

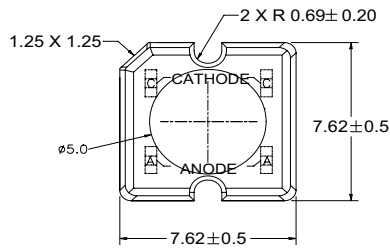


BVZ-922WI4

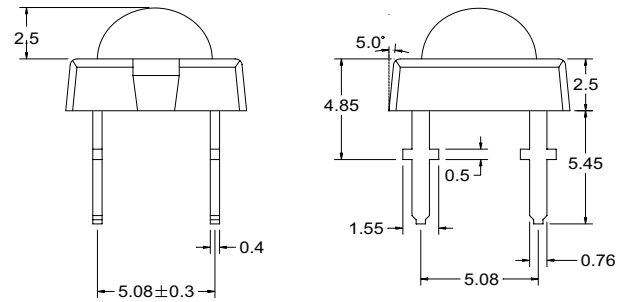
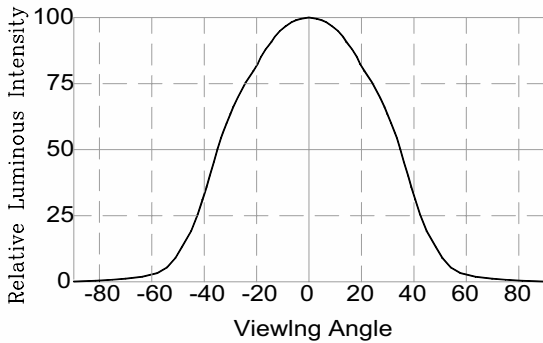
PACKAGE CONFIGURATION

DESCRIPTION

Dice Material : GaN Blue
Light Color : White Color
Lens Color : Water Transparent
ESD : 2000V (HBM)



RADIATION PATTERN



Tolerance ± 0.25 mm

ABSOLUTE MAXIMUM RATINGS AT Ta = 25 °C

PARAMETER	MAX.	UNIT
Power Dissipation	120	mW
Continuous Forward Current	30	mA
Peak Forward Current (1/10 Duty Cycle , 0.1ms Pulse Width)	100	mA
Reverse Voltage	5	V
Derating Linear From 25°C	0.4	mA/°C
Operating Temperature Range	-30 to + 80	°C
Storage Temperature Range	-55 to + 100	°C
LED Junction Temperature	125	°C
Soldering Preheat Temperature	100 °C for 30 seconds	
Lead Solder Temperature (1.5mm Below Seating Plane)	260 °C for 5 seconds	

ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta = 25 °C

SYMBOL	PARAMETER	TEST COND.	MIN.	TYP.	MAX.	UNIT
V _F	Forward Voltage	I _F = 30mA		3.2	4	V
I _R	Reverse Current	V _R = 5V			10	μA
2θ _{1/2}	Viewing Angle	I _F = 30mA		70		Deg
I _V /Φ _V	Luminous Intensity / Total Flux			1		cd/lm
R _{θj-pin}	Thermal Resistance			125		°C/W

BIN GRADE LIMITS (I F = 30 mA) CHROMATICITY COORDINATES

WA	x	0.26	0.26	0.29	0.29	WC	x	0.32	0.32	0.35	0.35
	y	0.24	0.28	0.32	0.28		y	0.33	0.37	0.41	0.37
WB	x	0.29	0.29	0.32	0.32	WD	x	0.35	0.35	0.38	0.38
	y	0.28	0.32	0.37	0.33		y	0.37	0.41	0.45	0.41

One delivery will include three different ranks of products.

Measurement Uncertainty of the color coordinates : ±0.02

BIN GRADE LIMITS (I F = 30 mA) Total Flux / lm

Bin	E	F	G	H	I	J
Min.	2.2	2.8	3.6	4.7	6.0	7.8
Max.	2.8	3.6	4.7	6.0	7.8	10.0

Tolerance ± 15%lm

*These products are sensitive to static electricity. Caution must be taken strictly to avoid static electricity.

