



Specification for Approval

- DEVICE NUMBER: BL-C34/2GYW-71K-LC3.2
- CUSTOMER:

SAMPLES
ATTACHED AREA

| DATE | PAGE | | | | | | | | | | | CONTENTS | |
|----------|------|-----|-----|-----|--|--|--|--|--|--|--|----------|-------------------|
| | 1 | 2 | 3 | 4 | | | | | | | | | |
| 2019/4/1 | 1.0 | 1.0 | 1.0 | 1.0 | | | | | | | | | Original Released |
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FOR CUSTOMER'S APPROVAL STAMP OR SIGNATURE

| APPROVED | PURCHASE | MANUFACTURE | QUALITY | ENGINEERING |
|----------|----------|-------------|---------|-------------|
| | | | | |

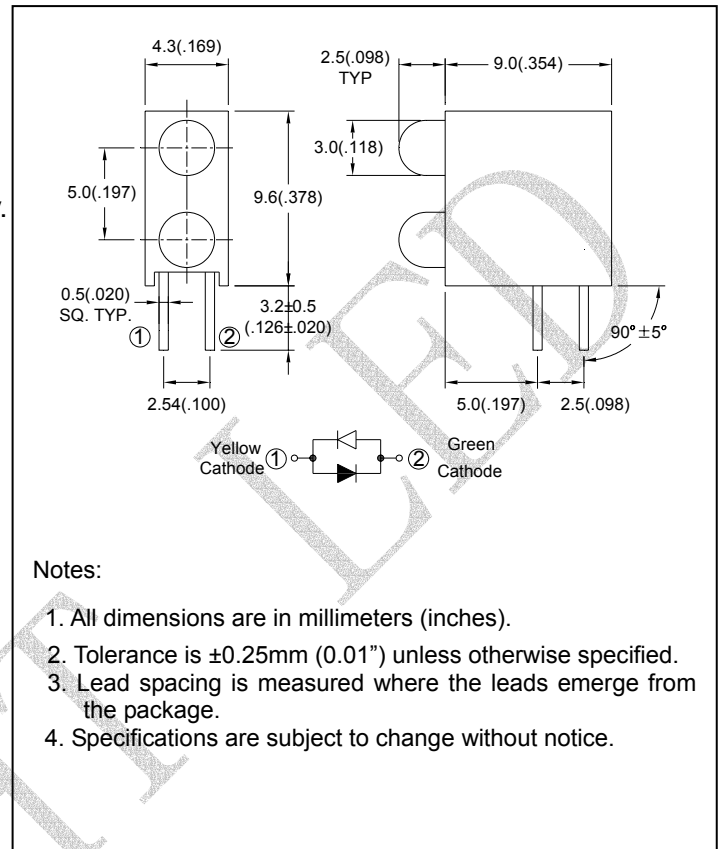
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| ISSUED | APPROVED | PREPARED |
|--------|----------|----------|
| | | |

● Features:

1. Chip material: GaP/GaP (Green)
and GaAsP/GaP(Yellow)
2. Emitted color : Green and Yellow
3. Lens Appearance : White Diffused
4. Designed for ease in circuit board assembly.
5. Black case enhance contrast ratio.
6. Solid state light source.
7. Reliable and rugged.
8. This product don't contained restriction substance, compliance RoHS standard.

● Package Dimensions:



● Applications:

1. TV set
2. Monitor
3. Telephone
4. Computer
5. Circuit board

● Absolute Maximum Ratings($T_a=25^\circ\text{C}$)

