

Specification

CUSTOMER NAME: _____

DIRECTOR: _____ TITLE: _____

CUSTOMER PART NO.: _____

PART NUMBER: **IE-3215BPG-ST-CE** REVISION: **2.0**

ISSUE DATE: **2016/07/22** RETURN DATE: / /



Features

3.2mmx1.6mm SMT LED, 0.90 mm THICKNESS.

_LOW POWER CONSUMPTION.

_WIDE VIEWING ANGLE.

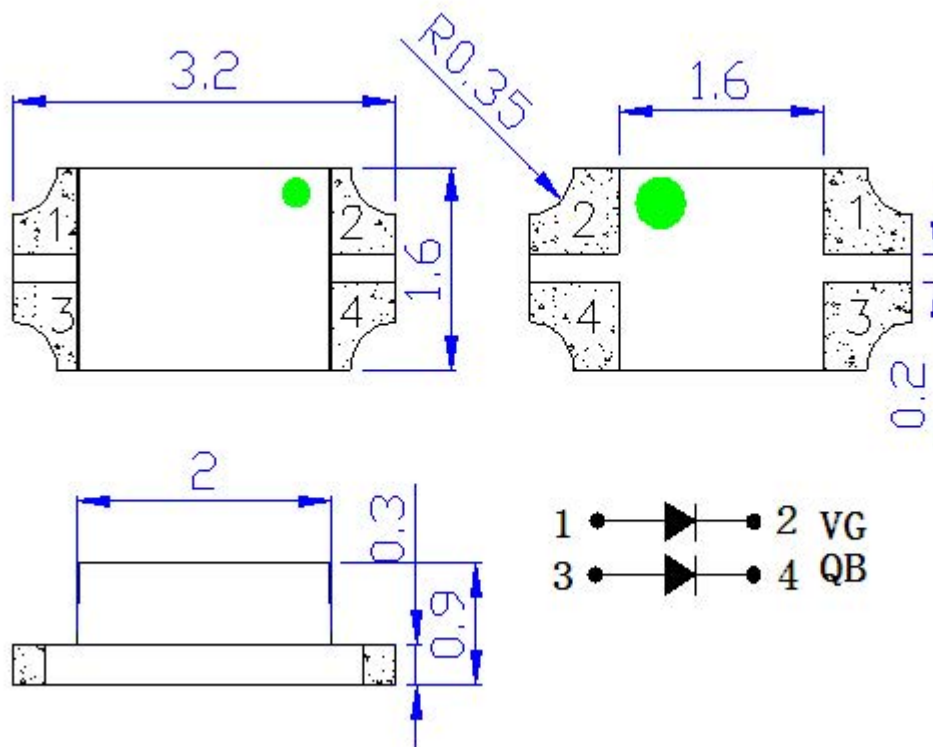
_IDEAL FOR BACKLIGHT AND INDICATOR.

_VARIOUS COLORS AND LENS TYPES AVAILABLE.

_PACKAGE : 3000 PCS / REEL.

_RoHS COMPLIANT.

Package Dimensions



Description

The Blue source color devices are made with GaN on Sapphire Light Emitting Diode.

The Green source color devices are made with InGaN on SiC Light Emitting Diode.

The Hyper Orange source color devices are made with DH InGaAlP on GaAs substrate Light Emitting Diode.

Static electricity and surge damage the LEDs.

It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs.

All devices, equipment and machinery must be electrically grounded.

Emitting Diode.

Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.1 (0.004") unless otherwise noted.
3. Specifications are subject to change without notice.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20mA		Viewing Angle
			Min.	Typ.	2 θ 1/2
IE-3215BPG-ST-CE	BLUE (GaN)	WATER CLEAR	100	200	120
	GREEN (InGaN)		400	600	

Note:

1. θ 1/2 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	Blue Green			nm	IF=20mA
λ_D	Dominant Wavelength	Blue Green	466 518 620	472 524 625	nm	IF=20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Blue Green	25 38 20		nm	IF=20mA
C	Capacitance	Blue Green	100 45 25		pF	V _F =0V;f=1MHz
V _F	Forward Voltage	Blue Green	2.9 2.9	3.3 3.3	V	IF=20mA
I _R	Reverse Current	Blue Green		2 2 2	uA	V _R = 5V