*Bright View reserves the rights to alter specifications and remove availability of products at any time without notice.

*Chromaticity Coordinates,x,y is according to CIE Chromaticity Diagram base on color of the device.

* θ 1/2 is the off-axis angle where the luminous intensity is one half the on-axis intensity.



BVZ-922WI4

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

FIG. 1 Forward Current vs. Forward Voltage
($T_a = 25^\circ\text{C}$)

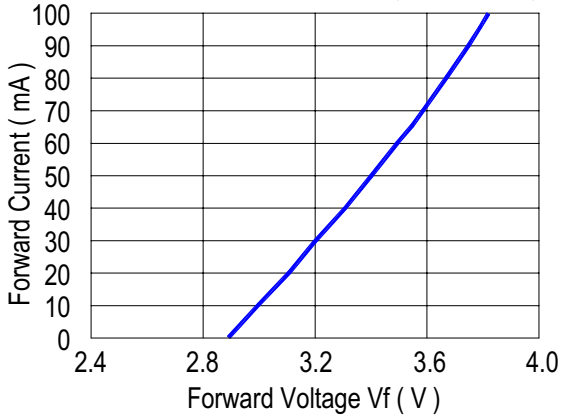


FIG. 2 Relative Total Flux vs. Forward Current
($T_a = 25^\circ\text{C}$)

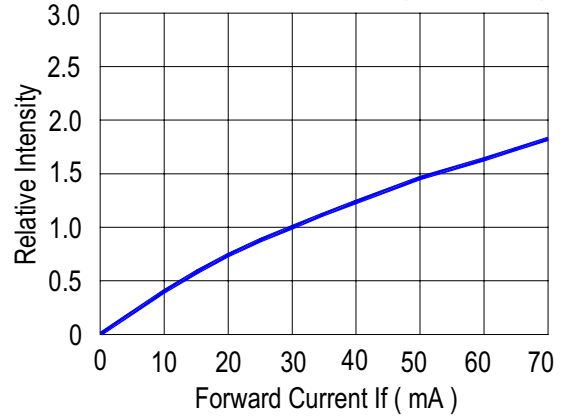


FIG. 3 Forward Voltage vs. Temperature

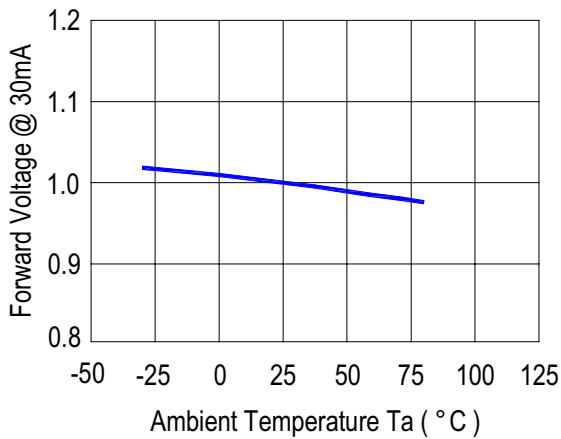


FIG. 4 Relative Intensity vs. Temperature

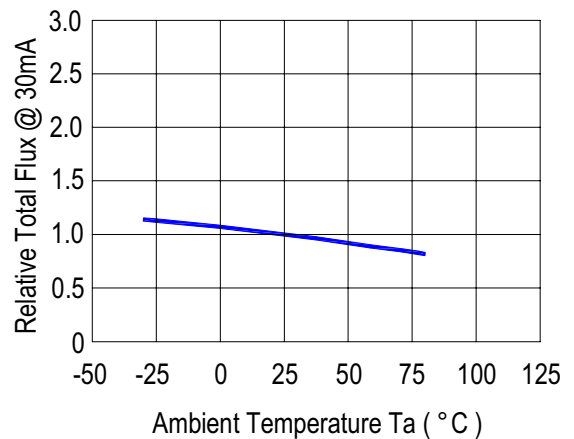


FIG. 5 Relative Intensity vs. Wavelength (λ_p)
($T_a = 25^\circ\text{C}$)

