



598 SERIES

# MicroLED® SMD LED

## Right Angle

## Bi-Color 2106

2.10 x 0.60 x 1.00mm

### MECHANICAL / SPECIFICATIONS

DIMENSIONS:  
2.10 x 0.60 x 1.00mm

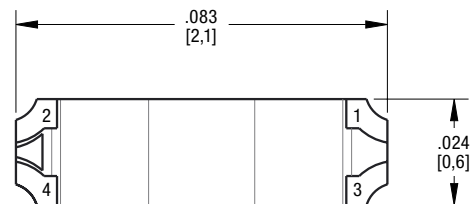
STANDARD PACKAGING:  
3000 pcs / Reel

CERTIFICATIONS & RATINGS  
ROHS Compliant

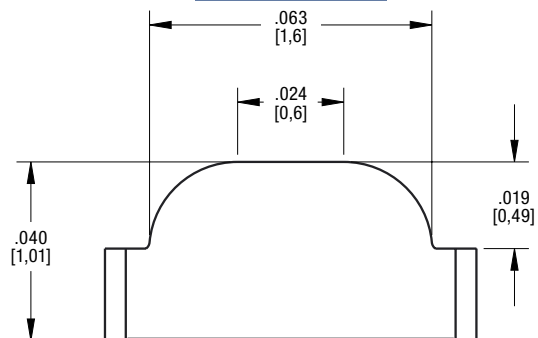
FEATURES & BENEFITS  
MOISTURE SENSITIVITY LEVEL: 3

### DIMENSIONS inches [mm]

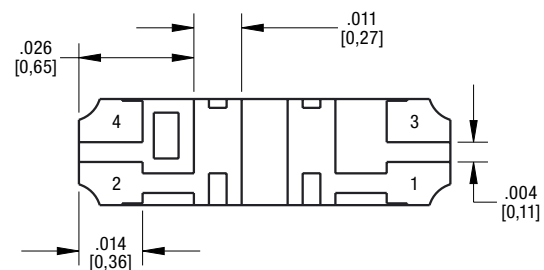
FRONT VIEW



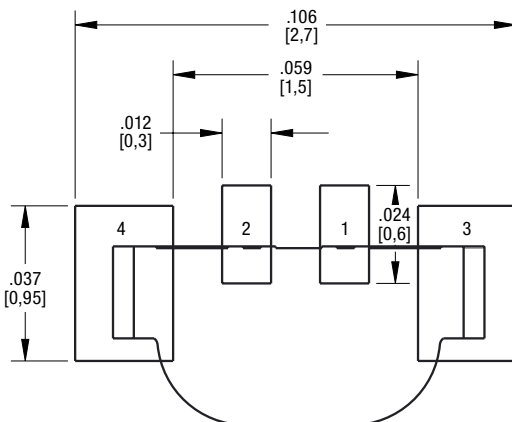
TOP VIEW



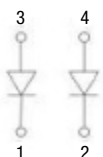
BACK VIEW



RECOMMENDED PAD LAYOUT



LED SCHEMATICS



ELECTRICAL/OPTICAL CHARACTERISTICS @ Ta=25°C

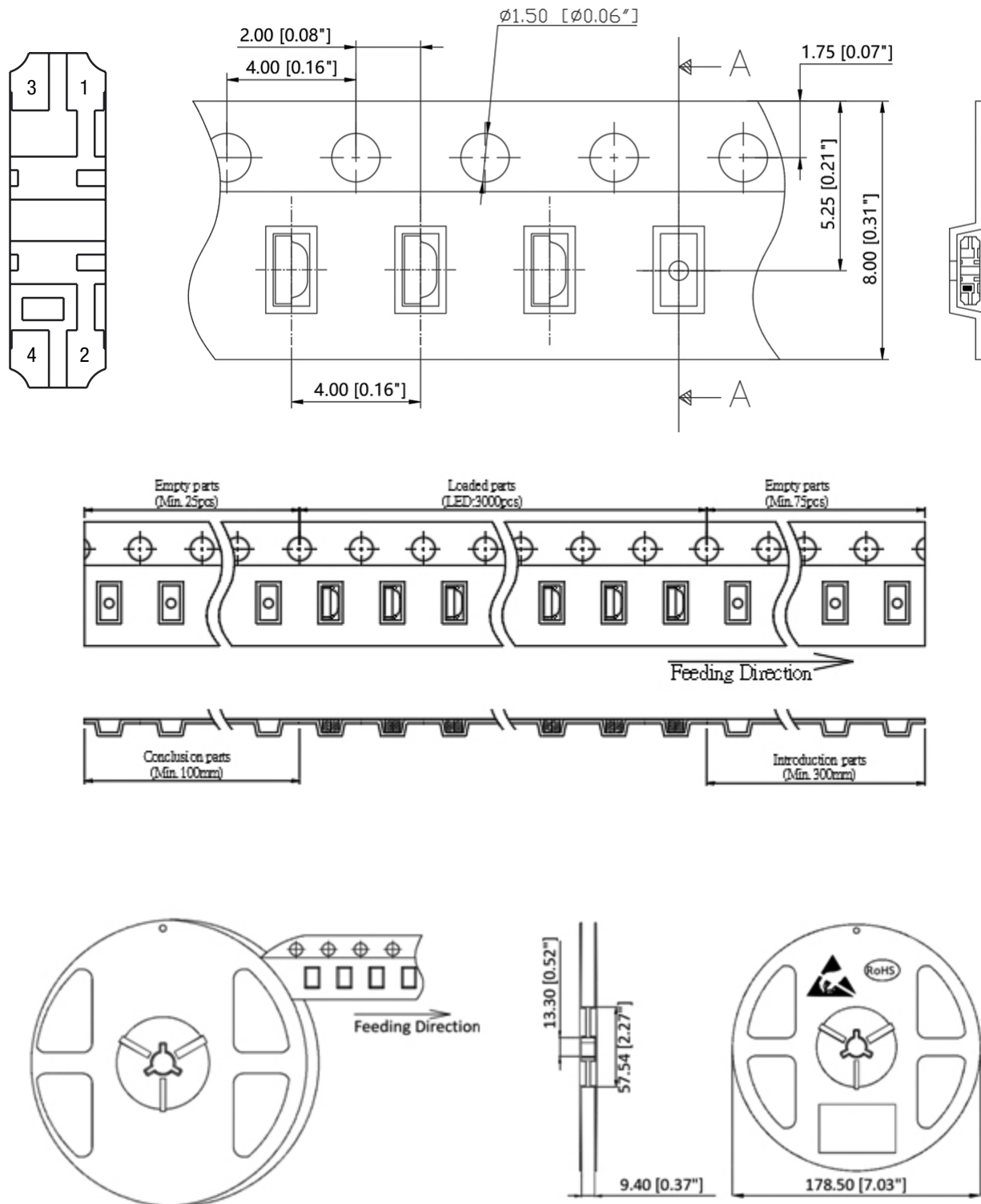
|                               |                |           |             | Luminous Intensity (mcd) |     |      | Dominant Wavelength (nm) |     |                  | Forward Voltage (V) |     |     | Viewing Angle (°deg.) | Reverse Current Intensity (µA) | LED Schematic Pin Numbers |
|-------------------------------|----------------|-----------|-------------|--------------------------|-----|------|--------------------------|-----|------------------|---------------------|-----|-----|-----------------------|--------------------------------|---------------------------|
|                               |                |           |             | I <sub>F</sub> =20mA     |     |      |                          |     |                  |                     |     |     |                       |                                |                           |
| Part Number                   | Emitted Color  | Material  | Lens Color  | Min                      | Typ | Max  | Min                      | Typ | Max              | Min                 | Typ | Max | I <sub>F</sub> =10mA  | (I <sub>r</sub> )<br>VR=5V     |                           |
| <a href="#">598-8QA0-227F</a> | ● Orange       | AlGaInP   | Water Clear | 86                       | -   | 321  | 600                      | -   | 610              | 1.8                 | -   | 2.4 | 120                   | 10                             | 1,3                       |
|                               | ● Blue         | InGaN/GaN |             | 112                      | -   | 417  | 465                      | -   | 475              | 2.8                 | -   | 3.7 |                       |                                | 2,4                       |
| <a href="#">598-8Q30-227F</a> | ● Orange       | AlGaInP   |             | 86                       | -   | 321  | 600                      | -   | 610              | 1.8                 | -   | 2.4 | 120                   | 10                             | 1,3                       |
