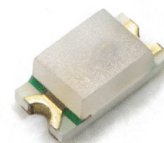


# Micro LED<sup>®</sup> Surface Mount LEDs



Micro LED<sup>®</sup> Surface Mount LED product line provides one of the industry's widest range of discrete LEDs. Packaged in chipLED, PLCC, right-angle and reverse-mount configurations, the series is available in a full range of colors and intensities, including the latest AlInGaP and InGaN technology. All products are RoHs compliant, and are perfectly suited to be used with Dialight's wide-range of Optopipe<sup>®</sup> 515 Series Light Pipes.

With such a wide variety of mounting styles, colors, intensities, viewing angles and lens features, the Micro LED<sup>®</sup> Surface Mount series is sure to include a cost-effective solution to any application.

## Also available from Dialight

### Prism<sup>®</sup> Surface Mount Indicators 591–595 Series Single, BiLevel & TriLevel SMDs

Dialight's Prism<sup>®</sup> indicators are the industry's only SMD indicator series designed to survive 260 °C peak reflow temperature *and* provide the aesthetic appeal of a diffused lens for enhanced viewing. Ideal for limited-space applications and board-edge mounting, the Prism<sup>®</sup> Series is available in a variety of package sizes including single level, bi-level, and tri-level configuration and in 1.6mm, 2mm and 3mm lens size. The integral light pipes used in Prism<sup>®</sup> SMD LEDs are engineered for maximum light transmission and minimal light bleed while the diffused lens is also ideal for bicolor and tricolor applications where color-mixing is desired.

#### Features & Benefits

- Compatible with automatic placement equipment.
- Compatible with surface mount reflow soldering processes.
- Housing meets UL-94V-0 flammability ratings.
- Patented design provides increased indication without increased space.
- Illumination areas compatible with industry standard 2 mm & 3 mm through hole CBIs.
- Packaged in dry packaging moisture barrier bags per IPC/JEDEC J-STD-033.
- Helps to eliminate mixed technology PC board processing.



Contact your Authorized Dialight Distributor or local Sales Representative for more information or samples.  
<http://www.dialightsignalsandcomponents.com/WhereToBuy/Optoelectronic>

The following pages are organized as a product overview. Additional information is available at [www.dialightsignalsandcomponents.com](http://www.dialightsignalsandcomponents.com) including detailed specs and schematics, 3D models, and operating characteristics.

## MicroLED® SMDs Typical Applications

- Data center Infrastructure
- Servers: Rack mount; blade; tower
- Storage: High-performance storage subsystems for high-end enterprise
- Storage Networking Hardware
- Fiber channel host bus adapter cards (HBAs); converged network adapter cards (CNAs); SCSI adapter cards; InfiniBand adapter cards
- Next-Gen Wireless
- Wireless Infrastructure
- Electronic Test & Measurement Instruments
- Networking Equipment for enterprise data centers and telecom communication centers
- Switches, routers, and network control equipment interconnected using fiber optic and high speed wiring
- Communications Testing Equipment
- Process controls
- Automation
- Medical
- Handheld devices
- Battery powered applications (2mA version)

Products are listed in this guide first by overall package size; then by variable heights from smallest to highest.

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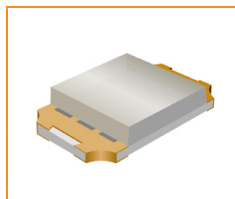
### Reverse Mount

|                                                          |           |
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### Right Angle

|                                                          |              |
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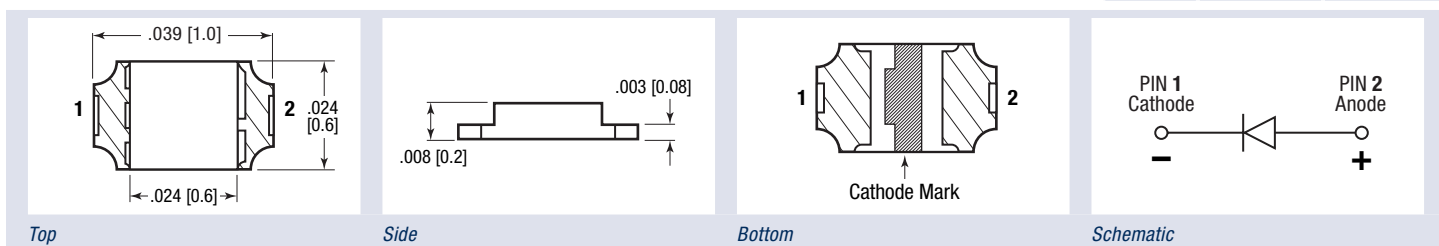
# Top View | 0402



| Color : Wavelength (nm) |     |     | Material | Test Current (mA) | Intensity (mcd) |     |     | Typ Fwd Voltage (V) |     | Viewing Angle | Operating Temp (°C) | Storage Temp (°C) |
|-------------------------|-----|-----|----------|-------------------|-----------------|-----|-----|---------------------|-----|---------------|---------------------|-------------------|
| Min                     | Typ | Max |          |                   | Min             | Typ | Max | Typ                 | Max |               |                     |                   |

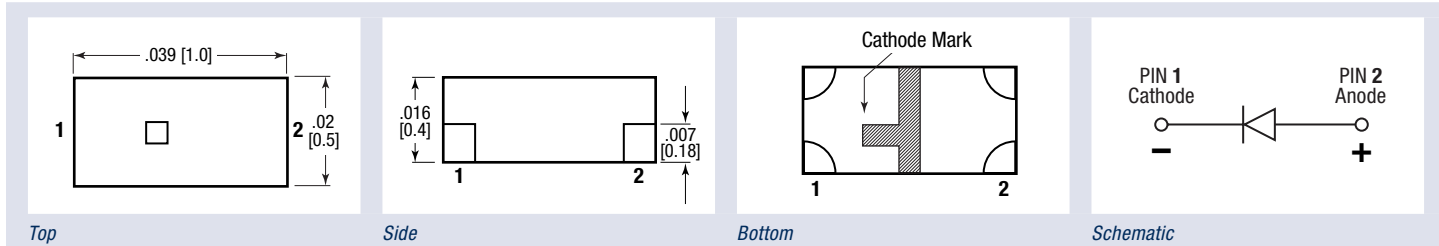
## 0402 Package ▶ 1.0 x 0.6 x 0.2 mm / Single Color

|               |                       |     |     |         |    |    |     |     |     |   |     |            |             |
|---------------|-----------------------|-----|-----|---------|----|----|-----|-----|-----|---|-----|------------|-------------|
| 597-3007-507F | ● R : 625             | 630 | 635 | AlInGaP | 20 | 25 | 60  | 100 | 2.0 | — | 135 | -40 to +85 | -40 to +100 |
| 597-3027-507F | ● R : 615             | 620 | 625 |         | 20 | 40 | 85  | 160 | 2.0 | — |     |            |             |
| 597-3207-507F | ● O : 602             | 605 | 608 |         | 20 | 63 | 100 | 250 | 2.1 | — |     |            |             |
| 597-3327-507F | ● G : 520             | 527 | 535 | InGaP   | 5  | 56 | 110 | 220 | 3.0 | — |     |            |             |
| 597-3407-507F | ● Y : 587             | 590 | 593 | AlInGaP | 20 | 40 | 130 | 160 | 2.1 | — |     |            |             |
| 597-3507-507F | ● YG : 569            | 572 | 575 |         | 20 | 10 | 25  | 65  | 2.2 | — |     |            |             |
| 597-3607-507F | ● B : 465             | 470 | 475 | InGaP   | 5  | 9  | 25  | 56  | 2.9 | — |     |            |             |
| 597-3907-507F | ○ W : X=0.30 / Y=0.30 |     |     |         | 5  | 90 | 150 | 360 | 2.9 | — |     |            |             |

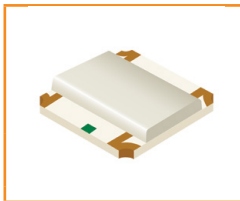


## 0402 ▶ 1.0 x 0.5 x 0.4 mm / Single Color

|               |            |     |     |         |   |     |     |     |     |     |     |            |            |
|---------------|------------|-----|-----|---------|---|-----|-----|-----|-----|-----|-----|------------|------------|
| 598-8A10-107F | ● R : 630  | 635 | 640 | AlInGaP | 5 | 28  | 65  | 100 | 1.7 | 2.4 | 140 | -40 to +85 | -40 to +85 |
| 598-8A20-107F | ● R : 620  | 625 | 630 |         |   | 28  | 47  | 65  | 1.8 | 2.4 |     |            |            |
| 598-8A30-107F | ● O : 600  | 605 | 610 |         |   | 28  | 47  | 65  | 1.8 | 2.4 |     |            |            |
| 598-8A40-107F | ● Y : 587  | 591 | 595 |         |   | 18  | 42  | 65  | 1.8 | 2.4 |     |            |            |
| 598-8A60-107F | ● YG : 568 | 572 | 575 |         |   | 8   | 12  | 18  | 1.8 | 2.4 |     |            |            |
| 598-8A80-107F | ● G : 525  | 528 | 530 | InGaP   | 5 | 230 | 330 | 430 | 2.5 | 3.3 | 140 | -40 to +85 | -40 to +85 |
| 598-8A90-107F | ● B : 465  | 470 | 475 |         |   | 43  | 72  | 100 | 2.5 | 3.3 |     |            |            |



**NOTE:** Top View SMDs are shown in the diagrams in top, side and bottom views. The top and bottom diagrams flip across the x-axis.



| Color : Wavelength (nm) |     |     | Material | Test Current (mA) | Intensity (mcd) |     |     | Typ Fwd Voltage (V) |     | Viewing Angle | Operating Temp (°C) | Storage Temp (°C) |
|-------------------------|-----|-----|----------|-------------------|-----------------|-----|-----|---------------------|-----|---------------|---------------------|-------------------|
| Min                     | Typ | Max |          |                   | Min             | Typ | Max | Typ                 | Max |               |                     |                   |

## 0404 Package ▶ 1.0 x 1.0 x 0.2 mm / BiColor and TriColor

|               |           |     |     |         |    |    |    |     |     |   |     |            |             |
|---------------|-----------|-----|-----|---------|----|----|----|-----|-----|---|-----|------------|-------------|
| 597-7707-507F | ● R : 615 | 620 | 625 | AlInGaP | 20 | 25 | 52 | 100 | 2.1 | — | 128 | -40 to +85 | -40 to +100 |
|               | ● G : 569 | 572 | 575 | AlInGaP |    | 10 | 21 | 40  | 2.2 | — |     |            |             |

Top

Side

Bottom

Schematic

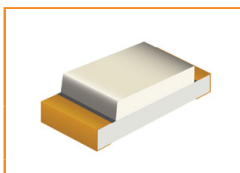
|               |           |     |     |         |   |    |     |     |     |   |     |            |             |
|---------------|-----------|-----|-----|---------|---|----|-----|-----|-----|---|-----|------------|-------------|
| 597-7717-507F | ● R : 619 | 624 | 629 | AlInGaP | 5 | 14 | 35  | 56  | 2.1 | — | 120 | -40 to +85 | -40 to +100 |
|               | ● G : 520 | 527 | 535 | InGaN   |   | 56 | 110 | 220 | 3.1 | — |     |            |             |
|               | ● B : 465 | 470 | 475 | InGaN   |   | 28 | 45  | 110 | 3.0 | — |     |            |             |

