

KA-3020EC	HIGH EFFICIENCY RED
KA-3020SGC	SUPER BRIGHT GREEN
KA-3020YC	YELLOW

Features

- 3.0mm X 2.0mm, 1.4mm HIGH, ONLY MINIMUM SPACE REQUIRED.
- SUITABLE FOR COMPACT OPTOELECTRONIC APPLICATIONS.
- LOW POWER CONSUMPTION.
- EMBOSSED TAPING.
- PACKAGE : 2000PCS / REEL.

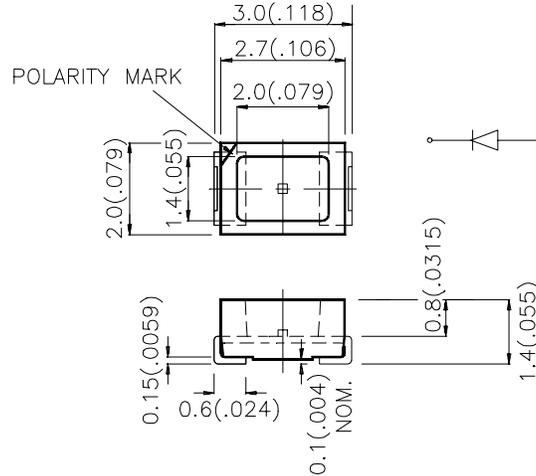
Description

The High Efficiency Red source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange Light Emitting Diode.

The Super Bright Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

The Yellow source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Yellow Light Emitting Diode.

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25(0.01)$ " 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
KA-3020EC	HIGH EFFICIENCY RED(GaAsP/GaP)	WATER CLEAR	8	20	90°
KA-3020SGC	SUPER BRIGHT GREEN (GaP)	WATER CLEAR	8	30	90°
KA-3020YC	YELLOW (GaAsP/GaP)	WATER CLEAR	4	15	90°

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

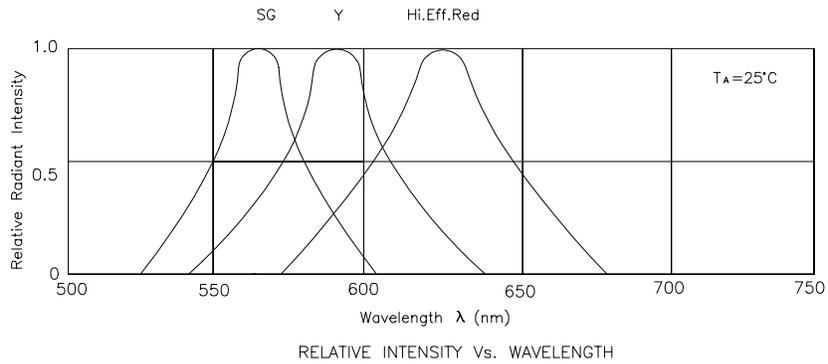
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ _{peak}	Peak Wavelength	High Efficiency Red Super Bright Green Yellow	627 565 590		nm	IF=20mA
λ _D	Dominate Wavelength	High Efficiency Red Super Bright Green Yellow	625 568 588		nm	IF=20mA
Δλ _{1/2}	Spectral Line Halfwidth	High Efficiency Red Super Bright Green Yellow	45 30 35		nm	IF=20mA
C	Capacitance	High Efficiency Red Super Bright Green Yellow	15 15 20		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	High Efficiency Red Super Bright Green Yellow		10	μA	VR = 5V

Absolute Maximum Ratings at T_A=25°C

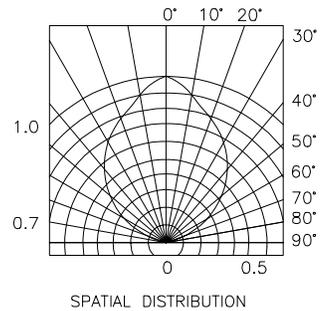
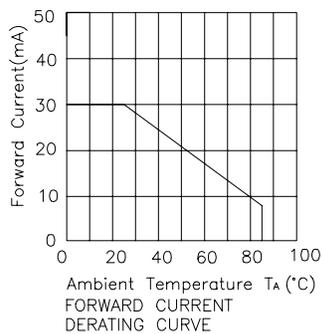
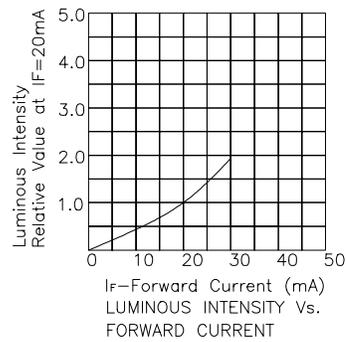
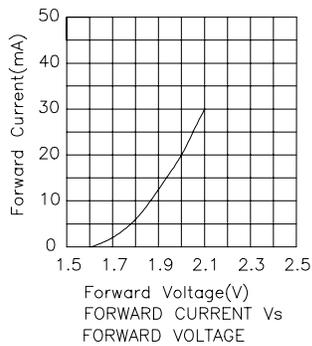
Parameter	High Efficiency Red	Super Bright Green	Yellow	Units
Power dissipation	105	105	105	mW
DC Forward Current	30	25	30	mA
Peak Forward Current [1]	160	140	140	mA
Reverse Voltage	5	5	5	V
Operating/Storage Temperature	-40°C To +85°C			