|                               | ● Green        | InGaN/GaN |             | 321                      | -   | 1192 | 520                      | -   | 530              | 2.8                 | -   | 3.7 |                       |                                | 2,4                       |
| <a href="#">598-8Q40-227F</a> | ● Yellow       | AlGaInP   |             | 86                       | -   | 321  | 585                      | -   | 595              | 1.8                 | -   | 2.4 | 120                   | 10                             | 1,3                       |
|                               | ● Yellow-Green | AlGaInP   |             | 23                       | -   | 86   | 565                      | -   | 576              | 1.8                 | -   | 2.4 |                       |                                | 2,4                       |
| <a href="#">598-8Q70-227F</a> | ● Red          | AlGaInP   |             | 51                       | -   | 190  | 630                      | -   | 650              | 1.8                 | -   | 2.4 | 120                   | 10                             | 1,3                       |
|                               | ● Yellow-Green | AlGaInP   |             | 23                       | -   | 86   | 565                      | -   | 576              | 1.8                 | -   | 2.4 |                       |                                | 2,4                       |
| <a href="#">598-8Q90-227F</a> | ● Yellow       | AlGaInP   |             | 247                      | -   | 917  | 585                      | -   | 595              | 1.8                 | -   | 2.4 | 120                   | 10                             | 1,3                       |
|                               | ● Blue         | InGaN/GaN |             | 146                      | -   | 417  | 465                      | -   | 475              | 2.8                 | -   | 3.7 |                       |                                | 2,4                       |
| I <sub>F</sub> =5mA           |                |           |             |                          |     |      |                          |     |                  |                     |     |     |                       |                                |                           |
| <a href="#">598-2Q00-227F</a> | ● Green        | InGaN/GaN | Yellow      | 51                       | -   | 146  | 525                      | -   | 535              | 2.5                 | -   | 3.1 | 120                   | 10                             | 1,3                       |
|                               | ○ White        | InGaN/GaN |             | 51                       | -   | 146  | X 0.26<br>Y 0.24         | -   | X 0.30<br>Y 0.31 | 2.5                 | -   | 3.1 |                       |                                | 2,4                       |

