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| BF5H02G-NPT | C     | 2022/02/24 | 1/3  |

# APPROVAL SHEET

Part No: **BF5H02G-NPT**

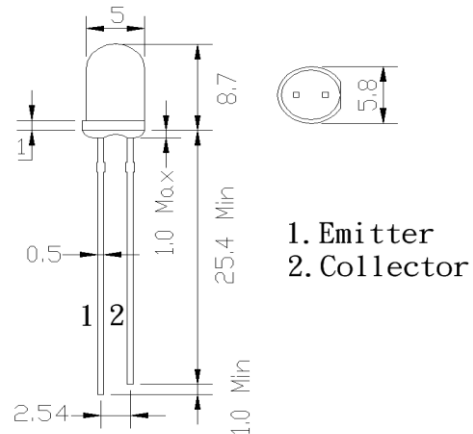
NOTE : Green Part

| MAKER   |   |   | CUSTOMER |          |
|---|---|---|----------|----------|
|  |   |   |          |          |
| R&D   | QA  | Sales   | Checked  | Approved |
|  |  |  |          |          |

|            |         |            |
|------------|---------|------------|
| Prepared   | Checked | Approved   |
| Rachel Lee | Sky Lin | Kenneth Wu |

DESCRIPTION:

Device Type : BF5H02G-NPT  
 Dice Material : Silicon  
 Lens Color : Black  
 Lens Dimension : 5 mm



All epoxy resin dimension are in millimeter  
 tolerance is  $\pm 0.2\text{mm}$

Absolute Maximum Ratings at  $T_a=25^\circ\text{C}$

| Parameter   | Symbol | Rating.    | Unit             |
|---|--------|------------|------------------|
| Power dissipation   | Pd     | 75         | mW               |
| Operating Temperature   | Topr   | -40 ~ +80  | $^\circ\text{C}$ |
| Storage Temperature   | Tstr   | -40 ~ +100 | $^\circ\text{C}$ |
| Solder DIP (MAX. 5 seconds, 1.6mm from body) Temperature 260 $^\circ\text{C}$ |        |            |                  |

Electrical and Optical Characteristics at  $T_a=25^\circ\text{C}$

| Description               | Symbol        | Condition   | Min. | Typ. | Max. | Unit          |
|---------------------------|---------------|---|------|------|------|---------------|
| Range of Spectral Bandwid | Wp            |   | 750  | -    | 1100 | nm            |
| Peak sensitive wavelength | Wp            |   | -    | 940  | -    | nm            |
| C-E breakdown voltage     | $BV_{CEO}$    | $I_C=100\mu\text{A}$                                | 30   | -    | -    | V             |
| E-C breakdown voltage     | $BV_{ECO}$    | $I_E=100\mu\text{A}$                                | 5    | -    | -    | V             |
| Collector dark current    | $I_{CEO}$     | $V_{CE}=20\text{V}$                                 | -    | -    | 100  | nA            |
| Light Current             | $I_L$         | $E_e=1\text{mW}/\text{C m}^2$<br>$V_{CE}=5\text{V}$ | 0.7  | -    | -    | mA            |
| C-E saturation voltage    | $V_{CE(sat)}$ | $I_C=2\text{mA}/I_B=100\mu\text{A}$                 | -    | -    | 0.2  | V             |
| Rise Time                 | $t_r$         | $V_{CE}=5\text{V}$<br>$I_C=1\text{mA}$              | -    | 15   | -    | $\mu\text{s}$ |
| Fall Time                 | $t_f$         | $R_L=1000\Omega$                                    | -    | 15   | -    |               |

Note: 1.The lead should be formed up to 5mm from the body of device without forming stress.

2. Soldering shall be performed after lead forming.

3. All dimensions are in millimeters

## LED LAMP Technical Data

### Typical Optical-Electrical Characteristic Curves