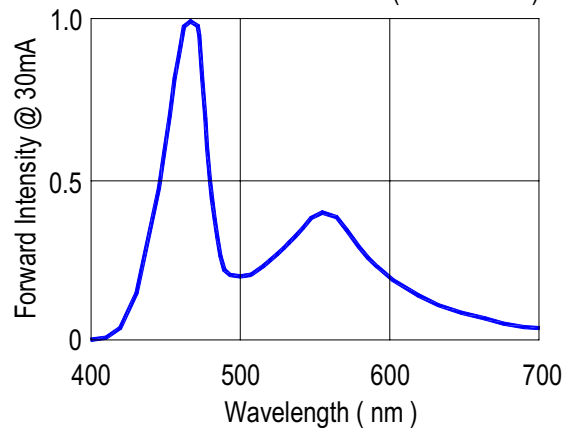
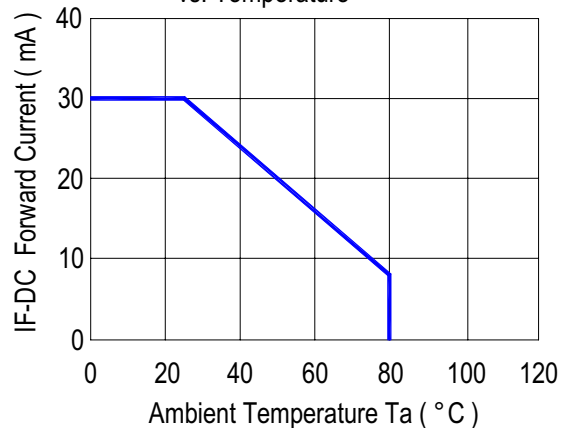


FIG. 6 Maximum Forward Current
vs. Temperature





BRIGHT VIEW
ELECTRONICS CO.,LTD

CAUTION FOR CLASS 1 ESD (MACHINE MODE)

Gallium Nitride (GaN) based light emitting diodes (LEDs) are extremely sensitive to electrostatic discharge (ESD). Users are strongly recommended to take necessary meter to test the static and avoid ESD when handling these products.

Bright View's BA, GN, WI series products are GaN based materials and are classified as "Class 1", (ESD endurance 50V or lower), any manufacturing site or workstation where GaN devices are handled should be rated and controlled at 50V or below.

Proper grounding of products or machines (via $1M\Omega$), using static dissipative mats, static dissipative containers, static dissipative working uniforms and shoes are considered to be effective against ESD.

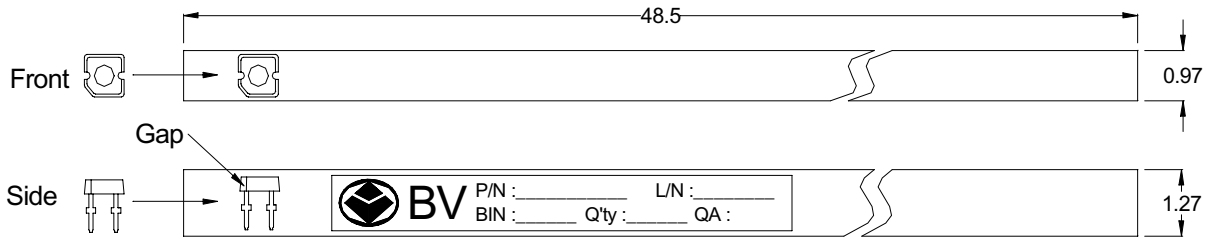
An ionizer is recommended in the facility or environment where ESD may be generated easily, and soldering iron with a grounded tip is also recommended.

