

PRELIMINARY SPEC

Part Number: APBDA3020ESGC

High Efficiency Red
Super Bright Green

Features

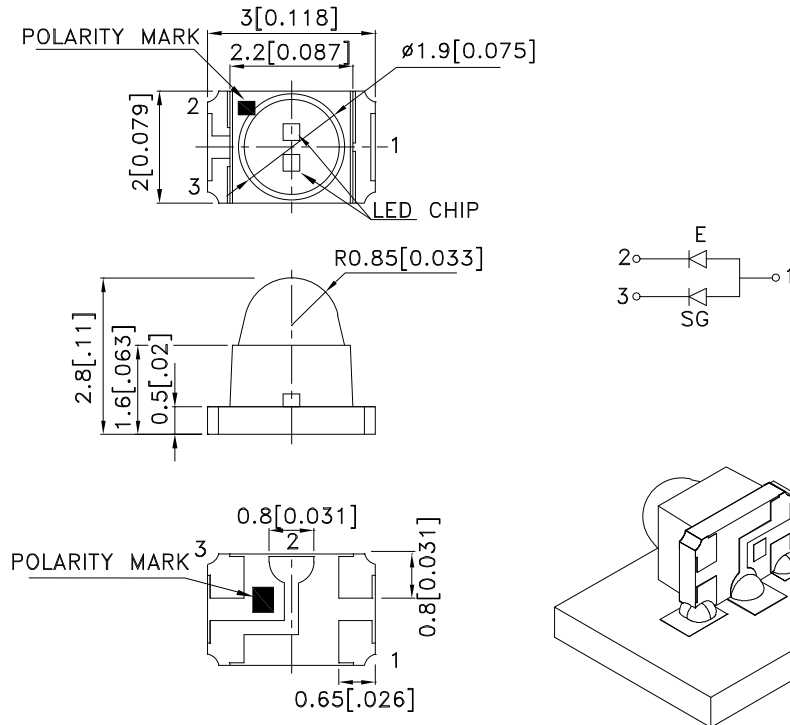
- 3.0mmx2.0mm SMT LED, 2.8mm THICKNESS.
- LOW POWER CONSUMPTION.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- IDEAL FOR BACK LIGHT AND INDICATOR
- PACKAGE : 2000PCS / REEL.
- WHEN SOLDERED IN THE SIDEVIEW CONFIGURATION, THE MAXIMUM SHEAR TOLERANCE OF THE EPOXY LENS IS 300G.
- MOISTURE SENSITIVITY LEVEL : LEVEL 3.
- RoHS COMPLIANT.

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.

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.2 (0.008") unless otherwise noted.
3. Specifications are subject to change without notice.
4. The device has a single mounting surface. The device must be mounted according to the specifications.



Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Typ.	2θ1/2
APBDA3020ESGC	High Efficiency Red (GaAsP/GaP)	WATER CLEAR	4	18	15°
	Super Bright Green (GaP)		4	18	

Notes:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
2. Luminous intensity/ luminous Flux: +/-15%.

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ _{peak}	Peak Wavelength	High Efficiency Red Super Bright Green	627 565		nm	I _F =20mA
λ _D [1]	Dominant Wavelength	High Efficiency Red Super Bright Green	625 568		nm	I _F =20mA
Δλ _{1/2}	Spectral Line Half-width	High Efficiency Red Super Bright Green	45 30		nm	I _F =20mA
C	Capacitance	High Efficiency Red Super Bright Green	15 15		pF	V _F =0V;f=1MHz
V _F [2]	Forward Voltage	High Efficiency Red Super Bright Green	2 2.2	2.5 2.5	V	I _F =20mA
I _R	Reverse Current	High Efficiency Red Super Bright Green		10 10	uA	V _R = 5V

Notes:

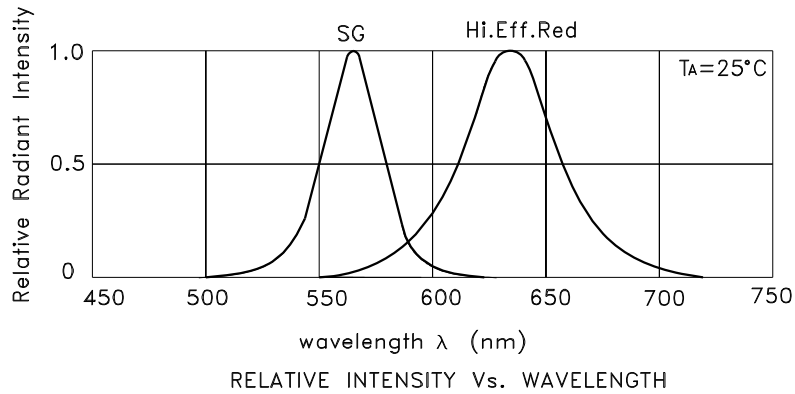
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

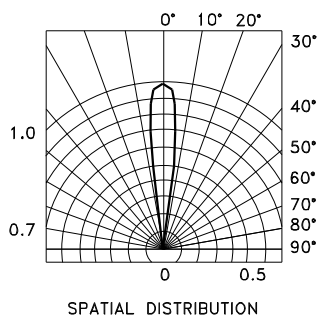
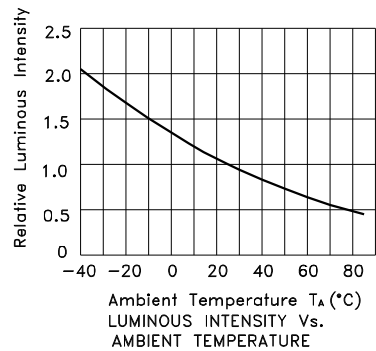
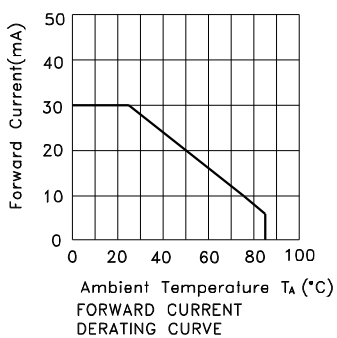
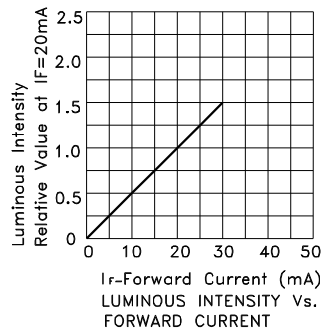
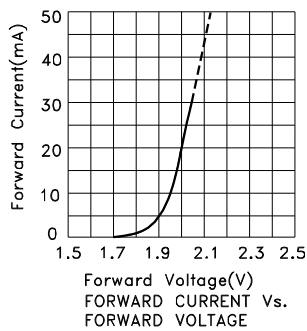
Parameter	High Efficiency Red	Super Bright Green	Units
Power dissipation	75	62.5	mW
DC Forward Current	30	25	mA
Peak Forward Current [1]	160	140	mA
Reverse Voltage	5		V
Operating Temperature	-40°C To +85°C		
Storage Temperature	-40°C To +85°C		

Note:

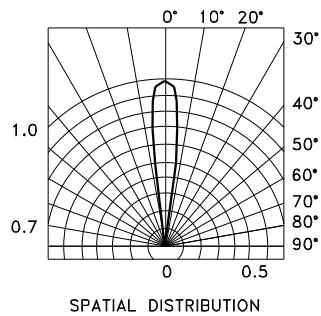
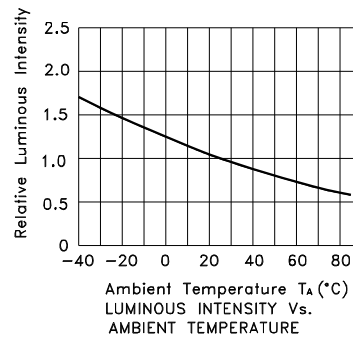
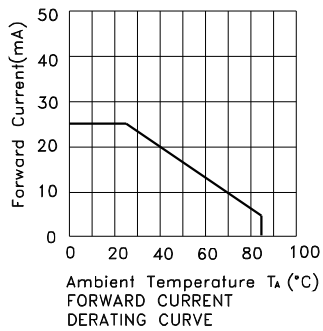
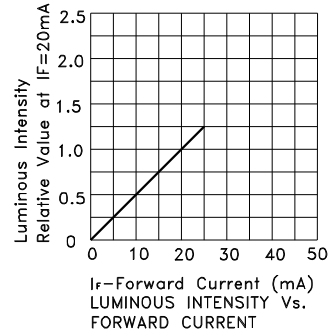
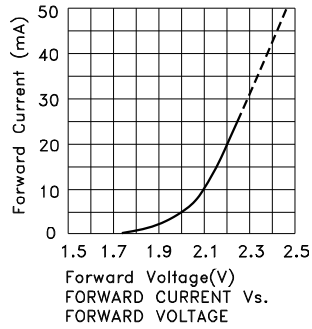
1. 1/10 Duty Cycle, 0.1ms Pulse Width.