Note:

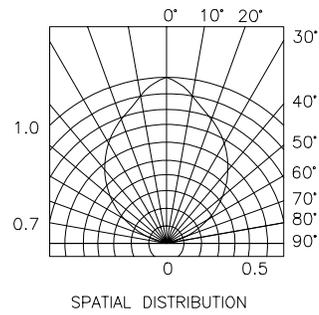
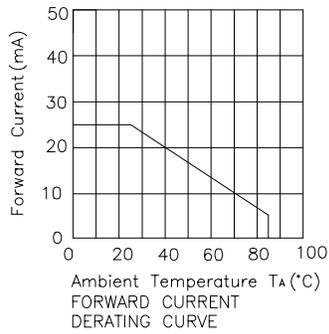
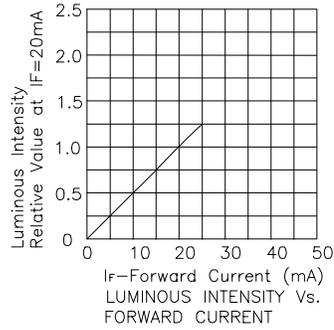
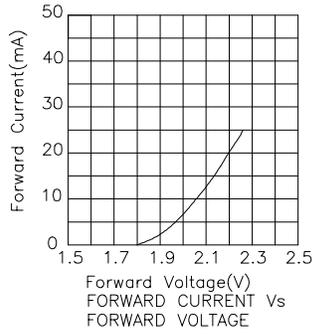
1. 1/10 Duty Cycle, 0.1ms Pulse Width.



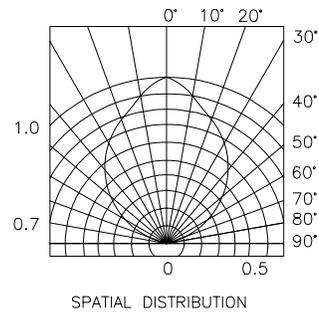
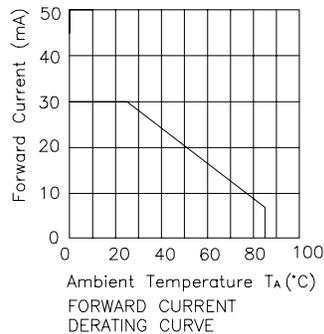
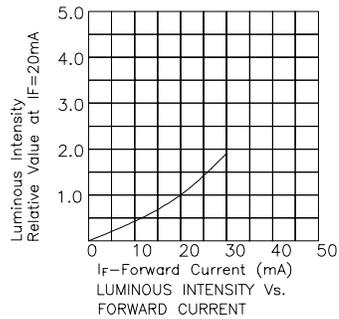
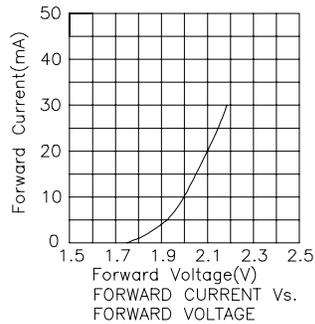
High Efficiency Red KA-3020EC



Super Bright Green KA-3020SGC

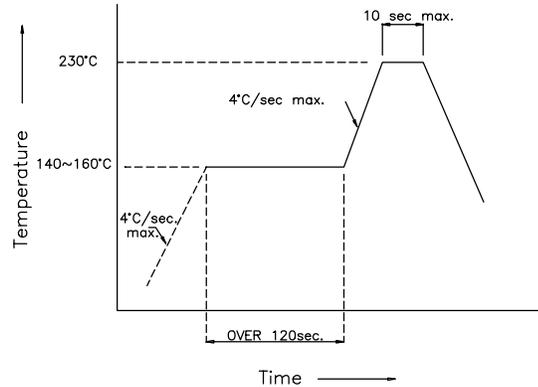


Yellow KA-3020YC

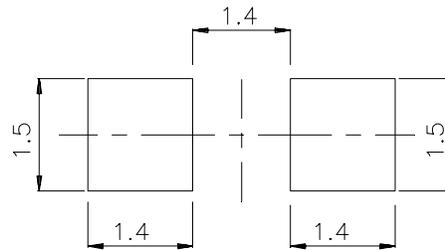


KA-3020 SMT Reflow Soldering Instructions

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)