To install a protection device in the LED circuit to ensure the surge current and voltage not exceeding the max rating during on/off switching.

When inspecting the final products in which LEDs are assembled, it is recommended to check whether the assembled LEDs are damaged by ESD or not. It is simple to find damaged LEDs by light-on or a VF test at lower current (below 1mA is recommended).

EDS damaged LEDs will show some unusual characteristics such as the remarkable increasing of leak current, the forward voltage become lower, or the LEDs do not light on at the low current.

DOC. NO.:S-QW-K011
2006/03/17 -A



Tube
Dimension(cm): 1.27* 0.97* 48.5
60PCS / Tube

BOX
Dimension(cm): 10.5 * 13.5 * 50.5
100 Tubes / Box
Box : 6,000PCS

Bright View Electronics Co.,Ltd.

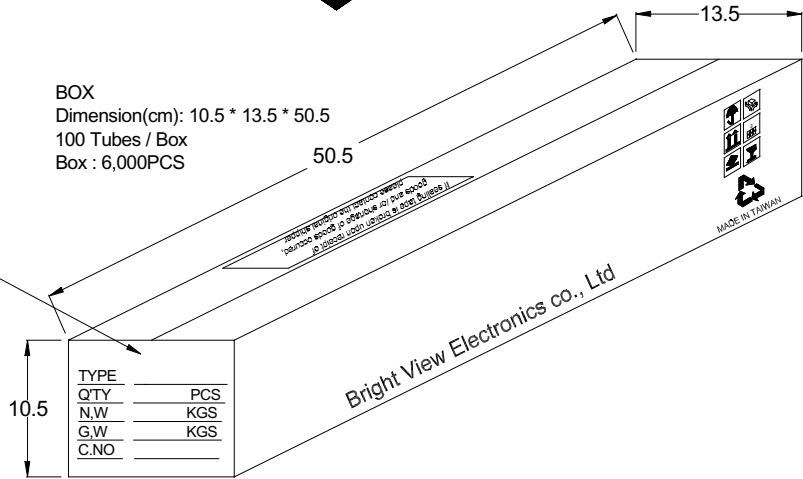
PART NO.: BVZ-91XXXX

LOT NO.:

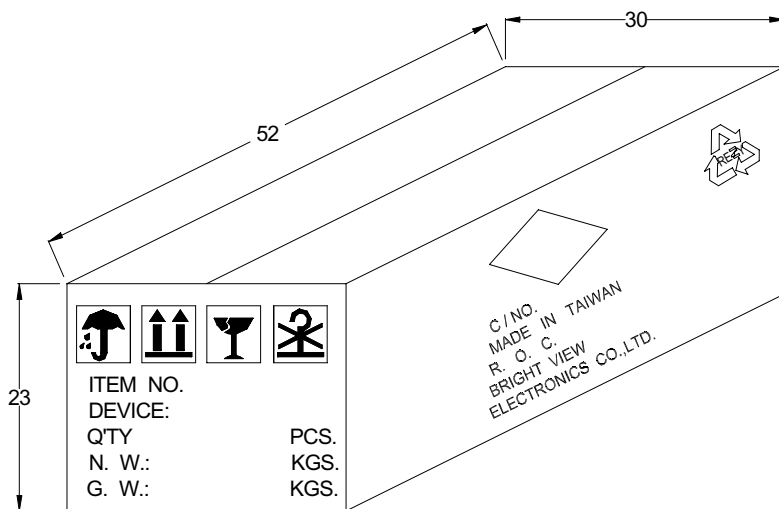
GRADE: X- Δ ■

Q'ty pcs QA

X: Bin grade
Δ: Wavelength
■: Vf



CARTON
Dimension(cm): 23*30*52



4 Boxes / Carton
Total : 24,000PCS