APBDA3020ESGC High Efficiency Red



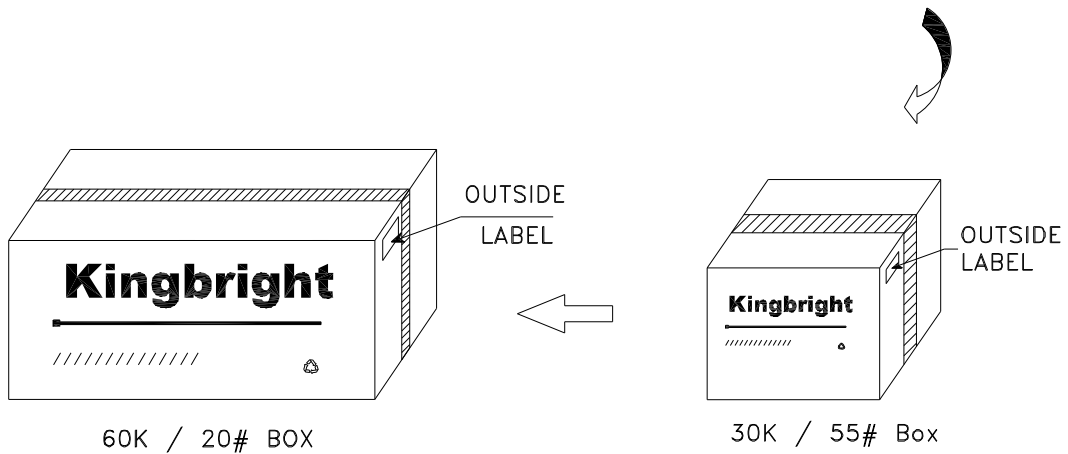
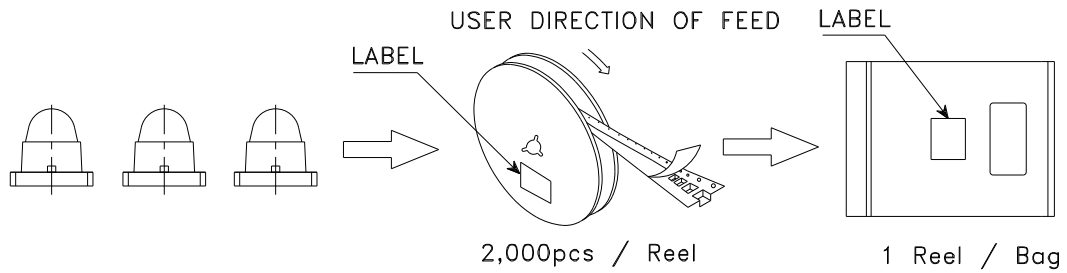
Super Bright Green



Kingbright

PACKING & LABEL SPECIFICATIONS

APBDA3020ESGC



<h2 style="margin: 0;">Kingbright</h2>	
P/NO: APBDA3020xxx	
QTY: 2,000 pcs	Q.C. Q C XX XX XXXX PASSED
S/N: XXXX	
CODE: XXX	
LOT NO:	
<small>XXXXXXXXXXXXXXXXXXXXXXXXXXXX</small>	
RoHS Compliant	