

PSC05-12EWA/SRWA/YWA/GWA

Description

- The High Efficiency Red source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange Light Emitting Diode.
- The Super Bright Red source color devices are made with Gallium Aluminum Arsenide Red Light Emitting Diode.
- The Yellow source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Yellow Light Emitting Diode.
- The Green source color devices are made with Gallium Phosphide GreenLight Emitting Diode.

PSA/PSC05-11

11

A B C D E F G H K M N P S R T U DP

1 18 16 13 10 9 8 4 3 2 17 15 6 14 7 5 12

PSA/PSC05-12

18

A B C D E F G H K M N P S R T U DP

2 1 16 13 9 8 6 5 4 3 17 15 11 12 7 14 10

1. All dimensions are in millimeters (inches), Tolerance is $\pm 0.25(0.01")$ unless otherwise noted.
2. Specifications are subject to change without notice.

Selection Guide

Part No.	Dice	Iv (ucd) @ 10 mA		Description
		Min.	Typ.	
PSA05-11EWA PSA05-12EWA	HIGH EFFICIENCY RED (GaAsP/GaP)	1200	4100	Common Anode, Rt. Hand Decimal
PSC05-11EWA PSC05-12EWA				Common Cathode, Rt. Hand Decimal
PSA05-11SRWA PSA05-12SRWA	SUPER BRIGHT RED (GaAlAs)	8000	18000	Common Anode, Rt. Hand Decimal
PSC05-11SRWA PSC05-12SRWA				Common Cathode, Rt. Hand Decimal
PSA05-11YWA PSA05-12YWA	YELLOW (GaAsP/GaP)	1200	3000	Common Anode, Rt. Hand Decimal
PSC05-11YWA PSC05-12YWA				Common Cathode, Rt. Hand Decimal
PSA05-11GWA PSA05-12GWA	GREEN (GaP)	1900	4700	Common Anode, Rt. Hand Decimal
PSC05-11GWA PSC05-12GWA				Common Cathode, Rt. Hand Decimal

Electrical / Optical Characteristics at T_A=25°C

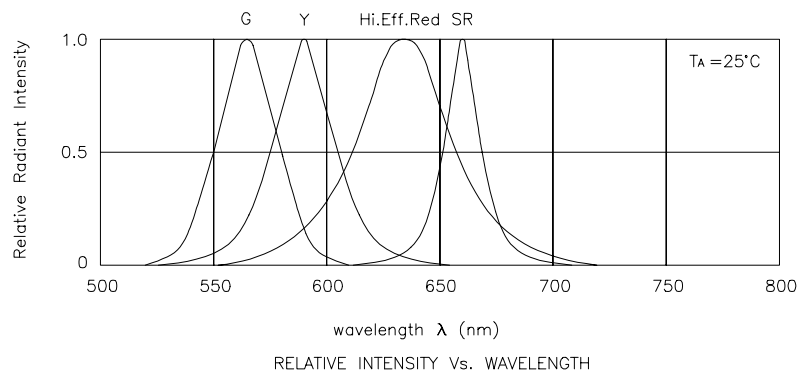
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	High Efficiency Red Super Bright Red Yellow Green	627 660 590 565		nm	I _F =20mA
λ_D	Dominate Wavelength	High Efficiency Red Super Bright Red Yellow Green	625 640 588 568		nm	I _F =20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	High Efficiency Red Super Bright Red Yellow Green	45 20 35 30		nm	I _F =20mA
C	Capacitance	High Efficiency Red Super Bright Red Yellow Green	15 45 20 15		pF	V _F =0V;f=1MHz
V _F	Forward Voltage	High Efficiency Red Super Bright Red Yellow Green	2.0 1.85 2.1 2.2	2.5 2.5 2.5 2.5	V	I _F =20mA
I _R	Reverse Current	All		10	uA	V _R = 5V