ABSOLUTE MAXIMUM RATINGS @ Ta=25°C

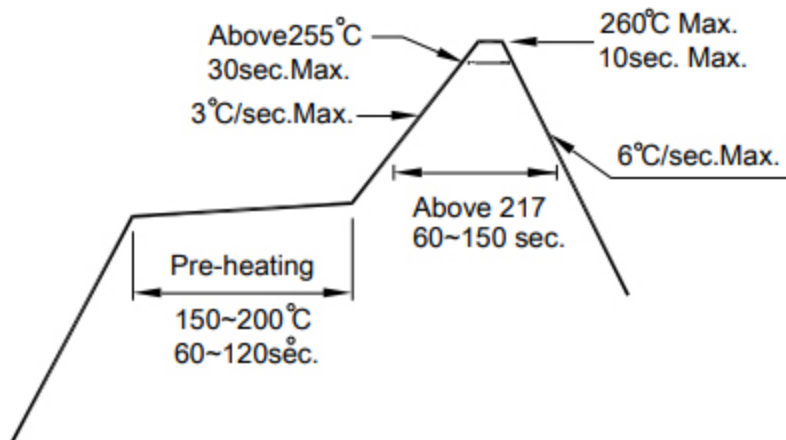
| LED Color    | Power Dissipation (mW) | Forward Current (mA) | Peak Forward Current (mA) | Reverse Voltage (V) | Operating Temperature (°C) | Storage Temperature (°C) |
|--------------|------------------------|----------------------|---------------------------|---------------------|----------------------------|--------------------------|
| Green        | 108                    | 30                   | 125                       | 5                   | -40 to +85                 | -40 to +85               |
| White        | 108                    | 30                   | 125                       |                     |                            |                          |
| Orange       | 72                     | 30                   | 125                       | 5                   | -40 to +85                 | -40 to +85               |
| Blue         | 111                    | 30                   | 125                       |                     |                            |                          |
| Orange       | 72                     | 30                   | 125                       | 5                   | -40 to +85                 | -40 to +85               |
| Green        | 111                    | 30                   | 125                       |                     |                            |                          |
| Yellow       | 48                     | 20                   | 60                        | 5                   | -40 to +85                 | -40 to +85               |
| Yellow-Green | 48                     | 20                   | 60                        |                     |                            |                          |
| Red          | 48                     | 20                   | 60                        | 5                   | -40 to +85                 | -40 to +85               |
| Yellow-Green | 48                     | 20                   | 60                        |                     |                            |                          |
| Yellow       | 72                     | 30                   | 60                        | 5                   | -40 to +85                 | -40 to +85               |
| Blue         | 111                    | 30                   | 125                       |                     |                            |                          |

\*Condition for Peak Forward Current: 1/8 Duty Cycle, f=1kHz

TAPE AND REEL SPECIFICATION



## REFLOW SOLDERING PROFILE



### Soldering notes:

1. Reflow soldering should not be done more than one times.