Top

Side

Bottom

Schematic



## 0603 Package ▶ 1.6 x 0.8 x 0.35 mm / Single Color with Zener

|               |                         |       |   |    |   |     |     |      |     |            |            |
|---------------|-------------------------|-------|---|----|---|-----|-----|------|-----|------------|------------|
| 597-3905-607F | ○ W : X=0.294 / Y=0.300 | InGaN | 5 | 71 | — | 146 | 2.7 | 3.15 | 130 | -20 to +80 | -40 to +85 |
|---------------|-------------------------|-------|---|----|---|-----|-----|------|-----|------------|------------|

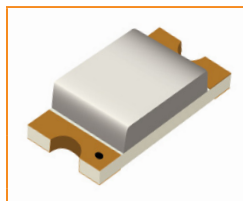
Top

Side

Bottom

Schematic

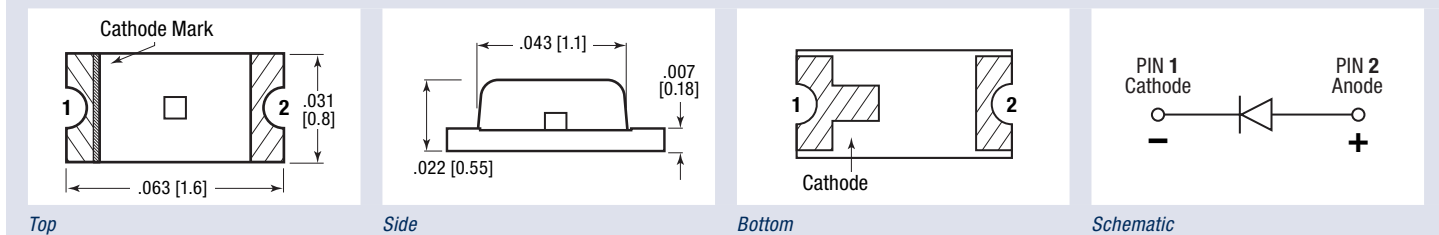
# Top View | 0603



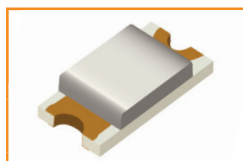
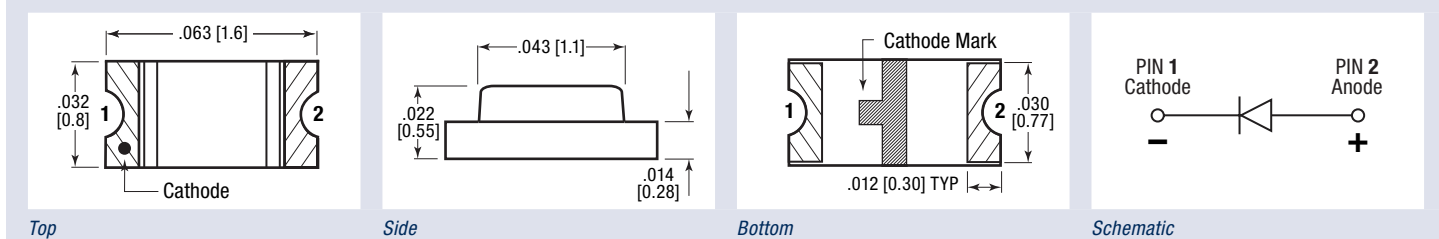
| Color : Wavelength (nm) |     |     | Material | Test Current (mA) | Intensity (mcd) |     |     | Typ Fwd Voltage (V) |     | Viewing Angle | Operating Temp (°C) | Storage Temp (°C) |
|-------------------------|-----|-----|----------|-------------------|-----------------|-----|-----|---------------------|-----|---------------|---------------------|-------------------|
| Min                     | Typ | Max |          |                   | Min             | Typ | Max | Typ                 | Max |               |                     |                   |

**0603 ▶ 1.6 x 0.8 x 0.55 mm / Single Color**

|               |         |     |   |     |    |     |    |    |     |     |     |            |            |
|---------------|---------|-----|---|-----|----|-----|----|----|-----|-----|-----|------------|------------|
| 597-3304-607F | ● G : - | 569 | - | GaP | 20 | 2.8 | 12 | 28 | 2.1 | 2.6 | 130 | -55 to +85 | -55 to +85 |
|---------------|---------|-----|---|-----|----|-----|----|----|-----|-----|-----|------------|------------|



|               |                       |       |    |     |   |     |     |     |  |  |            |             |
|---------------|-----------------------|-------|----|-----|---|-----|-----|-----|--|--|------------|-------------|
| 597-3901-830F | ○ W : X=0.31 / Y=0.32 | InGaN | 10 | 112 | - | 240 | 2.8 | 3.4 |  |  | -20 to +80 | -55 to +105 |
|---------------|-----------------------|-------|----|-----|---|-----|-----|-----|--|--|------------|-------------|

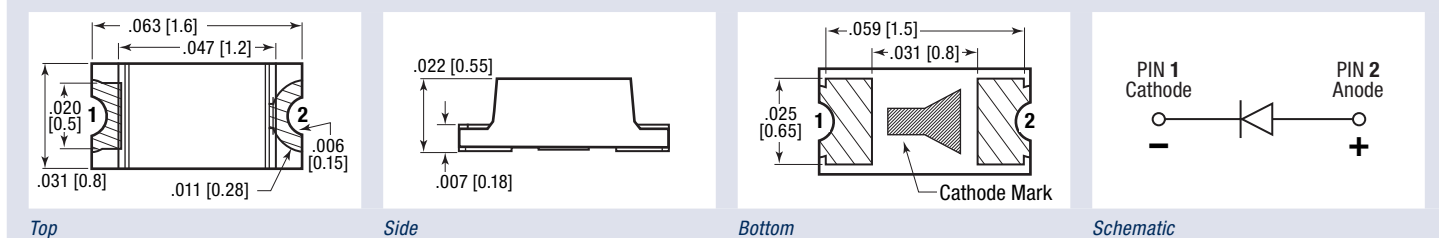


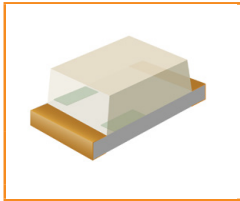
**0603 ▶ 1.6 x 0.8 x 0.55 mm / Single Color 1 Bin**

|               |            |     |     |         |    |     |     |   |     |     |             |             |
|---------------|------------|-----|-----|---------|----|-----|-----|---|-----|-----|-------------|-------------|
| 597-3005-507F | ● R : 627  | 630 | 633 | AlInGaP | 20 | 71  | 90  | - | 2   | 160 | -40 to +100 | -40 to +100 |
| 597-3035-507F | ● R : 617  | 620 | 623 |         |    | 90  | 112 | - | 2   |     |             |             |
| 597-3045-507F | ● R0 : 612 | 615 | 618 |         |    | 112 | 140 | - | 2   |     |             |             |
| 597-3205-507F | ● O : 603  | 605 | 607 |         |    | 112 | 140 | - | 2   |     |             |             |
| 597-3405-507F | ● Y : 588  | 590 | 592 |         |    | 180 | 224 | - | 2.1 |     |             |             |
| 597-3505-507F | ● YG : 569 | 571 | 573 |         |    | 56  | 71  | - | 2.1 |     |             |             |

**0603 ▶ 1.6 x 0.8 x 0.55 mm / Single Color 2+ Bin**

|               |                         |     |     |       |   |    |     |     |     |     |     |             |             |
|---------------|-------------------------|-----|-----|-------|---|----|-----|-----|-----|-----|-----|-------------|-------------|
| 597-3324-507F | ● G : 520               | 527 | 535 | InGaN | 5 | 56 | 140 | 330 | 3   | 3.5 | 160 | -40 to +100 | -40 to +100 |
| 597-3604-507F | ● B : -                 | 470 | -   |       |   | 14 | 40  | 56  | 2.9 | 3.3 |     |             |             |
| 597-3904-507F | ○ W : X=0.295 / Y=0.280 |     |     |       |   | 56 | 120 | 220 | 2.9 | 3.3 |     |             |             |

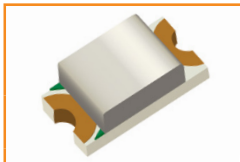
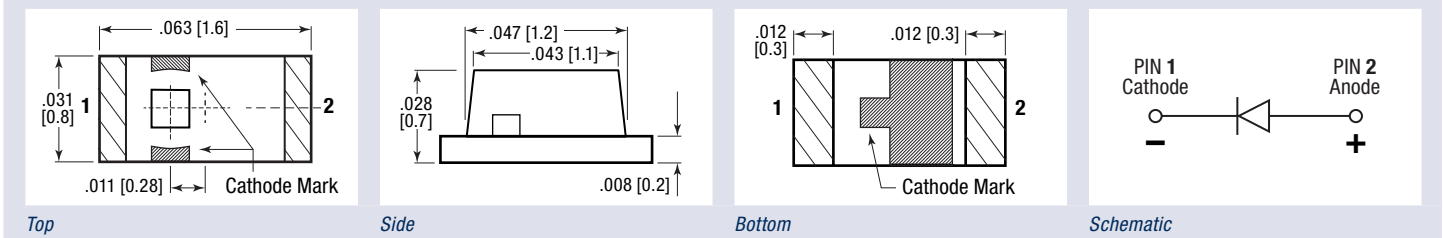




| Color : Wavelength (nm) |     |     | Material | Test Current (mA) | Intensity (mcd) |     |     | Typ Fwd Voltage (V) |     | Viewing Angle | Operating Temp (°C) | Storage Temp (°C) |
|-------------------------|-----|-----|----------|-------------------|-----------------|-----|-----|---------------------|-----|---------------|---------------------|-------------------|
| Min                     | Typ | Max |          |                   | Min             | Typ | Max | Typ                 | Max |               |                     |                   |

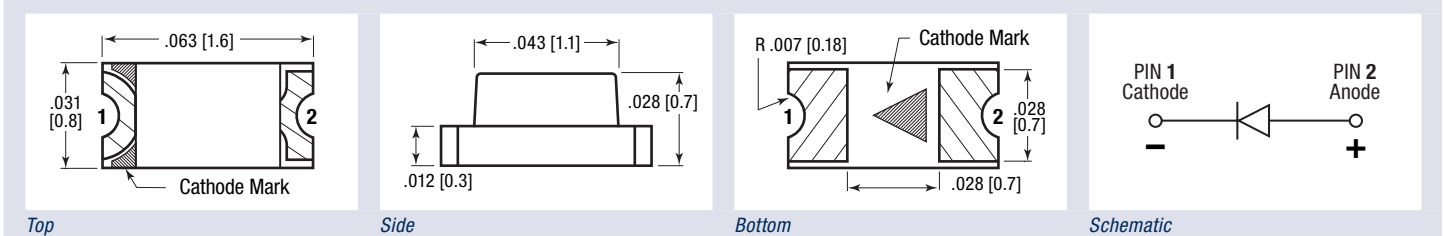
### 0603 ▶ 1.6 x 0.8 x 0.7 mm / Single Color

|                |           |     |     |         |    |     |      |      |     |     |     |             |             |
|----------------|-----------|-----|-----|---------|----|-----|------|------|-----|-----|-----|-------------|-------------|
| 597-5004-407F  | ● R : 621 | 626 | 632 | AlInGaP | 20 | 25  | 50   | 200  | 1.9 | 2.4 | 152 | -40 to +85  | -40 to +100 |
| 597-5112-407F  | ● R : -   | 647 | -   | AlGaAs  |    | 7   | 11.7 | -    | 1.7 | 2.3 |     | -30 to +85  |             |
| 597-5203-407F  | ● O : -   | 606 | -   | GaAsP   |    | 2   | 3.4  | -    | 2.2 | 2.8 |     | -30 to +85  |             |
| 597-5213-407F  | ● O : -   | 605 | -   | AlInGaP |    | 25  | 65   | -    | 1.9 | 2.4 |     | -40 to +85  |             |
| 597-5223-407F  | ● Y : -   | 590 | -   | AlInGaP |    | 25  | 65   | -    | 1.9 | 2.4 |     | -40 to +85  |             |
| 597-5312-407NF | ● G : 565 | 567 | 572 | GaP     |    | 4.5 | -    | 15.1 | 2.1 | 2.8 |     | -40 to +100 |             |
| 597-5412-407F  | ● YG : -  | 572 | -   | GaP     |    | 7   | 11.7 | -    | 2.1 | 2.8 |     | -30 to +85  |             |

