

Selection Guide

| Part No. | Dice | Iv (ucd) @ 10 mA | | Description |
|----------------------------|---------------------------------|---------------------|-------|---------------------------------|
| | | Min. | Typ. | |
| SA39-11EWA SA39-12EWA | HIGH EFFICIENCY RED (GaAsP/GaP) | 1200 | 4100 | Common Anode.Rt. Hand Decimal |
| SC39-11EWA SC39-12EWA | | | | Common Cathode.Rt. Hand Decimal |
| SA39-11GWA SA39-12GWA | GREEN (GaP) | 1900 | 6400 | Common Anode.Rt. Hand Decimal |
| SC39-11GWA SC39-12GWA | | | | Common Cathode.Rt. Hand Decimal |
| SA39-11YWA SA39-12YWA | YELLOW (GaAsP/GaP) | 1200 | 3000 | Common Anode.Rt. Hand Decimal |
| SC39-11YWA SC39-12YWA | | | | Common Cathode.Rt. Hand Decimal |
| SA39-11SRWA SA39-12SRWA | SUPER BRIGHT RED (GaAlAs) | 4700 | 16000 | Common Anode.Rt. Hand Decimal |
| SC39-11SRWA SC39-12SRWA | | | | Common Cathode.Rt. Hand Decimal |

Electrical / Optical Characteristics at T_A=25°C

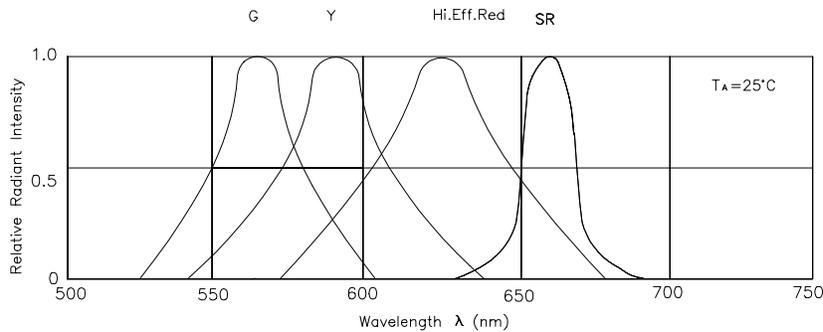
| Symbol | Parameter | Device | Typ. | Max. | Units | Test Conditions |
|-----------------------|-------------------------|--|---------------------------|--------------------------|-------|-----------------|
| λ_{peak} | Peak Wavelength | High Efficiency Red Green Yellow Super Bright Red | 627 565 590 660 | | nm | IF=20mA |
| λ_D | Dominate Wavelength | High Efficiency Red Green Yellow Super Bright Red | 625 568 588 640 | | nm | IF=20mA |
| $\Delta\lambda_{1/2}$ | Spectral Line Halfwidth | High Efficiency Red Green Yellow Super Bright Red | 45 30 35 20 | | nm | IF=20mA |
| C | Capacitance | High Efficiency Red Green Yellow Super Bright Red | 15 15 20 45 | | pF | VF=0V;f=1MHz |
| V _F | Forward Voltage | High Efficiency Red Green Yellow Super Bright Red | 2.0 2.2 2.1 1.85 | 2.5 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 | Green | Yellow | Super Bright Red | Units |
|-------------------------------|---------------------|-------|--------|------------------|-------|
| Power dissipation | 105 | 105 | 105 | 100 | mW |
| DC Forward Current | 30 | 25 | 30 | 30 | mA |
| Peak Forward Current [1] | 160 | 140 | 140 | 155 | mA |
| Reverse Voltage | 5 | 5 | 5 | 5 | V |
| Operating/Storage Temperature | -40°C To +85°C | | | | |
| Lead Solder Temperature [2] | 260°C For 5 Seconds | | | | |

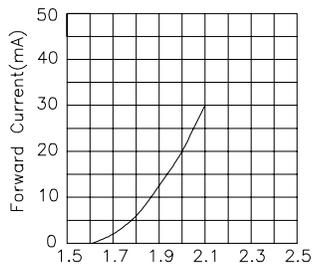
Notes:

- 1/10 Duty Cycle, 0.1ms Pulse Width.
- 4mm below package base.