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

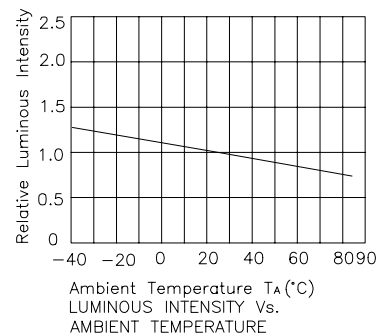
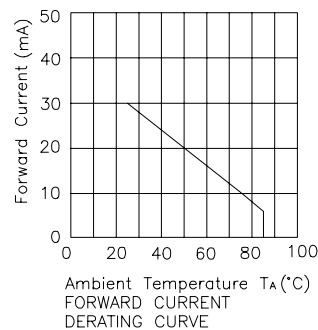
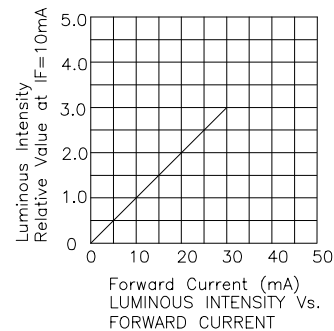
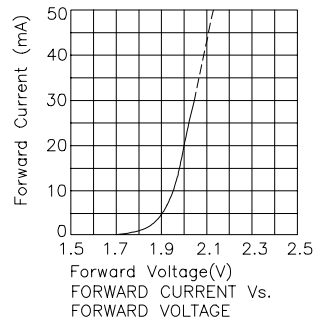
Parameter	High Efficiency Red	Super Bright Red	Yellow	Green	Units
Power dissipation	105	100	105	105	mW
DC Forward Current	30	30	30	25	mA
Peak Forward Current [1]	160	155	140	140	mA
Reverse Voltage	5	5	5	5	V
Operating/Storage Temperature	-40°C To $+85^{\circ}\text{C}$				
Lead Solder Temperature [2]	260 $^{\circ}\text{C}$ For 5 Seconds				

Notes:

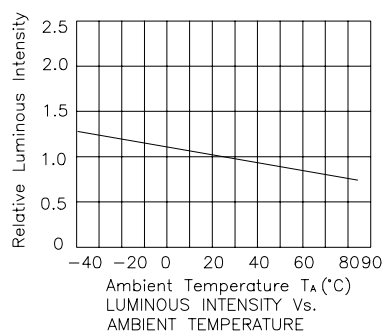
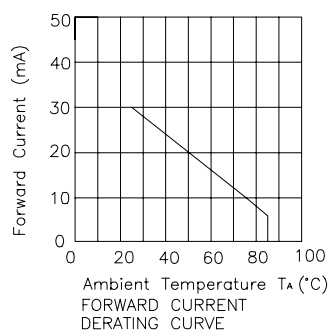
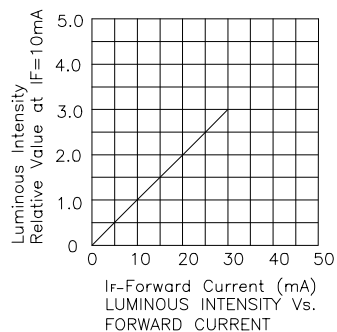
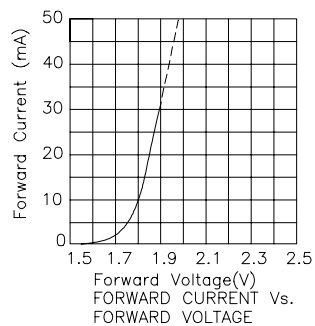
- 1/10 Duty Cycle, 0.1ms Pulse Width.
- 2mm below package base.



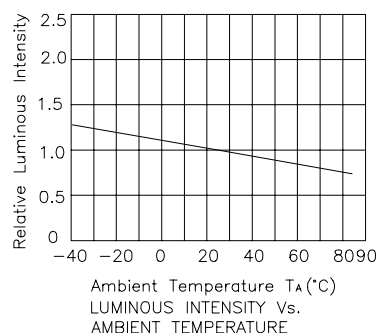
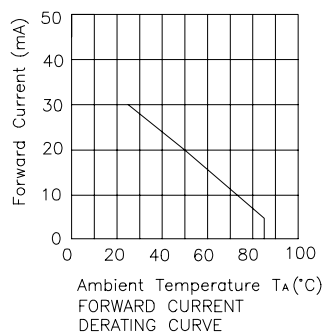
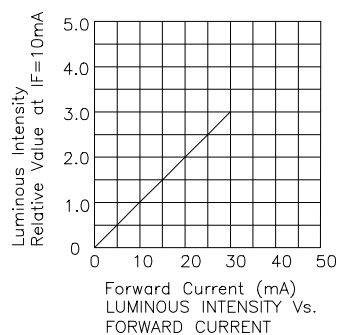
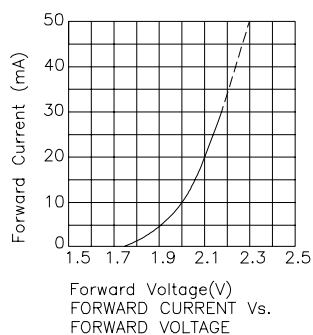
High Efficiency Red



Super Bright Red



Yellow



Green

