

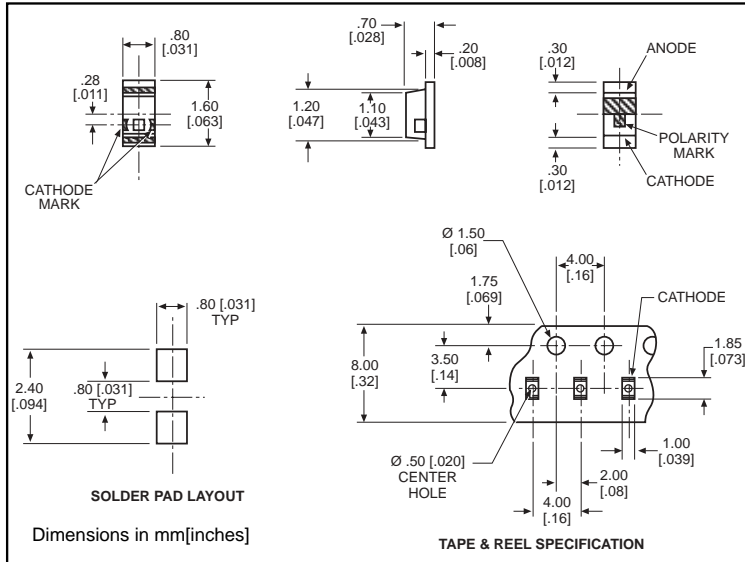
microLED®

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

AllnGaP Red
Red
Orange
AllnGaP Orange
AllnGaP 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 \uparrow

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

| | AllnGaP Red | Red | Orange | AllnGaP Orange | AllnGaP Yellow | Green | Yellow |
|--|-----------------------------------|--------------|--------------|----------------|----------------|--------------|--------------|
| ABSOLUTE MAXIMUM RATINGS ($T_A=25^\circ\text{C}$) | -5004 | -5112 | -5203 | -5213 | -5223 | -5312 | -5412 |
| 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 ($^\circ\text{C}$) | -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

| | AllnGaP Red | Red | Orange | AllnGaP Orange | AllnGaP Yellow | Green | Yellow |
|---|----------------------|--------------|--------------|----------------|----------------|--------------|--------------|
| OPERATING CHARACTERISTICS ($T_A=25^\circ\text{C}$) | -5004 | -5112 | -5203 | -5213 | -5223 | -5312 | -5412 |
| Luminous Intensity (mcd) | Min. 16 | 7 | 2 | 16 | 16 | 3.8 | 7 |
| $I_F=20\text{mA}$ | 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 ($2\theta_{1/2}$) | 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 |
| $I_F=20\text{mA}$ | 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* |
| ($V_R = 5\text{V}$) * ($V_R = 4\text{V}$) | | | | | | | |

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