



## SINGLE COLOR LED

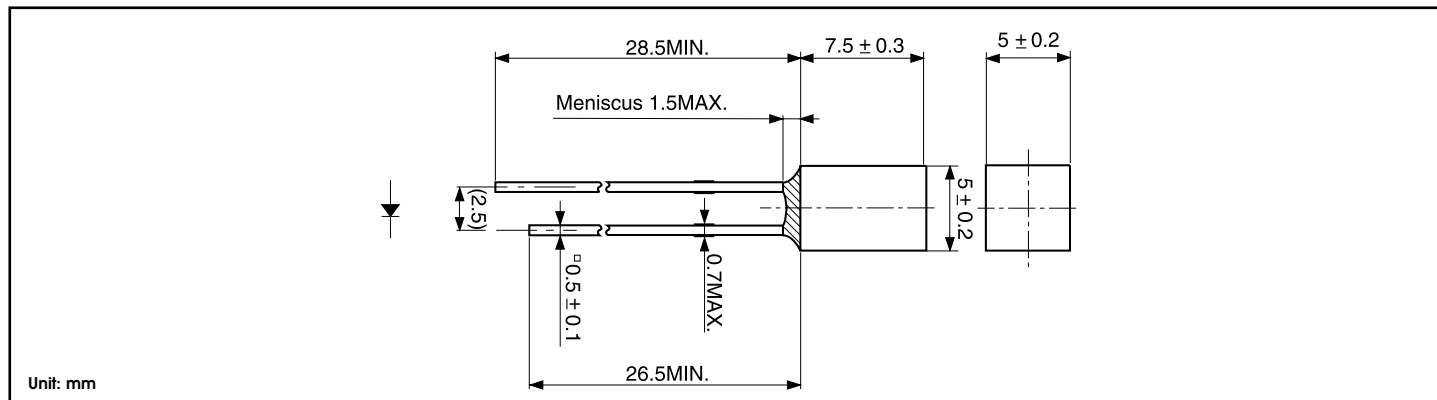
5 x 5mm Rectangular Shape



### 5353K Series

S T A N D A R D C O L O R

#### Outline Dimensions



#### Absolute Maximum Ratings

(Ta=25°C)

| Item                  | Symbol          | Red         |      |     | Orange | Yellow | Yellow Green | Green | Pure Green | Units |
|-----------------------|-----------------|-------------|------|-----|--------|--------|--------------|-------|------------|-------|
|                       |                 | BR          | MPR  | MVR | MAA    | MAY    | MPY          | MPG   | MBG        |       |
| Power Dissipation     | Pd              | 100         | 75   | 75  | 70     | 85     | 85           | 70    | 70         | mW    |
| Forward Current       | I <sub>F</sub>  | 50          | 30   | 30  | 25     | 30     | 30           | 25    | 25         | mA    |
| Peak Forward Current  | I <sub>FM</sub> | 300         | 75   | 75  | 60     | 75     | 75           | 60    | 60         | mA    |
| Reverse Voltage       | V <sub>R</sub>  | 4           | 4    | 4   | 4      | 4      | 4            | 4     | 4          | V     |
| Operating Temperature | Topr            | -30 to +85  |      |     |        |        |              |       |            | °C    |
| Storage Temperature   | Tstg            | -30 to +100 |      |     |        |        |              |       |            | °C    |
| Derating (DC)*        | I <sub>F</sub>  | 0.67        | 0.40 |     | 0.33   | 0.40   |              | 0.33  |            | mA/°C |

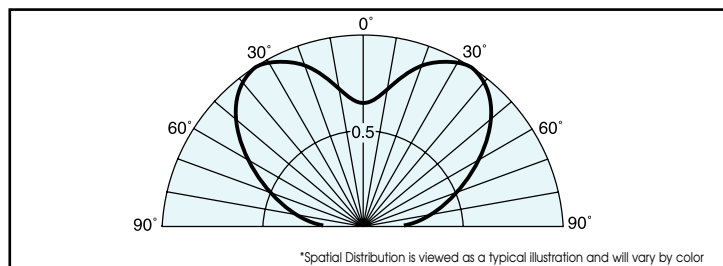
\* Ta=25°C, I<sub>FM</sub> applies for the pulse width 1msec. and duty cycle 1/20  
The current derating for operation applies when the temperature is above 25°C

#### Electro-Optical Characteristics

\*The viewing angle is an average and will vary by color (Ta=25°C)

| Part No. | Material | Emitted Color | Lens Color      | Luminous Intensity I <sub>V</sub> |      |                | Wavelength <div>Spectral Line Dominant Half Width</div> |                 |      |                | Forward Voltage V <sub>F</sub> |      |                | Reverse Current I <sub>R</sub> |                | Viewing Angle <div>(2 1/2)</div> |
|----------|----------|---------------|-----------------|-----------------------------------|------|----------------|---------------------------------------------------------|-----------------|------|----------------|--------------------------------|------|----------------|--------------------------------|----------------|----------------------------------|
|          |          |               |                 | MIN.                              | TYP. | I <sub>F</sub> | Peak P TYP.                                             | Dominant d TYP. | TYP. | I <sub>F</sub> | TYP.                           | MAX. | I <sub>F</sub> | MAX.                           | V <sub>R</sub> |                                  |
|          |          |               |                 |                                   |      |                |                                                         |                 |      |                |                                |      |                |                                |                |                                  |
| BR5353K  | GaAlAs   | Red           | Diffused Red    | 1.5                               | 3    | 20             | 660                                                     | 647             | 30   | 20             | 1.7                            | 2.0  | 20             | 100                            | 4              | 130°                             |
| MPR5353K | GaP      |               |                 | 0.3                               | 0.5  | 10             | 700                                                     | 635             | 100  | 10             | 2.1                            | 2.8  | 10             | 20                             | 4              |                                  |
| MVR5353K | GaAsP    |               |                 | 1.2                               | 2.4  | 20             | 630                                                     | 624             | 30   | 20             | 2.0                            | 2.8  | 20             | 20                             | 4              |                                  |
| MAA5353K | GaAsP    | Orange        | Diffused Orange | 1.2                               | 2.4  | 20             | 605                                                     | 606             | 30   | 20             | 2.2                            | 2.8  | 20             | 20                             | 4              |                                  |
| MAY5353K | GaAsP    | Yellow        | Diffused Yellow | 1.2                               | 2.4  | 20             | 580                                                     | 590             | 30   | 20             | 2.2                            | 2.8  | 20             | 20                             | 4              |                                  |
| MPY5353K | GaP      | Yellow Green  |                 | 2                                 | 4    | 20             | 570                                                     | 572             | 30   | 20             | 2.1                            | 2.8  | 20             | 20                             | 4              |                                  |
| MPG5353K | GaP      | Green         | Diffused Green  | 1.5                               | 3    | 20             | 560                                                     | 567             | 30   | 20             | 2.1                            | 2.8  | 20             | 20                             | 4              |                                  |
| MBG5353K | GaP      | Pure Green    |                 | 0.5                               | 1    | 20             | 555                                                     | 558             | 30   | 20             | 2.1                            | 2.8  | 20             | 20                             | 4              |                                  |
| Units    |          |               |                 | mcd                               |      | mA             | nm                                                      |                 | mA   |                | V                              |      | mA             | μA                             | V              | Deg.                             |

#### Spatial Distribution (x)



#### Operation Current Derating Chart

