

Selection Guide

| Part No. | Dice | Lens Type | Iv (mcd) @ 20 mA | | Viewing Angle |
|-----------------|--------------------------|-------------|---------------------|------|------------------|
| | | | Min. | Typ. | 2θ1/2 |
| APTB1612SURKSGC | HYPHER RED (InGaAlP) | WATER CLEAR | 80 | 150 | 120° |
| | SUPER BRIGHT GREEN (GaP) | | 3 | 12 | |

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

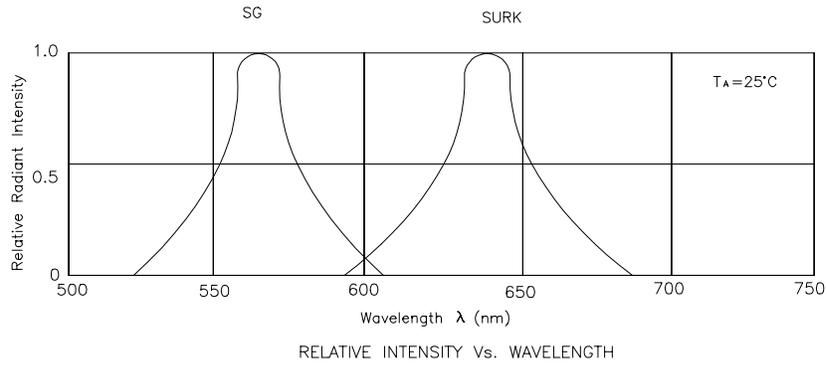
| Symbol | Parameter | Device | Typ. | Max. | Units | Test Conditions |
|-------------------|-------------------------|---------------------------------|-------------|------------|-------|-----------------|
| λ _{peak} | Peak Wavelength | Hyper Red Super Bright Green | 640 565 | | nm | IF=20mA |
| λ _D | Dominate Wavelength | Hyper Red Super Bright Green | 630 568 | | nm | IF=20mA |
| Δλ _{1/2} | Spectral Line Halfwidth | Hyper Red Super Bright Green | 28 30 | | nm | IF=20mA |
| C | Capacitance | Hyper Red Super Bright Green | 35 15 | | pF | VR=0V;f=1MHz |
| V _F | Forward Voltage | Hyper Red Super Bright Green | 1.95 2.2 | 2.5 2.5 | V | IF=20mA |
| I _R | Reverse Current | All | | 10 | uA | VR = 5V |

Absolute Maximum Ratings at T_A=25°C

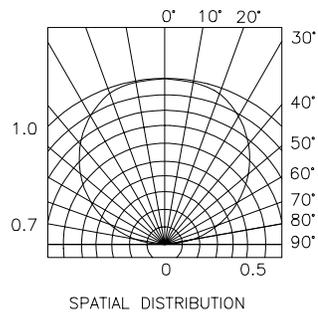
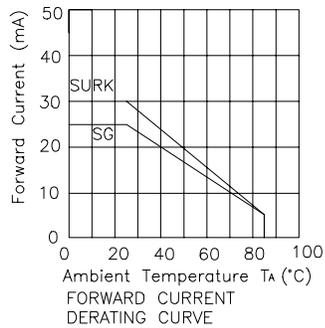
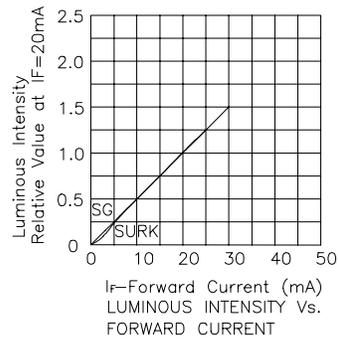
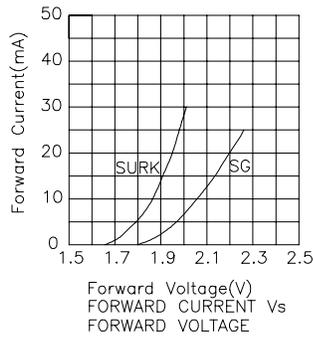
| Parameter | Hyper Red | Super Bright Green | Units |
|-------------------------------|----------------|--------------------|-------|
| Power dissipation | 170 | 105 | mW |
| DC Forward Current | 30 | 25 | mA |
| Peak Forward Current [1] | 185 | 140 | mA |
| Reverse Voltage | 5 | 5 | V |
| Operating/Storage Temperature | -40°C To +85°C | | |

Note:

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

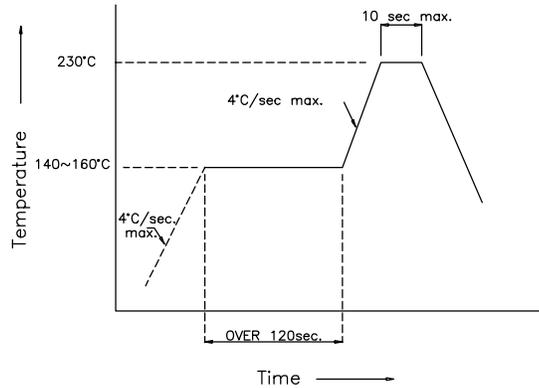


Hyper Red / Super Bright Green APTB1612SURKSGC

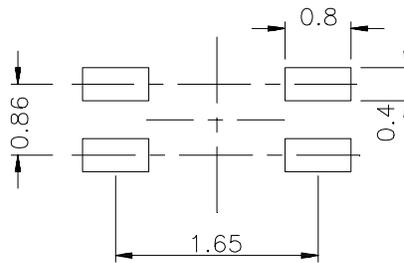


APTB1612SURKSGC SMT Reflow Soldering Instructions

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)