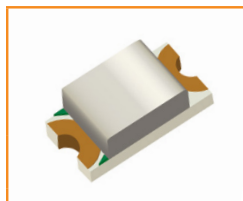


### 0603 ▶ 1.6 x 0.8 x 0.7 mm / Single Color

|               |            |     |     |         |    |     |     |     |     |     |     |             |             |
|---------------|------------|-----|-----|---------|----|-----|-----|-----|-----|-----|-----|-------------|-------------|
| 598-8010-107F | ● R : 625  | 633 | 640 | AlInGaP | 20 | 30  | 60  | 90  | 2.1 | 2.4 | 140 | -40 to +100 | -40 to +100 |
| 598-8020-107F | ● RO : 620 | 625 | 630 |         |    | 120 | 225 | 330 | 2.1 | 2.4 |     |             |             |
| 598-8030-107F | ● O : 600  | 605 | 610 |         |    | 70  | 120 | 200 | 2.1 | 2.4 |     |             |             |
| 598-8040-107F | ● Y : 590  | 592 | 595 |         |    | 120 | 160 | 200 | 2.1 | 2.4 |     |             |             |
| 598-8050-107F | ● Y : 585  | 587 | 590 |         |    | 90  | 105 | 120 | 2.1 | 2.4 |     |             |             |
| 598-8060-107F | ● YG : 570 | 572 | 575 |         |    | 43  | 62  | 80  | 2.1 | 2.4 |     |             |             |
| 598-8070-107F | ● G : 562  | 566 | 570 |         |    | 12  | 28  | 43  | 2.1 | 2.4 |     |             |             |
| 598-8081-107F | ● G : 517  | 525 | 530 | InGaN   | 20 | 260 | 580 | 900 | 3.1 | 3.4 | 140 | -40 to +100 | -40 to +100 |
| 598-8091-107F | ● B : 465  | 470 | 475 |         |    | 90  | 145 | 200 | 3.2 | 3.5 |     |             |             |



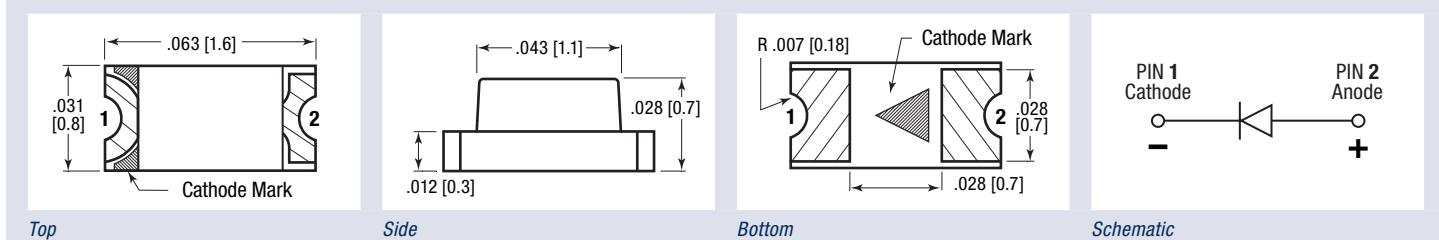
# Top View | 0603



| Color : Wavelength (nm) |     |     | Material | Test Current (mA) | Intensity (mcd) |     |     | Typ Fwd Voltage (V) |     | Viewing Angle | Operating Temp (°C) | Storage Temp (°C) |
|-------------------------|-----|-----|----------|-------------------|-----------------|-----|-----|---------------------|-----|---------------|---------------------|-------------------|
| Min                     | Typ | Max |          |                   | Min             | Typ | Max | Typ                 | Max |               |                     |                   |

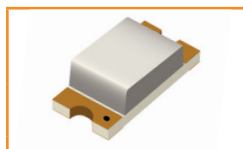
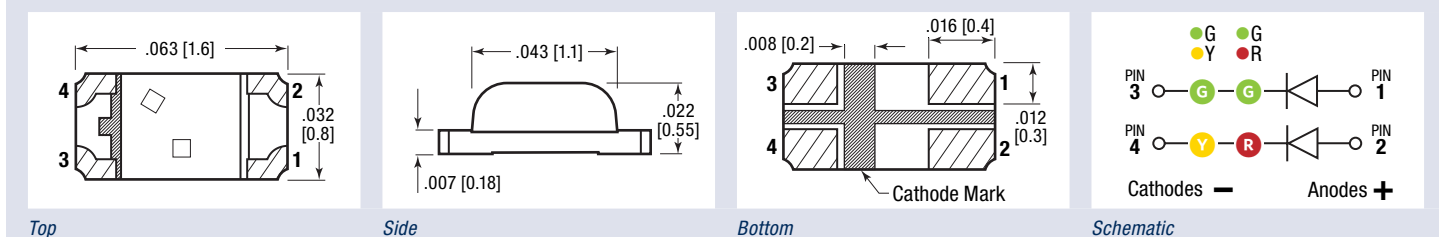
## 0603 ▶ 1.6 x 0.8 x 0.7 mm / Single Color

|               |            |     |     |          |    |     |     |     |     |     |     |             |             |
|---------------|------------|-----|-----|----------|----|-----|-----|-----|-----|-----|-----|-------------|-------------|
| 599-0110-007F | ● R : 625  | 633 | 640 | AllInGaP | 20 | 23  | 45  | 120 | 2.1 | 2.5 | 140 | -40 to +100 | -40 to +100 |
| 599-0120-007F | ● R0 : 620 | 625 | 630 |          |    | 90  | 169 | —   | 2.1 | 2.5 |     |             |             |
| 599-0130-007F | ● O : 600  | 605 | 610 |          |    | 53  | 90  | —   | 2.1 | 2.5 |     |             |             |
| 599-0140-007F | ● Y : 585  | 590 | 595 |          |    | 68  | 105 | —   | 2.1 | 2.5 |     |             |             |
| 599-0160-007F | ● YG : 562 | 569 | 575 |          |    | 9   | 43  | —   | 2.1 | 2.5 |     |             |             |
| 599-0181-007F | ● G : 517  | 525 | 530 | InGaN    | 20 | 195 | 340 | —   | 3.1 | 3.5 | 140 | -40 to +100 | -40 to +100 |
| 599-0191-007F | ● B : 465  | 470 | 475 |          |    | 68  | 105 | —   | 3.2 | 3.6 |     |             |             |



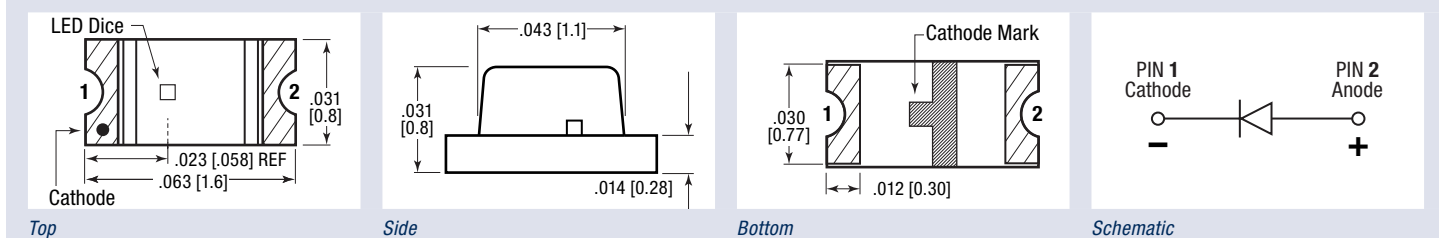
## 0603 ▶ 1.6 x 0.8 x 0.7 mm / BiColor

|               |           |   |     |          |    |    |    |     |     |     |     |            |            |
|---------------|-----------|---|-----|----------|----|----|----|-----|-----|-----|-----|------------|------------|
| 597-7725-607F | ● G : 564 | — | 578 | AllInGaP | 20 | 18 | 45 | 71  | 1.8 | 2.4 | 130 | -30 to +85 | -40 to +85 |
|               | ● Y : 582 | — | 596 |          |    | 28 | 71 | 112 | 1.8 | 2.4 |     |            |            |
| 597-7726-607F | ● G : 565 | — | 577 |          |    | 18 | 45 | 71  | 1.9 | 2.4 |     |            |            |
|               | ● R : 626 | — | 640 |          |    | 28 | 71 | 112 | 1.9 | 2.4 |     |            |            |



## 0603 ▶ 1.6 x 0.8 x 0.8 mm / Single Color

|               |           |     |     |       |    |    |     |     |     |     |            |             |
|---------------|-----------|-----|-----|-------|----|----|-----|-----|-----|-----|------------|-------------|
| 597-3326-607F | ● G : 520 | 525 | 530 | InGaN | 20 | 90 | 150 | 280 | 3.4 | 3.8 | -20 to +80 | -30 to +100 |
| 597-3607-607F | ● B : 465 | —   | 475 |       |    | 28 | 60  | —   | 2.8 | 3.8 |            |             |

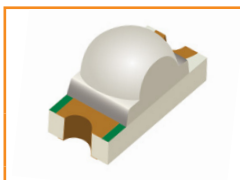
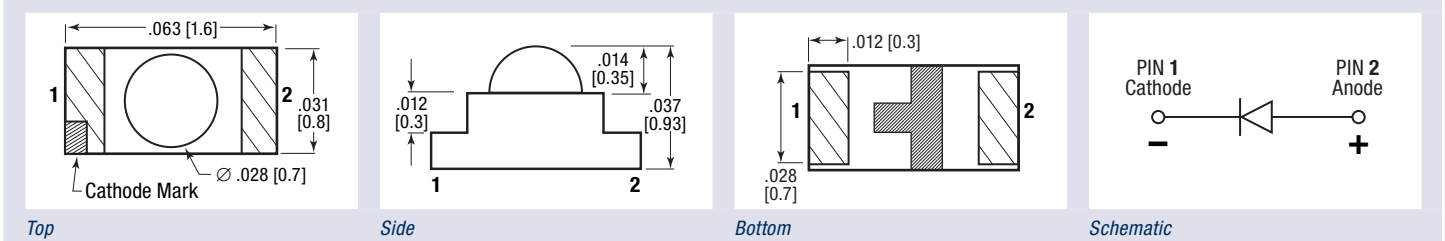




| Color : Wavelength (nm) |     |     | Material | Test Current (mA) | Intensity (mcd) |     |     | Typ Fwd Voltage (V) |     | Viewing Angle | Operating Temp (°C) | Storage Temp (°C) |
|-------------------------|-----|-----|----------|-------------------|-----------------|-----|-----|---------------------|-----|---------------|---------------------|-------------------|
| Min                     | Typ | Max |          |                   | Min             | Typ | Max | Typ                 | Max |               |                     |                   |