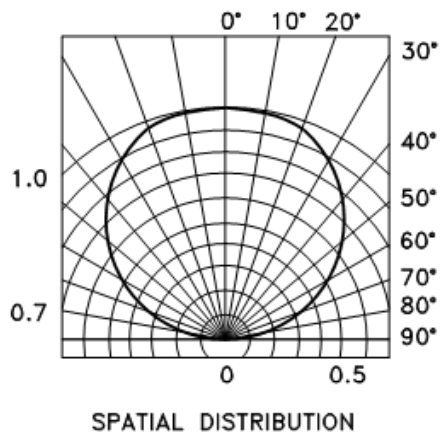
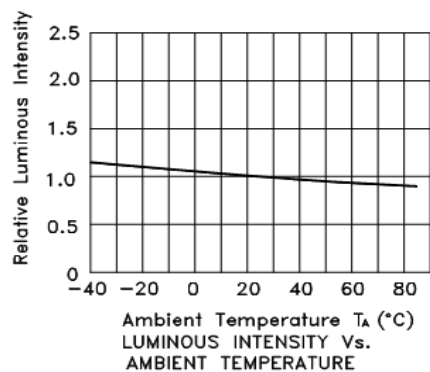
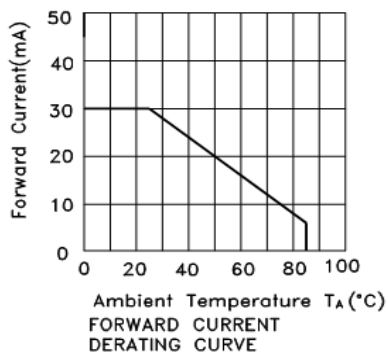
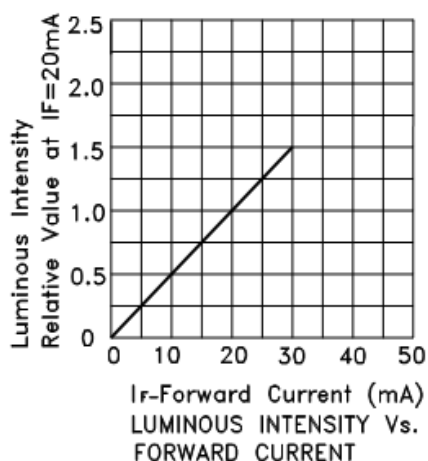
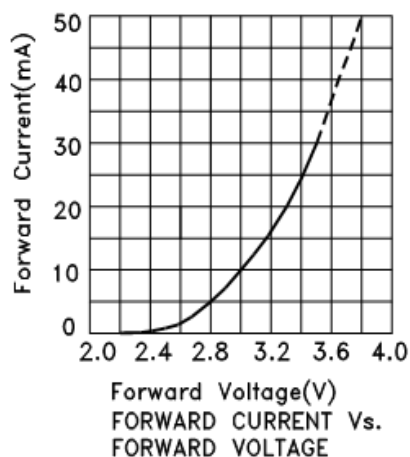
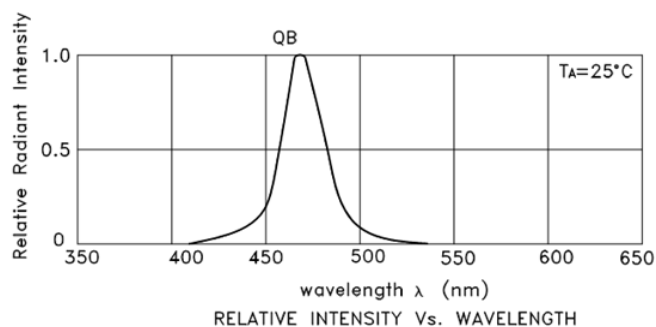
Absolute Maximum Ratings at T_A=25°C

Parameter	Blue	Green	Red	Units
Power dissipation	135	135	75	mW
DC Forward Current	30	30	30	mA
Peak Forward Current [1]	135	135	80	mA
Reverse Voltage	5	5	5	V
Operating/Storage Temperature	-40°C To +85°C			