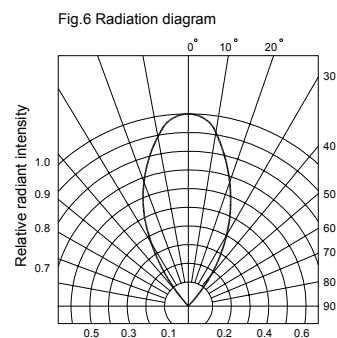
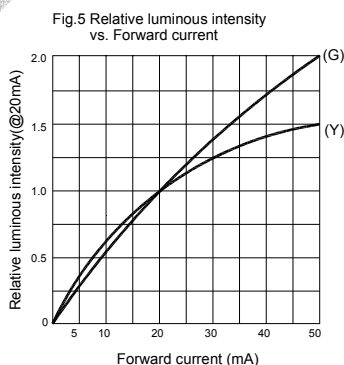
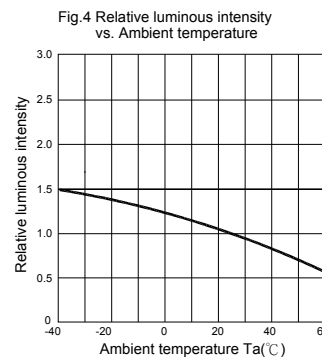
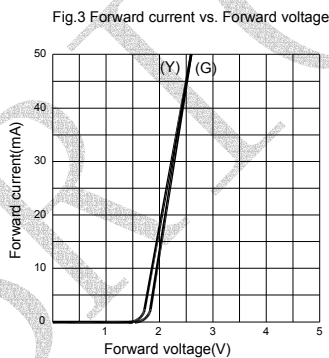
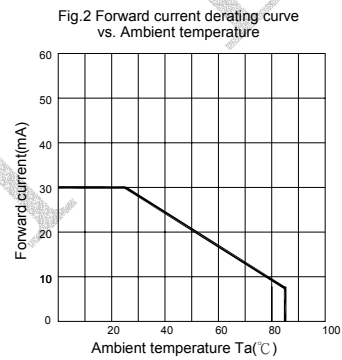
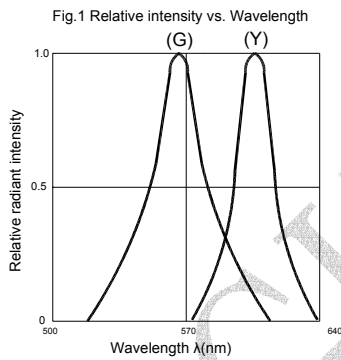
| Parameter | Symbol | Red | Green | Unit |
|------------------------------------|-----------|--------------|-------|------|
| Power Dissipation | P_d | 80 | 80 | mW |
| Forward Current | I_F | 30 | 30 | mA |
| Peak Forward Current* ¹ | I_{FP} | 150 | 150 | mA |
| Operating Temperature | T_{opr} | -40°C ~ 85°C | | |
| Storage Temperature | T_{stg} | -40°C ~ 85°C | | |

*¹ Condition for I_{FP} is pulse of 1/10 duty and 0.1msec width.

● Electrical and optical characteristics(Ta=25°C)

| Parameter | Symbol | Condition | Color | Min. | Typ. | Max. | Unit |
|--------------------------|-----------------|-------------------|-----------------|------------|------------|------------|---------------|
| Forward Voltage | V_F | $I_F=20\text{mA}$ | Green Yellow | - | 2.2 2.1 | 2.6 2.6 | V |
| Luminous Intensity | I_v | $I_F=20\text{mA}$ | Green Yellow | - | 10 8 | - | mcd |
| Reverse Current | I_R | $V_R=5\text{V}$ | Green Yellow | - | - | 100 | μA |
| Peak Wave Length | λ_p | $I_F=20\text{mA}$ | Green Yellow | - | 568 585 | - | nm |
| Dominant Wave Length | λ_d | $I_F=20\text{mA}$ | Green Yellow | 564 580 | - | 574 595 | nm |
| Spectral Line Half-width | $\Delta\lambda$ | $I_F=20\text{mA}$ | Green Yellow | - | 30 35 | - | nm |
| Viewing Angle | $2\theta_{1/2}$ | $I_F=20\text{mA}$ | Green Yellow | - | 55 | - | deg |

● Typical Electro-Optical Characteristics Curves





● Reliability Test

| Classification | Test Item | Reference Standard | Test Conditions | Result |
|--------------------|--|---|--|--------|
| Endurance Test | Operation Life | MIL-STD-750:1026 MIL-STD-883:1005 JIS-C-7021 :B-1 | I _F =20mA Ta=+25°C±5°C Test time=1,000hrs | 0/32 |
| | High Temperature High Humidity Storage | MIL-STD-202:103B JIS-C-7021 :B-11 | Ta=+85°C±5°C RH=90%-95% Test time=240hrs | 0/32 |
| | High Temperature Storage | MIL-STD-883:1008 JIS-C-7021 :B-10 | High Ta=+85°C±5°C Test time=1,000hrs | 0/32 |
| | Low Temperature Storage | JIS-C-7021 :B-12 | Low Ta=-45°C±5°C Test time=1,000hrs | 0/32 |
| Environmental Test | Temperature Cycling | MIL-STD-202:107D MIL-STD-750:1051 MIL-STD-883:1010 JIS-C-7021 :A-4 | Ta: +85°C (30min) ~ +25°C (5min) ~ -45°C (30min) ~ +25°C (5min) Test Time : 70min/cycle 10cycle | 0/32 |
| | Thermal Shock | MIL-STD-202:107D MIL-STD-750:1051 MIL-STD-883:1011 | -45°C±5°C ~+85°C±5°C 20min 20min Test Time=10cycle | 0/32 |
| | Solder Resistance | MIL-STD-202:201A MIL-STD-750:2031 JIS-C-7021 :A-1 | Preheating : 120°C, within 120-180 sec. Operation heating : 255°C±5°C within 5 sec. 260°C (Max) | 0/32 |
| | Solderability | MIL-STD-202F:208D MIL-STD-750D:2026 MIL-STD-883D:2003 JIS C 7021:A-2 | T.sol=230±5°C Dwell Time=5±1secs | 0/32 |