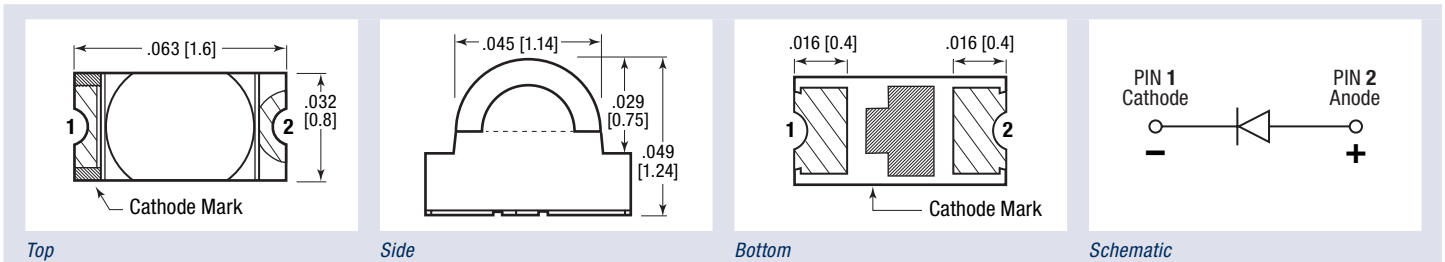
**0603 ▶ 1.6 x 0.8 x 0.93 mm / Single Color with Lens**

|               |            |     |     |         |    |     |     |      |     |     |    |            |            |  |
|---------------|------------|-----|-----|---------|----|-----|-----|------|-----|-----|----|------------|------------|--|
| 598-8E20-107F | ● R0 : 615 | 625 | 630 | AlInGaP | 20 | 350 | 500 | 650  | 1.6 | 2.4 | 60 | -40 to +85 | -40 to +85 |  |
| 598-8E30-107F | ● O : 600  | 605 | 610 |         |    | 430 | 615 | 800  | 1.6 | 2.4 |    |            |            |  |
| 598-8E40-107F | ● Y : 585  | 590 | 595 |         |    | 350 | 590 | 650  | 1.6 | 2.4 |    |            |            |  |
| 598-8E60-107F | ● YG : 565 | 570 | 575 |         |    | 150 | 340 | 530  | 1.8 | 2.4 |    |            |            |  |
| 598-8E80-107F | ● G : 515  | 525 | 535 | InGaN   |    | 350 | 775 | 1200 | 2.4 | 3.6 |    |            |            |  |
| 598-8E90-107F | ● B : 460  | 470 | 475 |         |    | 350 | 440 | 530  | 2.6 | 3.8 |    |            |            |  |



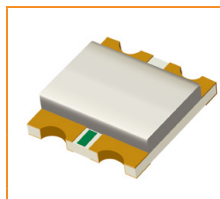
**0603 ▶ 1.6 x 0.8 x 1.24 mm / Single Color with Lens**

|               |            |     |     |                  |    |     |     |     |     |   |    |             |             |
|---------------|------------|-----|-----|------------------|----|-----|-----|-----|-----|---|----|-------------|-------------|
| 597-3006-507F | ● R : 625  | 630 | 635 | AlInGaP          | 20 | 112 | 174 | 355 | 2.0 | — | 60 | -40 to +100 | -40 to +100 |
| 597-3036-507F | ● R : 615  | 620 | 625 |                  |    | 140 | 185 | 450 |     |   |    |             |             |
| 597-3206-507F | ● O : 600  | 605 | 610 |                  |    | 224 | 405 | 710 |     |   |    |             |             |
| 597-3408-507F | ● Y : 585  | 590 | 595 | AlInGaP/<br>GaAs |    | 180 | 320 | 560 |     |   |    |             |             |
| 597-3409-507F | ● Y : 584  | 587 | 590 |                  |    | 180 | 290 | 560 |     |   |    |             |             |
| 597-3506-507F | ● YG : 568 | 571 | 575 | AlInGaP          |    | 56  | 140 | 180 |     |   |    |             |             |
| 597-3316-507F | ● G : 557  | 560 | 565 |                  |    | 14  | 34  | 45  |     |   |    |             |             |





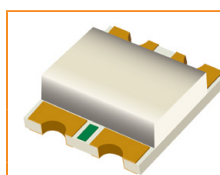
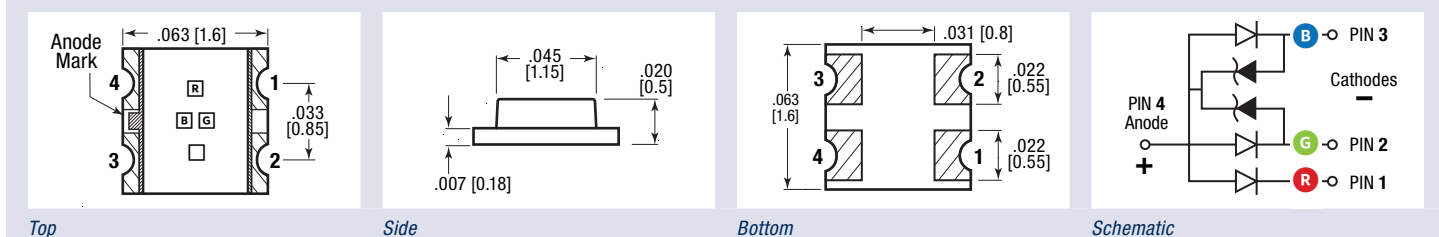
# Top View | 0606



| Color : Wavelength (nm) |     |     | Material | Test Current (mA) | Intensity (mcd) |     |     | Typ Fwd Voltage (V) |     | Viewing Angle | Operating Temp (°C) | Storage Temp (°C) |
|-------------------------|-----|-----|----------|-------------------|-----------------|-----|-----|---------------------|-----|---------------|---------------------|-------------------|
| Min                     | Typ | Max |          |                   | Min             | Typ | Max | Typ                 | Max |               |                     |                   |

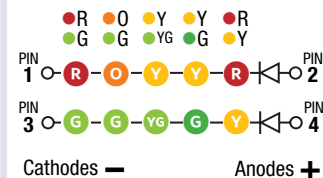
## 0606 Package ▶ 1.6 x 1.6 x 0.5 mm / TriColor with Zener Diode

|               |           |   |     |          |   |    |  |     |     |     |     |            |            |
|---------------|-----------|---|-----|----------|---|----|--|-----|-----|-----|-----|------------|------------|
| 597-7715-607F | ● R : 617 | — | 629 | AllInGaP | 5 | 15 |  | 50  | 1.9 | 2.3 | 130 | -20 to +80 | -30 to +85 |
|               | ● G : 525 | — | 540 | InGaP    |   | 71 |  | 145 | 2.9 | 3.3 |     |            |            |
|               | ● B : 465 | — | 475 | InGaP    |   | 10 |  | 30  | 2.8 | 3.1 |     |            |            |

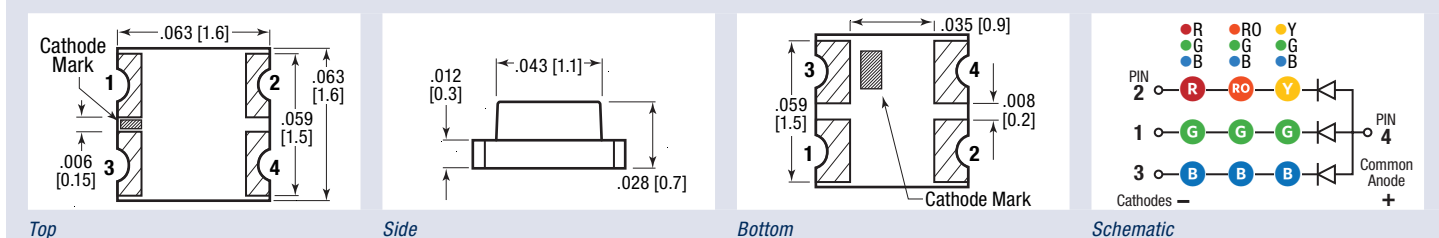


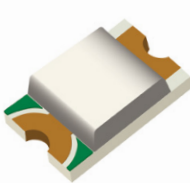
## 0606 ▶ 1.6 x 1.6 x 0.7 mm / BiColor and TriColor

|                |            |     |     |          |    |     |     |     |     |     |     |             |             |
|----------------|------------|-----|-----|----------|----|-----|-----|-----|-----|-----|-----|-------------|-------------|
| 598-8410-207CF | ● R : 625  | 633 | 640 | AllInGaP | 20 | 35  | 65  | 100 | 2.1 | 2.4 | 140 | -40 to +100 | -40 to +100 |
|                | ● G : 565  | 570 | 575 | AllInGaP |    | 18  | 59  | 80  | 2.1 | 2.4 |     |             |             |
| 598-8430-207CF | ● O : 600  | 605 | 610 | AllInGaP |    | 70  | 135 | 200 | 2.1 | 2.4 |     |             |             |
|                | ● G : 565  | 570 | 575 | AllInGaP |    | 18  | 59  | 100 | 2.1 | 2.4 |     |             |             |
| 598-8440-207CF | ● Y : 585  | 590 | 595 | AllInGaP |    | 70  | 135 | 200 | 2.1 | 2.4 |     |             |             |
|                | ● YG : 565 | 570 | 575 | AllInGaP |    | 18  | 59  | 100 | 2.1 | 2.4 |     |             |             |
| 598-8450-207CF | ● Y : 585  | 590 | 595 | AllInGaP |    | 70  | 135 | 200 | 2.1 | 2.4 |     |             |             |
|                | ● G : 515  | 523 | 530 | InGaP    |    | 260 | 580 | 900 | 3.0 | 3.4 |     |             |             |
| 598-8460-207CF | ● Y : 585  | 590 | 595 | AllInGaP |    | 90  | 145 | 200 | 2.1 | 2.4 |     |             |             |
|                | ● R : 625  | 633 | 640 | AllInGaP |    | 30  | 60  | 90  | 2.1 | 2.4 |     |             |             |