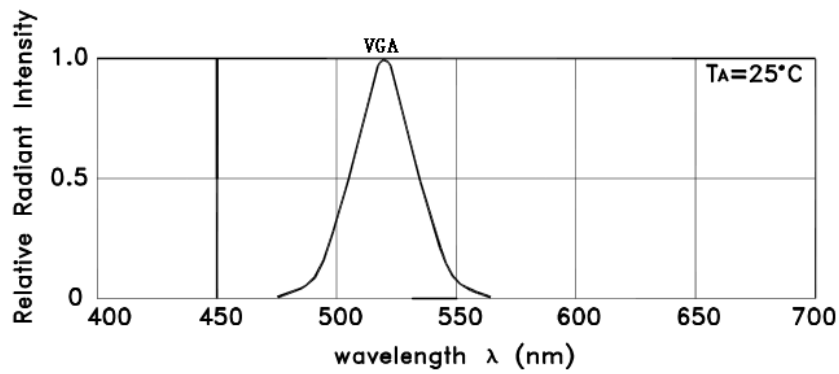
Note:

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

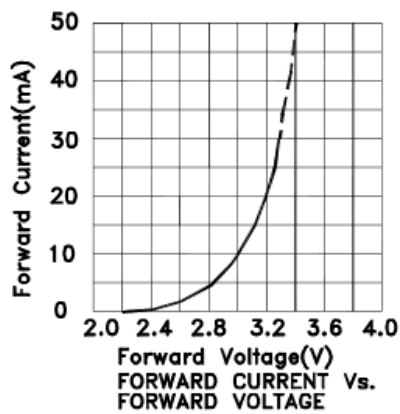
Blue



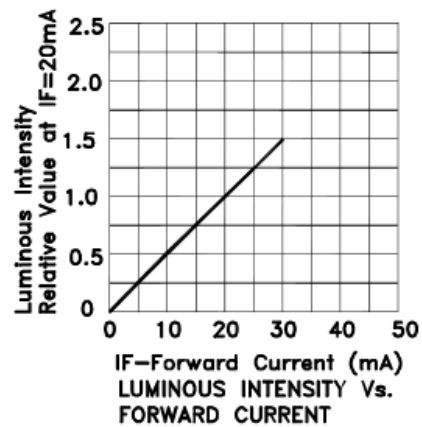
Green



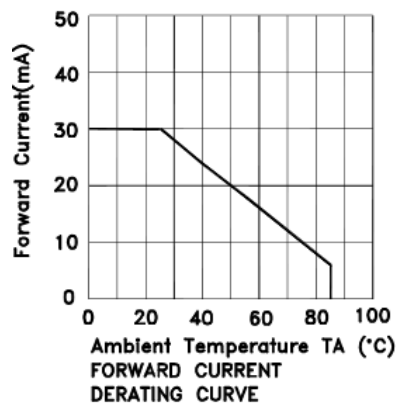
RELATIVE INTENSITY Vs. WAVELENGTH



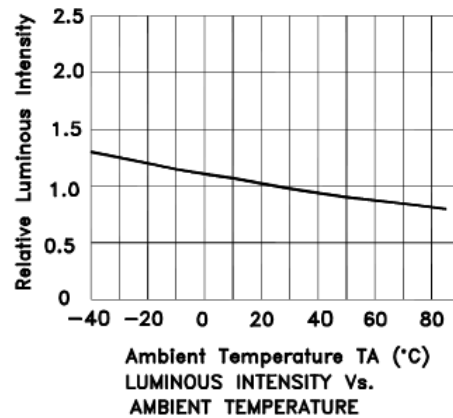
FORWARD CURRENT Vs. FORWARD VOLTAGE



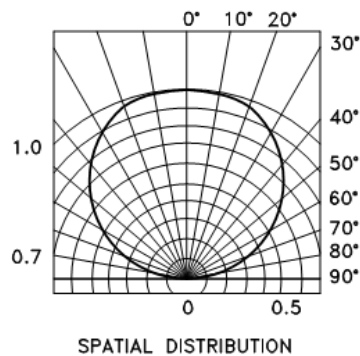
LUMINOUS INTENSITY Vs. FORWARD CURRENT



