

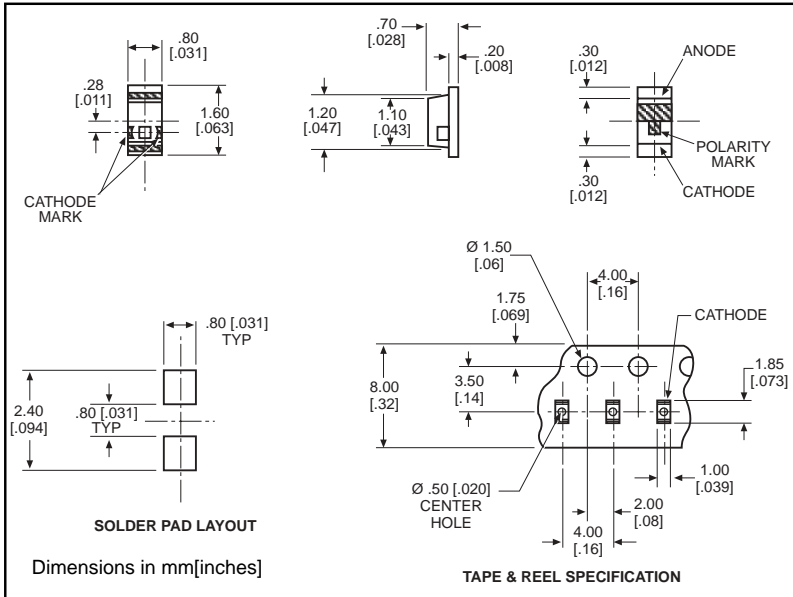
**microLED**®

**NEW**

**Dialight**

**Surface Mount LED  
0603 Type Package**

597-5004-4xx  
597-5x12-4xx  
597-52x3-4xx



**PART NO.\***  
597-5004-4xx  
597-5112-4xx  
597-5203-4xx  
597-5213-4xx  
597-5223-4xx  
597-5312-4xx  
597-5412-4xx

**COLOR**  
AllInGaP Red  
Red  
Orange  
AllInGaP Orange  
AllInGaP Yellow  
Green  
Yellow

**Benefits**

- Compatible with automatic placement equipment
- Compatible with infrared reflow processes
- Packaged on 12mm tape, 7" reels (meets EIA-481-1 standard)
- Helps to eliminate mixed technology PC board processing

**\*ORDERING INFORMATION**

**597-5xxx-4xx**

packaging option ↗

|    |                        |
|----|------------------------|
| 02 | 20 pieces on tape      |
| 07 | 7" reel, 4000 pcs/reel |

| <b>ABSOLUTE MAXIMUM RATINGS</b> (T <sub>A</sub> =25°C) | AllInGaP Red<br><b>-5004</b> | Red<br><b>-5112</b> | Orange<br><b>-5203</b> | AllInGaP Orange<br><b>-5213</b> | AllInGaP Yellow<br><b>-5223</b> | Green<br><b>-5312</b> | Yellow<br><b>-5412</b> |
|--|------------------------------|---------------------|------------------------|---------------------------------|---------------------------------|-----------------------|------------------------|
| Power Dissipation (mW)                                 | 81                           | 57.5                | 70                     | 81                              | 81                              | 70                    | 70                     |
| Forward Current (mA)                                   | 30                           | 25                  | 25                     | 30                              | 30                              | 25                    | 25                     |
| Peak Current (mA)                                      | 100                          | 60                  | 60                     | 100                             | 100                             | 60                    | 60                     |
| <i>Pulse width = 10 μs</i>                             |                              |                     |                        |                                 |                                 |                       |                        |
| Operating Temperature (°C)                             | -40/+85                      | -30/+85             | -30/+85                | -40/+85                         | -40/+85                         | -30/+85               | -30/+85                |
| Storage Temperature (°C)                               | -40/+100                     | -40/+100            | -40/+100               | -40/+100                        | -40/+100                        | -40/+100              | -40/+100               |
| Soldering Temperature                                  | 240°C, 5 sec. max            |                     |                        |                                 |                                 |                       |                        |

*Solder Adherence per MIL-STD-202E, Method 208C*

| <b>OPERATING CHARACTERISTICS</b> (T <sub>A</sub> =25°C) | AllInGaP Red<br><b>-5004</b> | Red<br><b>-5112</b> | Orange<br><b>-5203</b> | AllInGaP Orange<br><b>-5213</b> | AllInGaP Yellow<br><b>-5223</b> | Green<br><b>-5312</b> | Yellow<br><b>-5412</b> |
|---|------------------------------|---------------------|------------------------|---------------------------------|---------------------------------|-----------------------|------------------------|
| Luminous Intensity (mcd)                                | Min. 16                      | 7                   | 2                      | 16                              | 16                              | 3.8                   | 7                      |
| I <sub>F</sub> =20mA                                    | Typical 50                   | 11.7                | 3.4                    | 65                              | 65                              | 6.4                   | 11.7                   |
| Peak Wavelength (nm)                                    | Typical 630                  | 660                 | 605                    | 609                             | 592                             | 560                   | 570                    |
| λ Peak  |                              |                     |                        |                                 |                                 |                       |                        |
| Viewing Angle (2θ ½)                                    | Typical 152°                 | 152°                | 152°                   | 152°                            | 152°                            | 152°                  | 152°                   |
| Forward Voltage (V)                                     | Typical 1.9                  | 1.7                 | 2.2                    | 1.9                             | 1.9                             | 2.1                   | 2.1                    |
| I <sub>F</sub> =20mA                                    | Max. 2.4                     | 2.3                 | 2.8                    | 2.4                             | 2.4                             | 2.8                   | 2.8                    |
| Reverse Current (μA)                                    | Max 100                      | 100*                | 100*                   | 100                             | 100                             | 100*                  | 100*                   |
| (V <sub>R</sub> = 5V) * (V <sub>R</sub> = 4V)           |                              |                     |                        |                                 |                                 |                       |                        |

θ ½ is the off axis angle at which the luminous intensity is half the axial luminous intensity