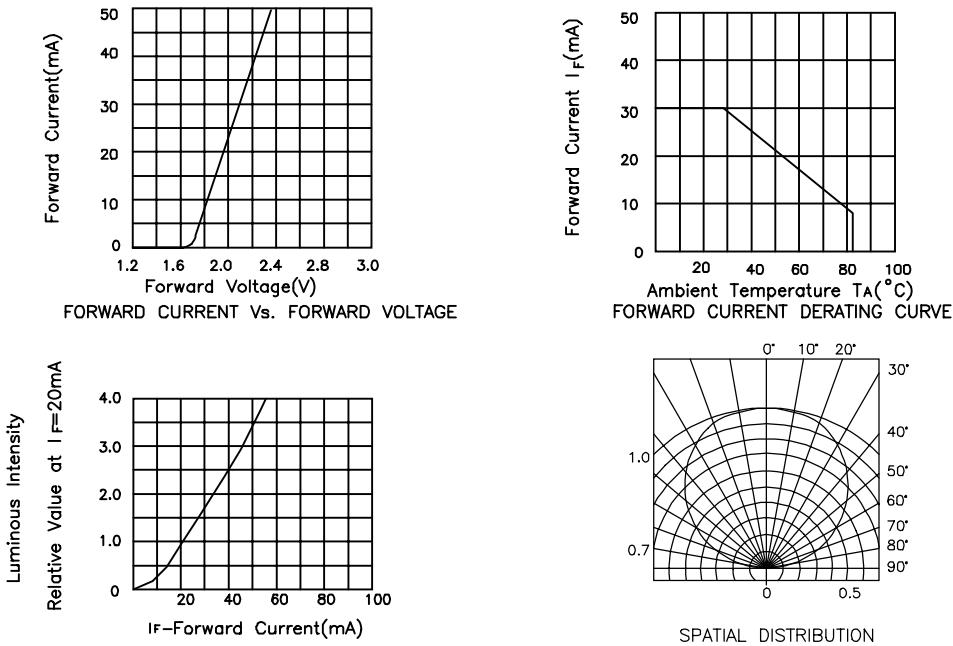
| Parameter | High Efficiency Red | Super Bright Green | Yellow | Units |
|-------------------------------|---------------------|--------------------|--------|-------|
| Power dissipation | 105 | 105 | 105 | mW |
| DC Forward Current | 30 | 25 | 30 | mA |
| Peak Forward Current [1] | 150 | 150 | 150 | mA |
| Reverse Voltage | 5 | 5 | 5 | V |
| Operating/Storage Temperature | -40°C To +85°C | | | |

Note:

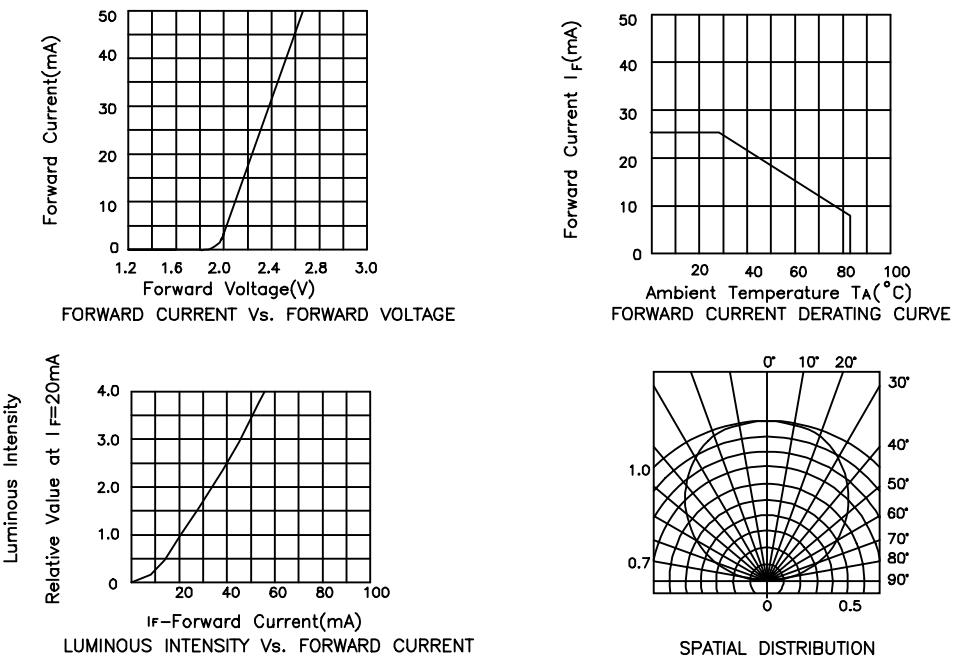
1. 1/10 Duty Cycle, 0.1ms Pulse Width.