FORWARD CURRENT DERATING CURVE



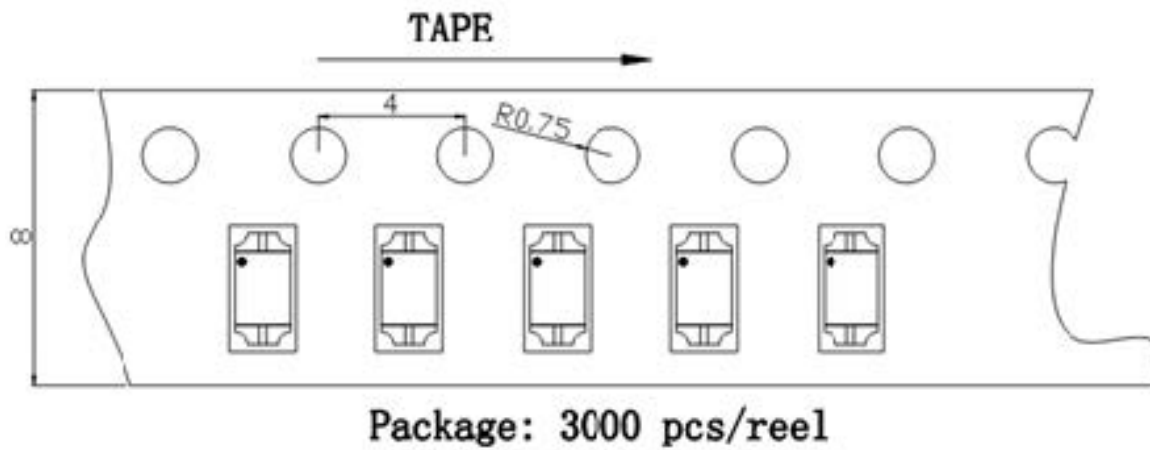
LUMINOUS INTENSITY Vs. AMBIENT TEMPERATURE



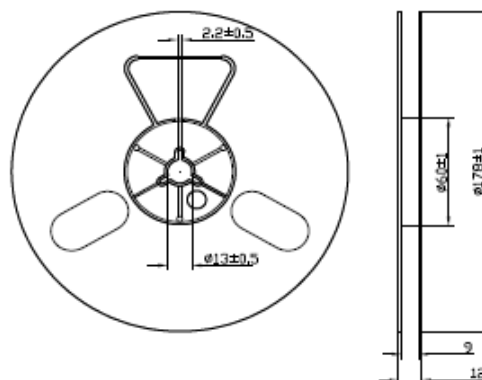
SPATIAL DISTRIBUTION

PACKAGING

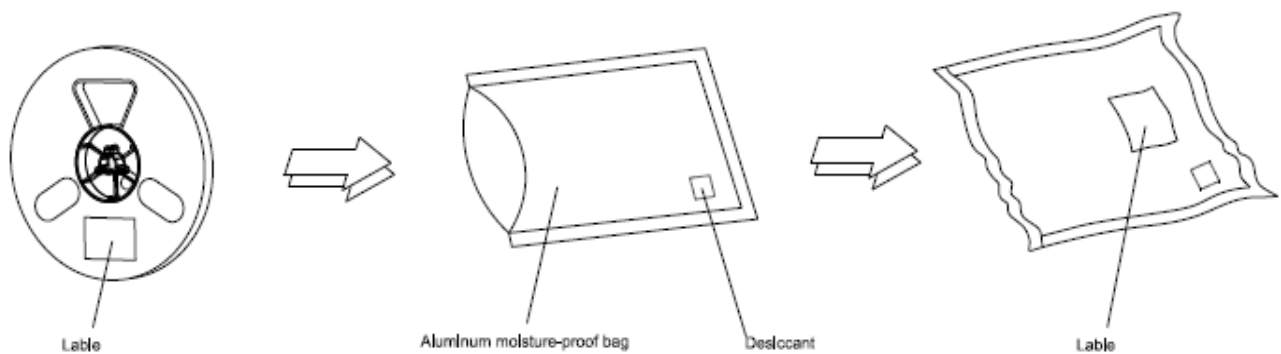
The LEDs are packed in cardboard boxes after taping.



Reel Dimensions



Moisture Resistant Packaging



Note: The tolerances unless mentioned is $\pm 0.1\text{mm}$, Unit: mm