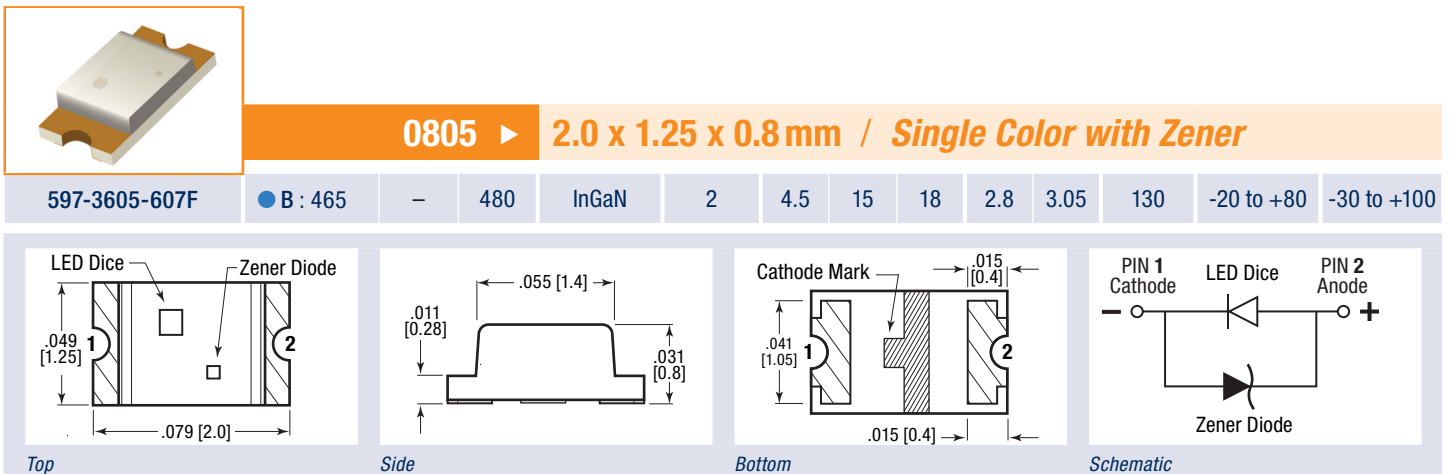
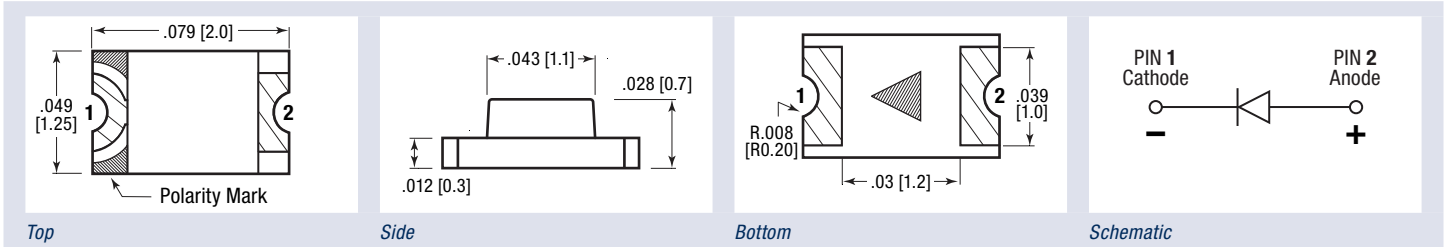


|               |            |     |     |          |    |     |     |     |     |     |     |             |             |
|---------------|------------|-----|-----|----------|----|-----|-----|-----|-----|-----|-----|-------------|-------------|
| 598-8710-307F | ● R : 625  | 630 | 640 | AllInGaP | 20 | 35  | 67  | 100 | 2.1 | 2.4 | 140 | -40 to +100 | -40 to +100 |
|               | ● G : 515  | 520 | 525 | InGaP    |    | 260 | 580 | 900 | 3.2 | 3.4 |     |             |             |
|               | ● B : 465  | 470 | 475 | InGaP    |    | 60  | 160 | 260 | 3.2 | 3.4 |     |             |             |
| 598-8720-307F | ● RO : 620 | 625 | 630 | AllInGaP |    | 70  | 135 | 200 | 2.1 | 2.4 |     |             |             |
|               | ● G : 515  | 523 | 530 | InGaP    |    | 260 | 580 | 900 | 3.2 | 3.4 |     |             |             |
|               | ● B : 465  | 470 | 475 | InGaP    |    | 90  | 175 | 260 | 3.2 | 3.4 |     |             |             |
| 598-8740-307F | ● Y : 585  | 590 | 595 | AllInGaP |    | 70  | 135 | 200 | 2.1 | 2.4 |     |             |             |
|               | ● G : 515  | 523 | 530 | InGaP    |    | 200 | 350 | 900 | 3.2 | 3.4 |     |             |             |
|               | ● B : 465  | 470 | 475 | InGaP    |    | 60  | 260 | 260 | 3.2 | 3.4 |     |             |             |

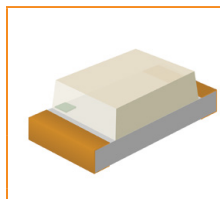


|  | Color : Wavelength (nm)                           |     |     | Material | Test Current (mA) | Intensity (mcd) |     |     | Typ Fwd Voltage (V) |     | Viewing Angle | Operating Temp (°C) | Storage Temp (°C) |
|-----------------------------------------------------------------------------------|---------------------------------------------------|-----|-----|----------|-------------------|-----------------|-----|-----|---------------------|-----|---------------|---------------------|-------------------|
|                                                                                   | Min                                               | Typ | Max |          |                   | Min             | Typ | Max | Typ                 | Max |               |                     |                   |
|                                                                                   | 0805 Package ▶ 2.0 x 1.25 x 0.7 mm / Single Color |     |     |          |                   |                 |     |     |                     |     |               |                     |                   |
| 598-8110-107F                                                                     | ● R : 625                                         | 633 | 640 | AlInGaP  | 20                | 20              | 55  | 90  | 2.1                 | 2.4 | 140           | -40 to +100         | -40 to +100       |
| 598-8120-107F                                                                     | ● RO : 620                                        | 625 | 630 |          |                   | 120             | 190 | 260 | 2.1                 | 2.4 |               |                     |                   |
| 598-8130-107F                                                                     | ● O : 600                                         | 605 | 610 |          |                   | 70              | 165 | 260 | 2.1                 | 2.4 |               |                     |                   |
| 598-8140-107F                                                                     | ● Y : 590                                         | 592 | 595 |          |                   | 150             | 205 | 260 | 2.1                 | 2.4 |               |                     |                   |
| 598-8150-107F                                                                     | ● Y : 585                                         | 587 | 590 |          |                   | 90              | 120 | 150 | 2.1                 | 2.4 |               |                     |                   |
| 598-8160-107F                                                                     | ● YG : 570                                        | 572 | 575 |          |                   | 43              | 62  | 80  | 2.1                 | 2.4 |               |                     |                   |
| 598-8170-107F                                                                     | ● G : 562                                         | 566 | 570 |          |                   | 12              | 28  | 43  | 2.1                 | 2.4 |               |                     |                   |
| 598-8181-107F                                                                     | ● G : 520                                         | 525 | 530 | InGaN    | 20                | 260             | 580 | 900 | 3.2                 | 3.6 | 140           | -40 to +100         | -40 to +100       |
| 598-8191-107F                                                                     | ● B : 465                                         | 470 | 475 |          |                   | 90              | 145 | 200 | 3.2                 | 3.6 |               |                     |                   |

|               |            |     |     |         |    |     |     |   |     |     |     |             |             |
|---------------|------------|-----|-----|---------|----|-----|-----|---|-----|-----|-----|-------------|-------------|
| 599-0110-007F | ● R : 625  | 633 | 640 | AlInGaP | 20 | 15  | 29  | — | 2.1 | 2.5 | 140 | -40 to +100 | -40 to +100 |
| 599-0120-007F | ● RO : 620 | 625 | 630 |         |    | 90  | 138 | — | 2.1 | 2.5 |     |             |             |
| 599-0130-007F | ● O : 600  | 605 | 610 |         |    | 53  | 95  | — | 2.1 | 2.5 |     |             |             |
| 599-0140-007F | ● Y : 585  | 590 | 595 |         |    | 68  | 112 | — | 2.1 | 2.5 |     |             |             |
| 599-0160-007F | ● YG : 562 | 569 | 575 |         |    | 9   | 43  | — | 2.1 | 2.5 |     |             |             |
| 599-0181-007F | ● G : 520  | 525 | 530 | InGaN   | 20 | 195 | 340 | — | 3.2 | 3.6 | 140 | -40 to +100 | -40 to +100 |
| 599-0191-007F | ● B : 465  | 470 | 475 |         |    | 68  | 105 | — | 3.2 | 3.6 |     |             |             |



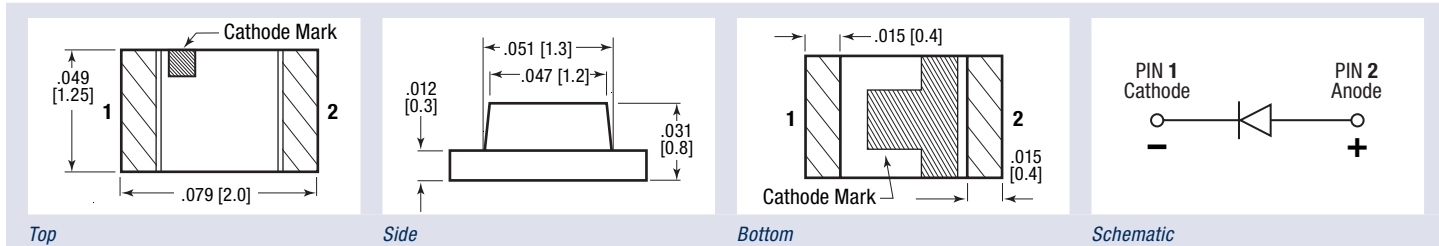
# Top View | 0805



| Color : Wavelength (nm) |     |     | Material | Test Current (mA) | Intensity (mcd) |     |     | Typ Fwd Voltage (V) |     | Viewing Angle | Operating Temp (°C) | Storage Temp (°C) |
|-------------------------|-----|-----|----------|-------------------|-----------------|-----|-----|---------------------|-----|---------------|---------------------|-------------------|
| Min                     | Typ | Max |          |                   | Min             | Typ | Max | Typ                 | Max |               |                     |                   |

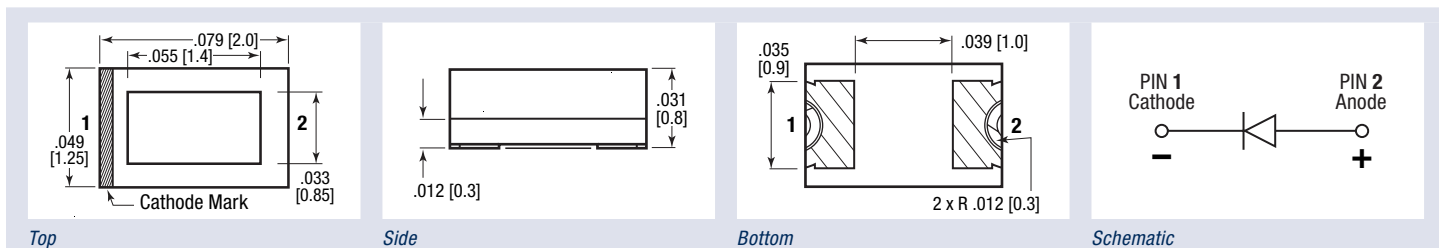
## 0805 Package ▶ 2.0 x 1.25 x 0.8 mm / Single Color

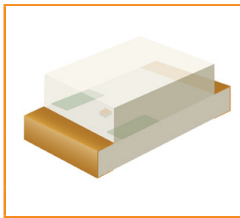
|                |            |     |     |         |    |     |      |      |     |     |     |             |             |
|----------------|------------|-----|-----|---------|----|-----|------|------|-----|-----|-----|-------------|-------------|
| 597-3003-407F  | ● R : 620  | 626 | 632 | AlInGaP | 20 | 68  | 91   | 120  | 1.9 | 2.4 | 140 | -40 to +100 | -40 to +100 |
| 597-3212-407NF | ● O : 603  | 605 | 609 |         |    | 82  | 110  | 150  | 1.9 | 2.4 | 140 | -40 to +100 | -40 to +105 |
| 597-3222-407F  | ● A : 583  | 590 | 597 |         |    | 25  | 65   | 105  | 1.9 | 2.4 | 150 | -40 to +85  | -40 to +100 |
| 597-5111-407F  | ● R : 642  | 647 | 653 | AlGaAs  |    | 7.0 | 11.7 | 16.4 | 1.7 | 2.3 |     |             |             |
| 597-5202-407F  | ● O : 600  | 606 | 612 | GaP     |    | 2.2 | 3.7  | 5.2  | 2.2 | 2.8 |     |             |             |
| 597-5311-407F  | ● G : 562  | 567 | 573 |         |    | 3.8 | 6.4  | 9.0  | 2.1 | 2.8 |     |             |             |
| 597-5411-407F  | ● YG : 570 | 572 | 577 |         |    | 7   | 11.7 | 16.4 | 2.1 | 2.8 |     |             |             |