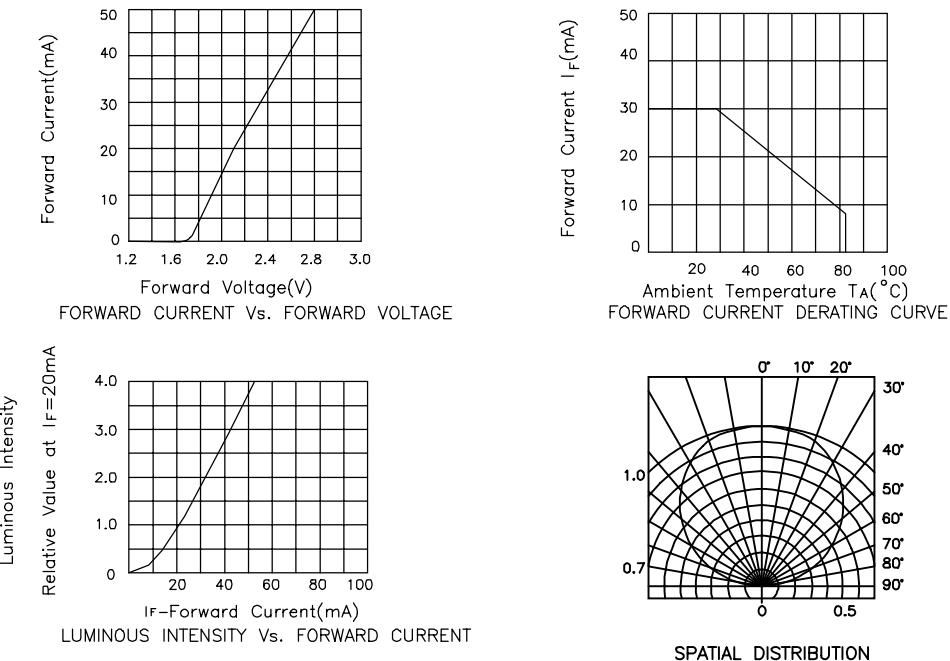
High Efficiency Red APH1005EC



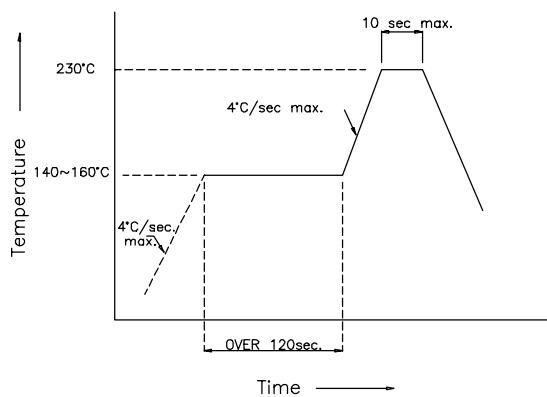
Super Bright Green APH1005SGC



Yellow APH1005YC

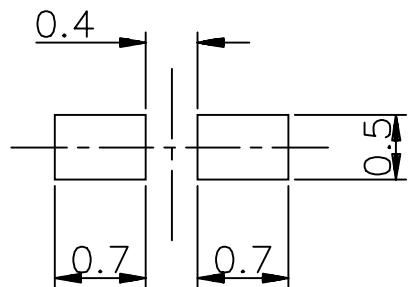


APH1005 SERIES SMT Reflow Soldering Instructions



APH1005 SERIES Recommended Soldering Pattern
(Units : mm)

FOR REFLOW SOLDERING



APH1005 SERIES Tape Specifications
(Units : mm)