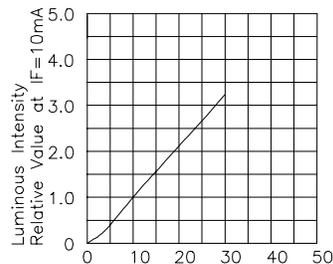


RELATIVE INTENSITY Vs. WAVELENGTH

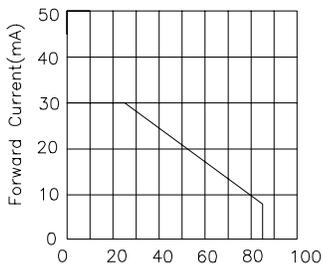
High Efficiency Red



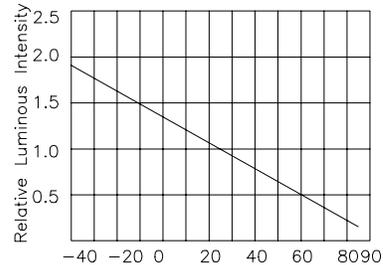
FORWARD CURRENT Vs. FORWARD VOLTAGE



LUMINOUS INTENSITY Vs. FORWARD CURRENT

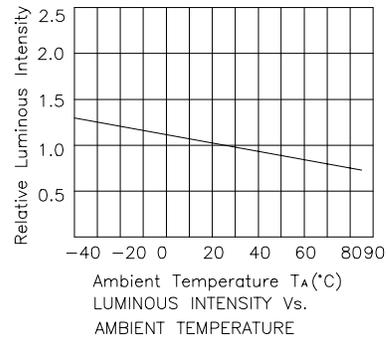
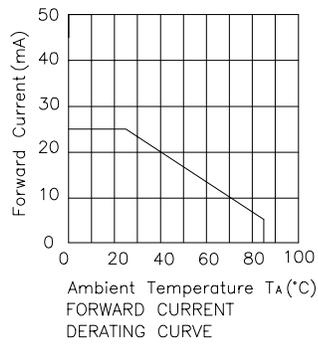
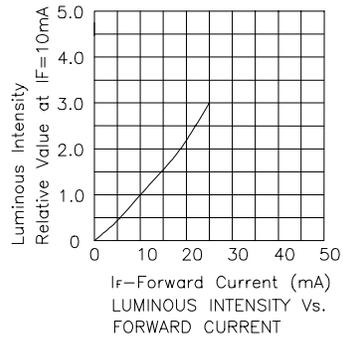
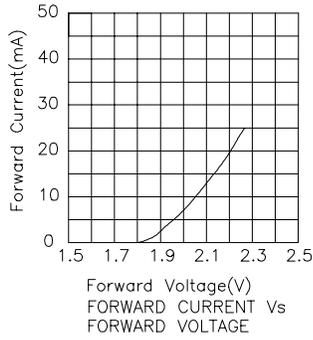


FORWARD CURRENT DERATING CURVE

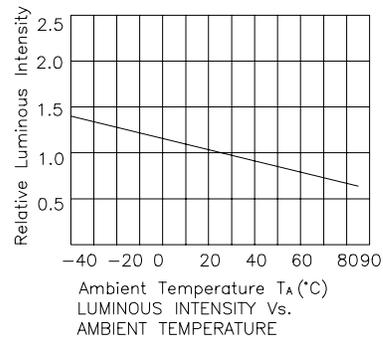
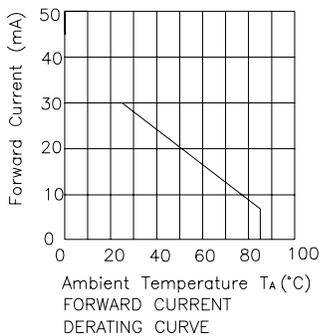
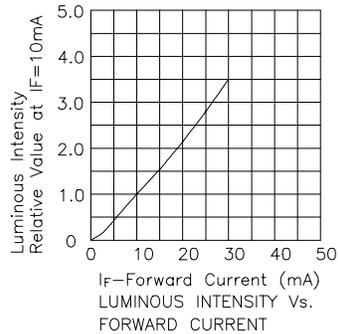
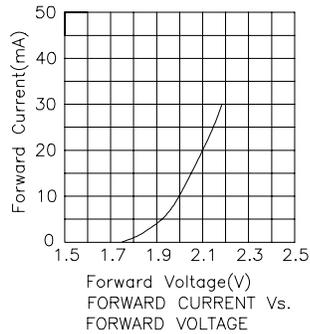


LUMINOUS INTENSITY Vs. AMBIENT TEMPERATURE

Green



Yellow



Super Bright Red

