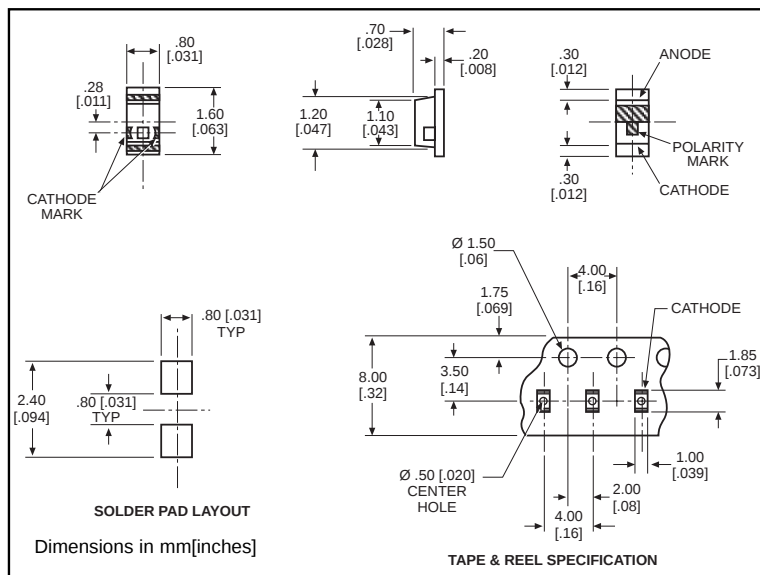


**microLED<sup>®</sup>****Surface Mount LED  
0603 Type Package****NEW****Dialight****597-5004-4xx  
597-5x12-4xx  
597-52x3-4xx****PART NO.\***

597-5004-4xx  
597-5112-4xx  
597-5203-4xx  
597-5213-4xx  
597-5223-4xx  
597-5312-4xx  
597-5412-4xx

**COLOR**

AlInGaP Red  
Red  
Orange  
AlInGaP Orange  
AlInGaP 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 |

|                                                                       | AlInGaP Red                         | Red          | Orange       | AlInGaP Orange | AlInGaP Yellow | Green        | Yellow       |
|-----------------------------------------------------------------------|-------------------------------------|--------------|--------------|----------------|----------------|--------------|--------------|
| <b>ABSOLUTE MAXIMUM RATINGS (<math>T_A=25^{\circ}\text{C}</math>)</b> | <b>-5004</b>                        | <b>-5112</b> | <b>-5203</b> | <b>-5213</b>   | <b>-5223</b>   | <b>-5312</b> | <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           |
| Pulse width = 10 $\mu\text{s}$                                        |                                     |              |              |                |                |              |              |
| Operating Temperature ( $^{\circ}\text{C}$ )                          | -40/+85                             | -30/+85      | -30/+85      | -40/+85        | -40/+85        | -30/+85      | -30/+85      |
| Storage Temperature ( $^{\circ}\text{C}$ )                            | -40/+100                            | -40/+100     | -40/+100     | -40/+100       | -40/+100       | -40/+100     | -40/+100     |
| Soldering Temperature                                                 | 240 $^{\circ}\text{C}$ , 5 sec. max |              |              |                |                |              |              |

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

|                                                                        |         | AlInGaP Red    | Red            | Orange         | AlInGaP Orange | AlInGaP Yellow | Green          | Yellow         |
|------------------------------------------------------------------------|---------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| <b>OPERATING CHARACTERISTICS (<math>T_A=25^{\circ}\text{C}</math>)</b> |         | <b>-5004</b>   | <b>-5112</b>   | <b>-5203</b>   | <b>-5213</b>   | <b>-5223</b>   | <b>-5312</b>   | <b>-5412</b>   |
| Luminous Intensity (mcd)                                               | Min.    | 16             | 7              | 2              | 16             | 16             | 3.8            | 7              |
|                                                                        | Typical | 50             | 11.7           | 3.4            | 65             | 65             | 6.4            | 11.7           |
| Peak Wavelength (nm)                                                   | Typical | 630            | 660            | 605            | 609            | 592            | 560            | 570            |
| $\lambda_{\text{Peak}}$                                                |         |                |                |                |                |                |                |                |
| Viewing Angle ( $2\theta_{\frac{1}{2}}$ )                              | Typical | 152 $^{\circ}$ | 152 $^{\circ}$ | 152 $^{\circ}$ | 152 $^{\circ}$ | 152 $^{\circ}$ | 152 $^{\circ}$ | 152 $^{\circ}$ |
| Forward Voltage (V)                                                    | Typical | 1.9            | 1.7            | 2.2            | 1.9            | 1.9            | 2.1            | 2.1            |
|                                                                        | Max.    | 2.4            | 2.3            | 2.8            | 2.4            | 2.4            | 2.8            | 2.8            |
| Reverse Current ( $\mu\text{A}$ )                                      | Max     | 100            | 100*           | 100*           | 100            | 100            | 100*           | 100*           |
| $(V_R = 5\text{V}) \quad * (V_R = 4\text{V})$                          |         |                |                |                |                |                |                |                |

 $\theta_{\frac{1}{2}}$  is the off axis angle at which the luminous intensity is half the axial luminous intensity