## 0805 ▶ 2.0 x 1.25 x 0.8 mm / Single Color with Reflector Cup

|               |                       |     |     |         |    |     |     |   |     |   |     |             |             |
|---------------|-----------------------|-----|-----|---------|----|-----|-----|---|-----|---|-----|-------------|-------------|
| 597-5006-507F | ● R : 625             | 630 | 635 | AlInGaP | 20 | 40  | 75  | — | 2.0 | — | 116 | -40 to +85  | -40 to +100 |
| 597-5036-507F | ● R : 615             | 620 | 625 |         |    | 63  | 120 | — | 2.0 | — |     |             |             |
| 597-5206-507F | ● O : 602             | 605 | 608 |         |    | 100 | 160 | — | 2.0 | — |     |             |             |
| 597-5316-507F | ● G : 557             | 560 | 563 |         |    | 6.3 | 16  | — | 2.2 | — |     |             |             |
| 597-5326-507F | ● G : 519             | 527 | 536 | InGaN   | 5  | 56  | 140 | — | 3.0 | — |     | -40 to +100 |             |
| 597-5406-507F | ● Y : 587             | 590 | 593 | AlInGaP | 20 | 100 | 160 | — | 2.0 | — |     | -40 to +85  |             |
| 597-5506-507F | ● YG : 569            | 572 | 575 |         |    | 25  | 45  | — | 2.2 | — |     |             |             |
| 597-5606-507F | ● B : 464             | 470 | 476 | InGaN   | 5  | 14  | 36  | — | 2.9 | — |     | -40 to +100 |             |
| 597-5906-507F | ○ W : X=0.30 / Y=0.28 |     |     |         |    | 56  | 140 | — | 2.9 | — |     |             |             |



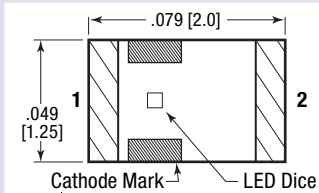


| Color : Wavelength (nm) |     |     | Material | Test Current (mA) | Intensity (mcd) |     |     | Typ Fwd Voltage (V) |     | Viewing Angle | Operating Temp (°C) | Storage Temp (°C) |
|-------------------------|-----|-----|----------|-------------------|-----------------|-----|-----|---------------------|-----|---------------|---------------------|-------------------|
| Min                     | Typ | Max |          |                   | Min             | Typ | Max | Typ                 | Max |               |                     |                   |

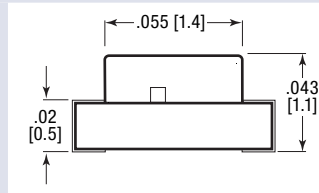
### 0805 ▶ 2.0 x 1.25 x 1.1 mm / Single Color

Fwd V @ 20 mA

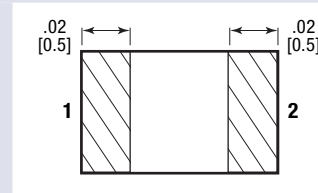
|               |         |     |   |     |    |     |   |   |     |     |     |            |            |
|---------------|---------|-----|---|-----|----|-----|---|---|-----|-----|-----|------------|------------|
| 597-3006-607F | ● R : - | 630 | - | GaP | 10 | 2   | 6 | - | 2.0 | 2.6 | 130 | -55 to +85 | -55 to +85 |
| 597-3305-607F | ● G : - | 569 | - |     |    | 2.8 | 8 | - | 2.1 | 2.6 |     |            |            |
| 597-3405-607F | ● Y : - | 588 | - |     |    | 2   | 6 | - | 2.1 | 2.6 |     |            |            |



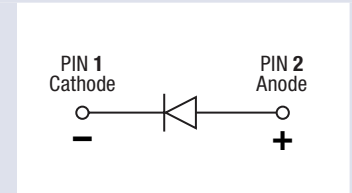
Top



Side



Bottom



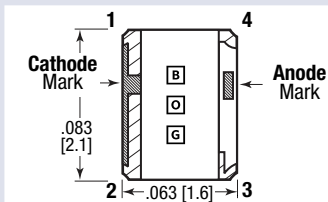
Schematic



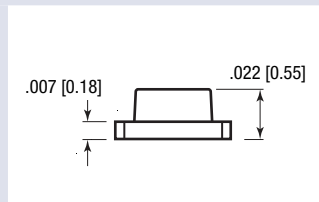
### Special ChipLED ▶ 2.1 x 1.6 x 0.55 mm / TriColor

Fwd V @ 20 mA

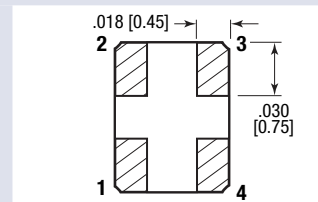
|               |           |   |     |         |    |     |     |     |      |     |     |            |             |
|---------------|-----------|---|-----|---------|----|-----|-----|-----|------|-----|-----|------------|-------------|
| 597-7713-607F | ● B : 463 | - | 477 | InGaN   | 10 | 45  | 71  | 112 | 3.2  | 3.8 | 130 | -20 to +80 | -30 to +100 |
|               | ● G : 518 | - | 532 | InGaN   |    | 112 | 180 | 280 | 3.25 | 3.8 |     |            |             |
|               | ● O : 598 | - | 612 | AlInGaP | 20 | 71  | -   | 180 | 2.1  | 2.5 |     |            |             |



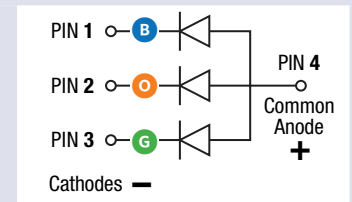
Top



Side

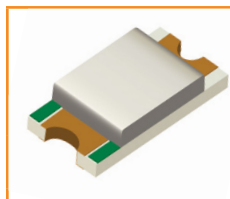


Bottom



Schematic

# Top View | 1206

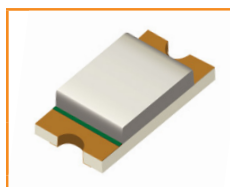
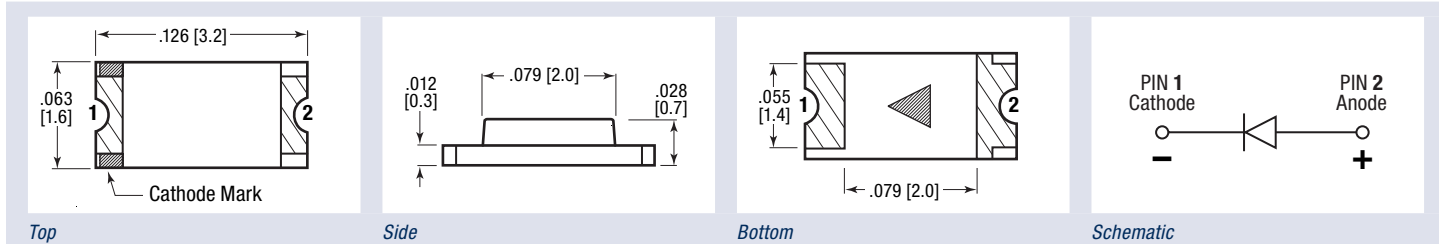


| Color : Wavelength (nm) |     |     | Material | Test Current (mA) | Intensity (mcd) |     |     | Typ Fwd Voltage (V) |     | Viewing Angle | Operating Temp (°C) | Storage Temp (°C) |
|-------------------------|-----|-----|----------|-------------------|-----------------|-----|-----|---------------------|-----|---------------|---------------------|-------------------|
| Min                     | Typ | Max |          |                   | Min             | Typ | Max | Typ                 | Max |               |                     |                   |

## 1206 Package ▶ 3.2 x 1.6 x 0.7 mm / Single Color

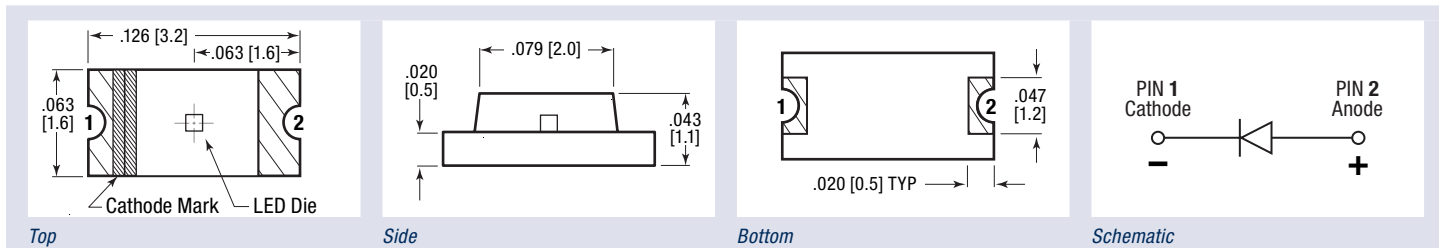
|               |            |     |     |         |    |     |     |     |     |     |     |             |             |
|---------------|------------|-----|-----|---------|----|-----|-----|-----|-----|-----|-----|-------------|-------------|
| 598-8210-107F | ● R : 625  | 633 | 640 | AlInGaP | 20 | 20  | 55  | 90  | 2.1 | 2.4 | 140 | -40 to +100 | -40 to +100 |
| 598-8220-107F | ● R0 : 620 | 625 | 630 |         |    | 70  | 120 | 200 | 2.1 | 2.4 |     |             |             |
| 598-8230-107F | ● O : 600  | 605 | 610 |         |    | 90  | 175 | 260 | 2.1 | 2.4 |     |             |             |
| 598-8240-107F | ● Y : 590  | 592 | 595 |         |    | 150 | 205 | 260 | 2.1 | 2.4 |     |             |             |
| 598-8250-107F | ● Y : 585  | 587 | 590 |         |    | 90  | 120 | 150 | 2.1 | 2.4 |     |             |             |
| 598-8260-107F | ● YG : 570 | 572 | 575 |         |    | 43  | 70  | 100 | 2.1 | 2.4 |     |             |             |
| 598-8270-107F | ● G : 562  | 566 | 570 |         |    | 18  | 30  | 43  | 2.1 | 2.4 |     |             |             |
| 598-8281-107F | ● G : 517  | 525 | 530 | InGaN   | 20 | 260 | 580 | 900 | 3.2 | 3.5 | 140 | -40 to +100 | -40 to +100 |
| 598-8291-107F | ● B : 465  | 470 | 475 |         |    | 90  | 175 | 260 | 3.2 | 3.5 |     |             |             |

