

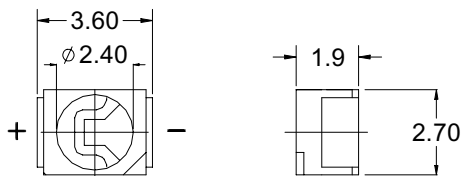


## BVS-301UG4#

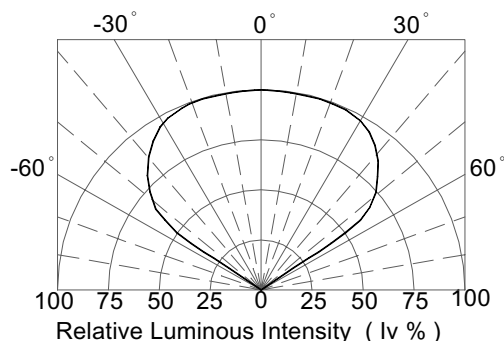
## PACKAGE CONFIGURATION

### DESCRIPTION

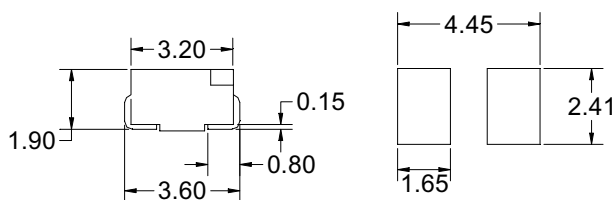
Dice Material : AlGaInP/GaAs Yellow Green  
Light Color : Yellow Green Color  
Lens Color : Water Transparent



### RADIATION PATTERN



### INFRARED/VAPOR PHASE REFLOW SOLDERING



Tolerance  $\pm 0.25$  mm

### ABSOLUTE MAXIMUM RATINGS AT Ta = 25 °C

| PARAMETER                                                    | MAX.         | UNIT  |
|--------------------------------------------------------------|--------------|-------|
| Power Dissipation                                            | 65           | mW    |
| Continuous Forward Current                                   | 25           | mA    |
| Peak Forward Current ( 1/10 Duty Cycle , 0.1ms Pulse Width ) | 80           | mA    |
| Reverse Voltage                                              | 5            | V     |
| Derating Linear From 50 °C                                   | 0.35         | mA/°C |
| Operating Temperature Range                                  | -40 to + 100 | °C    |
| Storage Temperature Range                                    | -40 to + 100 | °C    |
| Infrared Soldering Condition 230 °C for 40 seconds           |              |       |

### ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta = 25 °C

| SYMBOL            | PARAMETER                | TEST COND.             | MIN. | TYP. | MAX. | UNIT |
|-------------------|--------------------------|------------------------|------|------|------|------|
| V <sub>F</sub>    | Forward Voltage          | I <sub>F</sub> = 10 mA |      | 1.9  | 2.5  | V    |
| V <sub>F</sub>    | Forward Voltage          | I <sub>F</sub> = 20 mA |      | 2    | 2.6  | V    |
| I <sub>R</sub>    | Reverse Current          | V <sub>R</sub> = 5V    |      |      | 100  | μA   |
| λ <sub>p</sub>    | Peak Emission Wavelength | I <sub>F</sub> = 20 mA |      | 575  |      | nm   |
| λ <sub>d</sub>    | Dominant Wavelength      | I <sub>F</sub> = 20 mA |      | 572  |      | nm   |
| 2θ <sub>1/2</sub> | Viewing Angle            | I <sub>F</sub> = 20 mA |      | 110  |      | Deg  |

### BIN GRADE LIMITS ( I<sub>F</sub> = 10 mA ) LUMINOUS INTENSITY / mcd

| Device | <input type="checkbox"/> BVS-301UG4C |    |    | <input type="checkbox"/> BVS-301UG4D |    |     | <input type="checkbox"/> BVS-301UG4E |     |     | <input type="checkbox"/> BVS-301UG4F |     |     |
|--------|--------------------------------------|----|----|--------------------------------------|----|-----|--------------------------------------|-----|-----|--------------------------------------|-----|-----|
| Bin    | u                                    | v  | w  | x                                    | y  | z   | A                                    | B   | C   | D                                    | E   | F   |
| Min.   | 22                                   | 28 | 36 | 47                                   | 60 | 78  | 100                                  | 130 | 168 | 218                                  | 280 | 360 |
| Max.   | 28                                   | 36 | 47 | 60                                   | 78 | 100 | 130                                  | 168 | 218 | 280                                  | 360 | 465 |

Tolerance  $\pm 15\%$  mcd

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

\*Dominant Wavelength, λ<sub>d</sub> is according to CIE Chromaticity Diagram base on color of lamps.

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