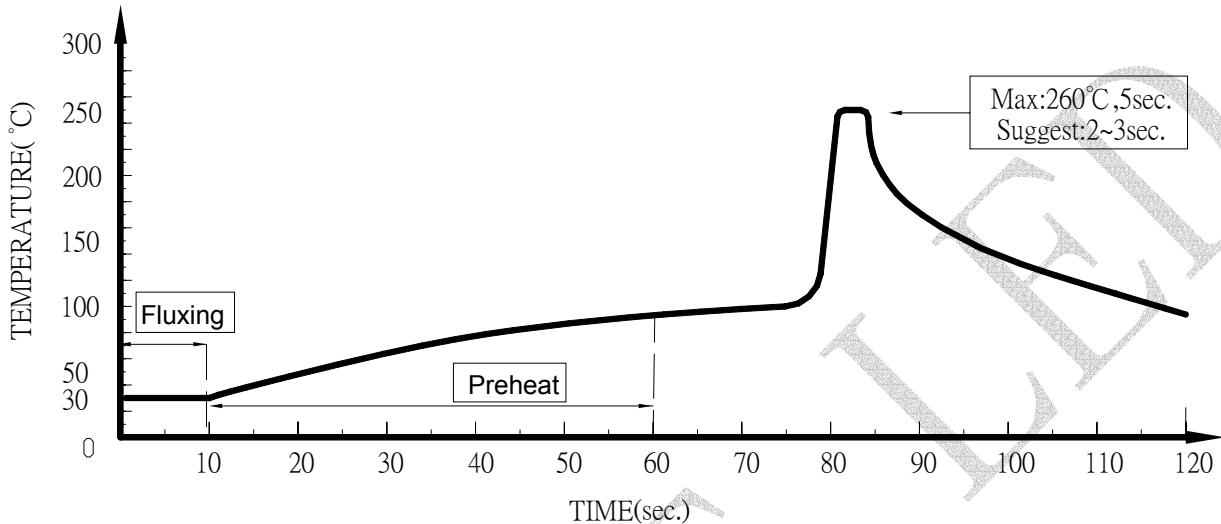
● Judgment criteria of failure for the reliability

| Measuring items | Symbol | Measuring conditions | Judgment criteria for failure |
|--------------------|-----------------------|----------------------|-------------------------------|
| Forward voltage | V _F (V) | I _F =20mA | Over U ¹ x1.2 |
| Reverse current | I _R (uA) | V _R =5V | Over U ¹ x2 |
| Luminous intensity | I _v (mcd) | I _F =20mA | Below S ¹ X0.5 |

Note: 1. U means the upper limit of specified characteristics. S means initial value.

2. Measurement shall be taken between 2 hours and after the test pieces have been returned to normal ambient conditions after completion of each test.

● Dip Soldering

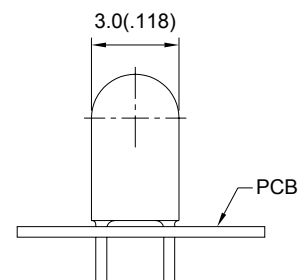


1. Please avoid any external stress applied to the lead-frames and epoxy while the LEDs are at high temperature, especially during soldering
2. DIP soldering and hand soldering should not be done more than one time.
3. After soldering, avoid the epoxy lens from mechanical shock or vibration until the LEDs are back to room temperature.
4. Avoid rapid cooling during temperature ramp-down process
5. Although the soldering condition is recommended above, soldering at the lowest possible temperature is feasible for the LEDs

● IRON Soldering

A : Max : 350°C Within 3 sec. One time only.

B : For 3mm LED without flange, if the LED epoxy lays flat on the PCB, the welding condition is 350°C within 2 seconds, one time only.



单击下面可查看定价，库存，交付和生命周期等信息

[>>BRT\(佰鸿工业\)](#)