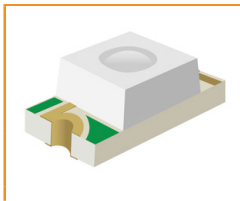
|               |            |     |     |         |    |     |     |   |     |     |     |             |             |
|---------------|------------|-----|-----|---------|----|-----|-----|---|-----|-----|-----|-------------|-------------|
| 599-0210-007F | ● R : 625  | 633 | 640 | AlInGaP | 20 | 15  | 29  | — | 2.1 | 2.5 | 140 | -40 to +100 | -40 to +100 |
| 599-0220-007F | ● R0 : 620 | 625 | 630 |         |    | 53  | 90  | — | 2.1 | 2.5 |     |             |             |
| 599-0230-007F | ● O : 600  | 605 | 610 |         |    | 68  | 112 | — | 2.1 | 2.5 |     |             |             |
| 599-0240-007F | ● Y : 585  | 587 | 590 |         |    | 68  | 126 | — | 2.1 | 2.5 |     |             |             |
| 599-0260-007F | ● YG : 562 | 566 | 570 | InGaN   | 20 | 14  | 54  | — | 2.1 | 2.5 | 140 | -40 to +100 | -40 to +100 |
| 599-0281-007F | ● G : 517  | 525 | 530 |         |    | 195 | 340 | — | 3.2 | 3.6 |     |             |             |
| 599-0291-007F | ● B : 465  | 470 | 475 |         |    | 68  | 105 | — | 3.2 | 3.6 |     |             |             |



## 1206 ▶ 3.2 x 1.6 x 1.1 mm / Single Color

|               |           |     |     |              |    |     |   |    |     |     |     |            |            |
|---------------|-----------|-----|-----|--------------|----|-----|---|----|-----|-----|-----|------------|------------|
| 597-3007-607F | ● R : —   | 621 | —   | GaP          | 20 | 4.0 | 8 | 30 | 2   | 2.6 | 130 | -55 to +85 | -55 to +85 |
| 597-3302-607F | ● G :     | 569 | —   |              | 10 | 4   | 8 | 30 | 2.1 | 2.6 |     | -55 to +85 | -55 to +85 |
| 597-3403-607F | ● Y : 585 | —   | 592 | GaAsP on GaP | 10 | 4.5 | — | 18 | 2.1 | 2.6 |     | -40 to +85 | -40 to +85 |

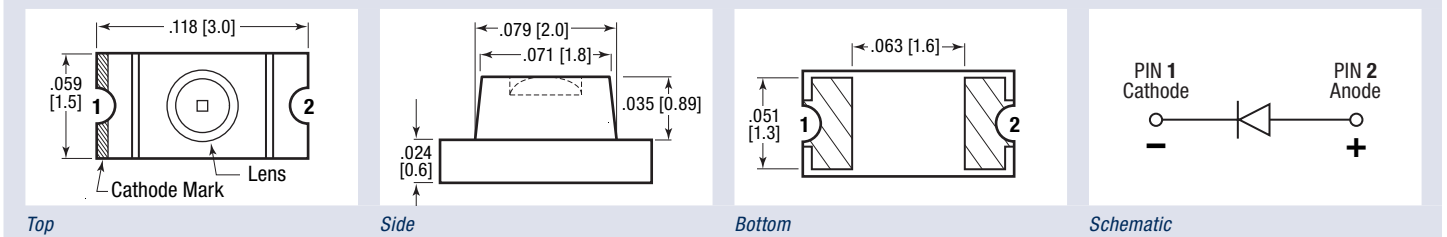




| Color : Wavelength (nm) |     |     | Material | Test Current (mA) | Intensity (mcd) |     |     | Typ Fwd Voltage (V) |     | Viewing Angle | Operating Temp (°C) | Storage Temp (°C) |
|-------------------------|-----|-----|----------|-------------------|-----------------|-----|-----|---------------------|-----|---------------|---------------------|-------------------|
| Min                     | Typ | Max |          |                   | Min             | Typ | Max | Typ                 | Max |               |                     |                   |

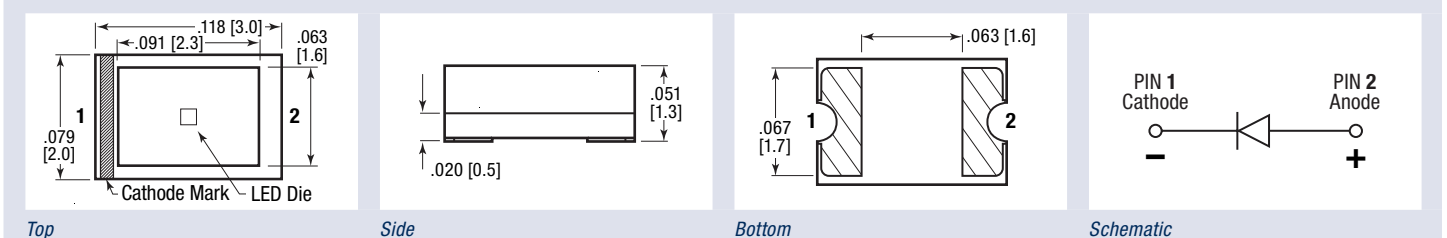
## 1206 ▶ 3.0 x 1.5 x 1.5 mm / Single Color with Lens

|                |           |     |     |        |    |     |      |      |     |     |    |             |             |
|----------------|-----------|-----|-----|--------|----|-----|------|------|-----|-----|----|-------------|-------------|
| 597-3111-407F  | ● R : 640 | 647 | 655 | AlGaAs | 20 | 12  | 33.6 | 55.2 | 1.7 | 2.0 | 70 | -30 to +85  | -40 to +100 |
| 597-3311-407NF | ● G : 560 | 567 | 575 | GaP    |    | 17  | 30   | 48   | 2.1 | 2.5 |    | -40 to +100 | -40 to +120 |
| 597-3401-407NF | ● Y : 589 | 592 | 595 | GaAsP  |    | 8.3 | 20   | 33.6 | 2.2 | 2.5 |    | -40 to +100 | -40 to +120 |
| 597-3325-407F  | ● G : -   | 525 | -   | InGaN  | 20 | 150 | -    | 680  | 3.3 | 3.8 | 50 | -40 to +100 | -40 to +110 |
| 597-3612-407F  | ● B : -   | 470 | -   | InGaN  |    | 47  | -    | 220  | 3.3 | 3.8 |    | -40 to +100 | -40 to +110 |

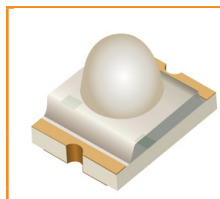


## 1208 Package ▶ 3.0 x 2.0 x 1.3 mm / Single Color with Reflector Cup

|               |                       |     |     |         |    |     |     |      |      |     |     |             |             |
|---------------|-----------------------|-----|-----|---------|----|-----|-----|------|------|-----|-----|-------------|-------------|
| 597-3002-507F | ● R : 625             | 630 | 635 | AllnGaP | 20 | 25  | 63  | 160  | 2.2  | 2.7 | 110 | -40 to +85  | -40 to +100 |
| 597-3021-507F | ● R : 646             | 653 | 659 | GaAsP   |    | 2.2 | 6.3 | 10.4 | 2    | 2.8 |     | -30 to +85  | -40 to +85  |
| 597-3032-507F | ● R : 615             | 620 | 625 | AllnGaP |    | 40  | 100 | 250  | 2.2  | 2.7 |     | -40 to +85  | -40 to +100 |
| 597-3111-507F | ● R : 656             | 662 | 668 | AlGaAs  |    | 5.6 | 16  | 26.4 | 1.75 | 2.5 |     | -30 to +85  | -40 to +85  |
| 597-3202-507F | ● O : 602             | 605 | 608 | AllnGaP |    | 63  | 160 | 400  | 2.2  | 2.7 |     | -40 to +85  | -40 to +100 |
| 597-3211-507F | ● O : 604             | 612 | 618 | GaAsP   |    | 3.6 | 10  | 16.4 | 2    | 2.8 |     | -30 to +85  | -40 to +85  |
| 597-3301-507F | ● G : 565             | 575 | 581 | GaP     |    | 5.6 | 25  | 44.4 | 2.2  | 2.8 |     | -30 to +85  | -40 to +85  |
| 597-3312-507F | ● G : 558             | 560 | 564 | AllnGaP |    | 9   | 18  | 36   | 2.1  | 2.5 |     | -40 to +100 | -40 to +100 |
| 597-3322-507F | ● G : 520             | 525 | 535 | InGaN   |    | 56  | 140 | 360  | 3.2  | 4.0 |     | -30 to +85  | -40 to +100 |
| 597-3401-507F | ● Y : 580             | 588 | 596 | GaAsP   |    | 2.2 | 6.3 | 10.4 | 2.1  | 2.8 |     | -30 to +85  | -40 to +85  |
| 597-3402-507F | ● Y : 587             | 590 | 593 | AllnGaP |    | 63  | 160 | 400  | 2.2  | 2.7 |     | -40 to +85  | -40 to +100 |
| 597-3502-507F | ● YG : 569            | 572 | 575 | AllnGaP |    | 10  | 25  | 63   | 2.2  | 2.7 |     | -40 to +85  | -40 to +100 |
| 597-3602-507F | ● B : 465             | 470 | 475 | InGaN   |    | 36  | 100 | —    | 3.3  | 4.2 |     | -30 to +85  | -40 to +100 |
| 597-3902-507F | ○ W : X=0.30 / Y=0.30 |     |     | InGaN   |    | 360 | 900 | 1400 | 3.2  | 4.3 |     | -30 to +85  | -40 to +100 |



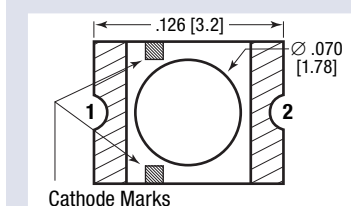
# Top View | 1209 & 1210



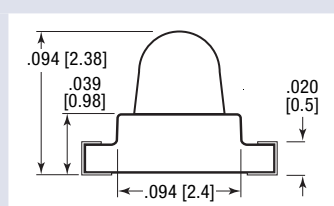
| Color : Wavelength (nm) |     |     | Material | Test Current (mA) | Intensity (mcd) |     |     | Typ Fwd Voltage (V) |     | Viewing Angle | Operating Temp (°C) | Storage Temp (°C) |
|-------------------------|-----|-----|----------|-------------------|-----------------|-----|-----|---------------------|-----|---------------|---------------------|-------------------|
| Min                     | Typ | Max |          |                   | Min             | Typ | Max | Typ                 | Max |               |                     |                   |

## 1209 Package ▶ 3.2 x 2.4 x 2.38 mm / Single Color with Lens

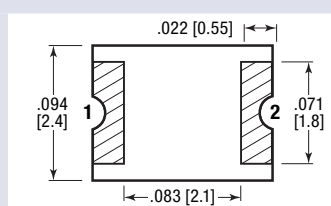
|               |           |     |     |          |    |     |      |      |     |     |    |            |             |
|---------------|-----------|-----|-----|----------|----|-----|------|------|-----|-----|----|------------|-------------|
| 597-3001-607F | ● R :     | 630 |     | AllInGaP | 20 | 710 | 850  | 2800 | 2.0 | 2.4 | 25 | -55 to +85 | -55 to +85  |
| 597-3041-607F | ● RO :    | 615 |     | AllInGaP |    | 710 | 2605 | 4500 | 2.0 | 2.4 |    | -30 to +85 | -40 to +85  |
| 597-3201-607F | ● O : 600 | 605 | 610 | AllInGaP |    | 450 | 1200 | 4500 | 2.0 | 2.4 |    | -55 to +85 | -55 to +85  |
| 597-3321-607F | ● G :     | 525 |     | InGaN    |    | 710 | 2000 | 4500 | 2.8 | 3.6 |    | -20 to +80 | -30 to +100 |
| 597-3401-607F | ● Y : 587 | 590 | 595 | AllInGaP |    | 450 | 710  | 1800 | 2.0 | 2.4 |    | -55 to +85 | -55 to +85  |
| 597-3501-607F | ● YG :    | 570 |     | AllInGaP |    | 180 | 600  | 1800 | 2.0 | 2.4 |    | -55 to +85 | -55 to +85  |
| 597-3601-607F | ● B : 465 | 470 | 475 | InGaN    |    | 560 | 1400 | 2240 | 3.4 | 3.8 |    | -20 to +80 | -30 to +100 |



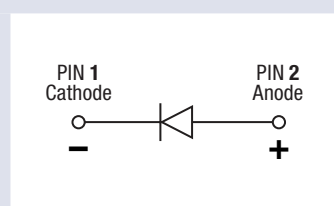
Top



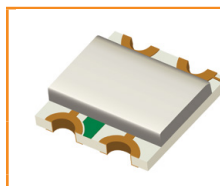
Side



Bottom

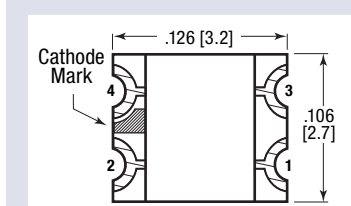


Schematic

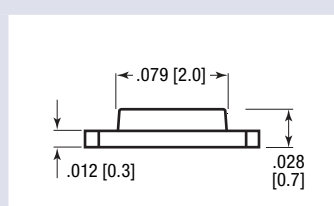


## 1210 Package ▶ 3.2 x 2.7 x 0.7 mm / Bicolor

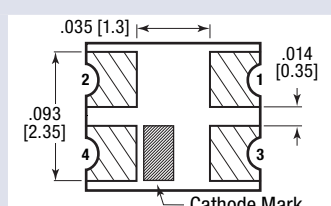
|               |            |     |     |          |    |     |     |     |     |     |     |             |             |
|---------------|------------|-----|-----|----------|----|-----|-----|-----|-----|-----|-----|-------------|-------------|
| 598-8610-207F | ● R : 630  | 635 | 640 | AllInGaP | 20 | 40  | 65  | 90  | 2.1 | 2.4 | 140 | -40 to +100 | -40 to +100 |
|               | ● G : 565  | 570 | 575 | AllInGaP |    | 30  | 40  | 50  |     |     |     |             |             |
| 598-8621-207F | ● RO : 620 | 625 | 630 | AllInGaP |    | 90  | 120 | 150 | 2.1 | 2.4 |     |             |             |
|               | ● G : 520  | 525 | 530 | InGaN    |    | 260 | 580 | 900 | 3.0 | 3.4 |     |             |             |
| 598-8640-207F | ● Y : 585  | 590 | 595 | AllInGaP |    | 80  | 155 | 230 | 2.1 | 2.4 |     |             |             |
|               | ● G : 565  | 570 | 575 | AllInGaP |    | 30  | 40  | 50  |     |     |     |             |             |
| 598-8660-207F | ● Y : 585  | 590 | 595 | AllInGaP |    | 90  | 145 | 200 | 2.1 | 2.4 |     |             |             |
|               | ● R : 630  | 635 | 640 | AllInGaP |    | 40  | 65  | 90  |     |     |     |             |             |



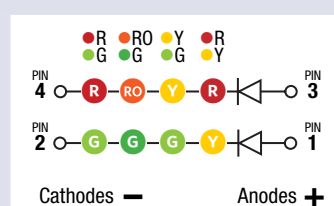
Top



Side

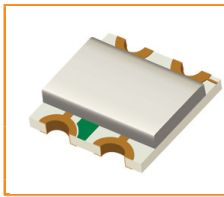


Bottom



Schematic

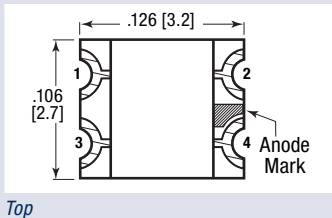




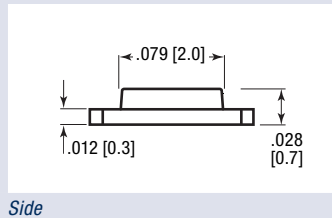
| Color : Wavelength (nm) |     |     | Material | Test Current (mA) | Intensity (mcd) |     |     | Typ Fwd Voltage (V) |     | Viewing Angle | Operating Temp (°C) | Storage Temp (°C) |
|-------------------------|-----|-----|----------|-------------------|-----------------|-----|-----|---------------------|-----|---------------|---------------------|-------------------|
| Min                     | Typ | Max |          |                   | Min             | Typ | Max | Typ                 | Max |               |                     |                   |

## 1210 Package ▶ 3.2 x 2.7 x 0.7 mm / Tricolor

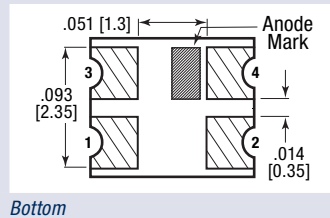
|               |            |     |     |         |    |     |     |     |     |     |     |             |             |
|---------------|------------|-----|-----|---------|----|-----|-----|-----|-----|-----|-----|-------------|-------------|
| 598-8610-307F | ● R : 630  | 635 | 640 | AlInGaP | 20 | 40  | 65  | 90  | 2.1 | 2.4 | 140 | -40 to +100 | -40 to +100 |
|               | ● G : 515  | 520 | 525 | InGaP   |    | 260 | 580 | 900 | 3.1 | 3.4 |     |             |             |
|               | ● B : 465  | 470 | 475 | InGaP   |    | 60  | 160 | 260 | 3.1 | 3.4 |     |             |             |
| 598-8920-307F | ● RO : 620 | 625 | 630 | AlInGaP |    | 90  | 120 | 150 | 2.1 | 2.4 |     |             |             |
|               | ● G : 515  | 520 | 525 | InGaP   |    | 260 | 580 | 900 | 3.1 | 3.4 |     |             |             |
|               | ● B : 465  | 470 | 475 | InGaP   |    | 90  | 175 | 260 | 3.1 | 3.4 |     |             |             |
| 598-8940-307F | ● Y : 585  | 590 | 595 | AlInGaP |    | 60  | 175 | 260 | 2.1 | 2.4 |     |             |             |
|               | ● G : 515  | 520 | 525 | InGaP   |    | 260 | 580 | 900 | 3.1 | 3.4 |     |             |             |
|               | ● B : 465  | 470 | 475 | InGaP   |    | 60  | 160 | 260 | 3.1 | 3.4 |     |             |             |



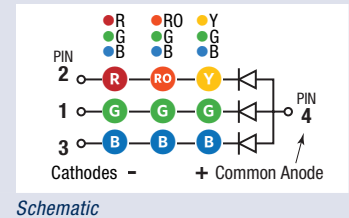
Top



Side



Bottom

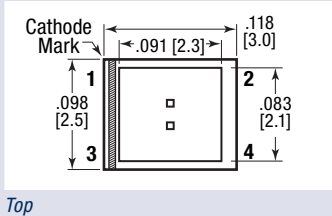


Schematic

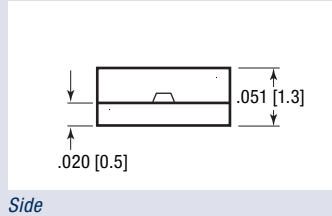


## 1210 ▶ 3.0 x 2.5 x 1.3 mm / BiColor with Reflector Cup

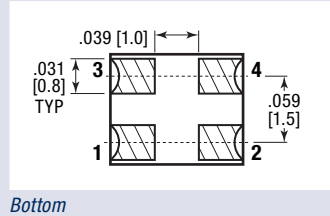
|               |           |     |     |             |    |     |     |    |     |     |     |            |            |
|---------------|-----------|-----|-----|-------------|----|-----|-----|----|-----|-----|-----|------------|------------|
| 597-7701-507F | ● R : 620 | 630 | 640 | GaAsP       | 20 | 3.6 | 6.3 | 11 | 2.0 | 2.8 | 100 | -30 to +85 | -40 to +85 |
|               | ● G : 560 | 570 | 580 | GaP         |    | 9   | 20  | 45 | 2.2 | 2.8 |     |            |            |
| 597-7721-507F | ● Y : 582 | 589 | 596 | GaAsP / GaP |    | 5.6 | 10  | 18 | 2.1 | 2.8 |     |            |            |
|               | ● G : 560 | 570 | 580 | GaP         |    | 9   | 21  | 45 | 2.2 | 2.8 |     |            |            |



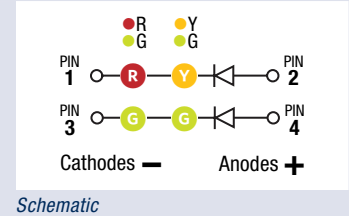
Top



Side



Bottom

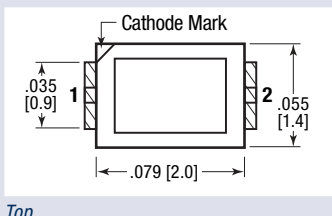


Schematic

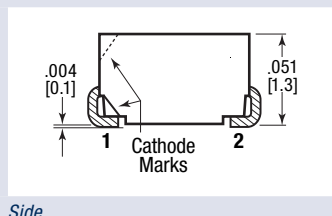


## Mini PLCC-2 ▶ 2.0 x 1.4 x 1.3 mm / Single Color, Low Current

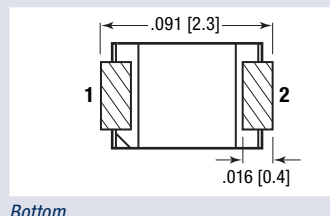
|                |                          |     |     |         |   |      |      |      |      |     |     |             |             |
|----------------|--------------------------|-----|-----|---------|---|------|------|------|------|-----|-----|-------------|-------------|
| 597C-3008-207F | ● R : 624                | 630 | 636 | AlInGaP | 2 | 3.55 | 9    | 14   | 1.8  | 2.2 | 120 | -40 to +100 | -40 to +100 |
| 597C-3208-207F | ● O : 600                | 606 | 609 |         |   | 5.6  | 14   | 22.4 | 1.8  | 2.2 |     |             |             |
| 597C-3408-207F | ● Y : 580                | 587 | 595 |         |   | 4.5  | 11   | 18   | 1.8  | 2.2 |     |             |             |
| 597C-3608-207F | ● IceB : X=0.20 / Y=0.30 |     |     | InGaP   |   | 9    | 15.7 | 22.4 | 2.75 | 3.1 |     |             |             |
| 597C-3908-207F | ● W : X=0.33 / Y=0.33    |     |     |         |   | 9    | 23   | 36   | 2.75 | 3.1 |     |             |             |



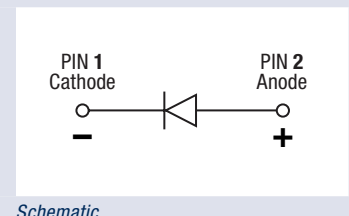
Top



Side



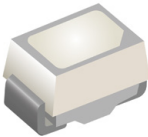
Bottom

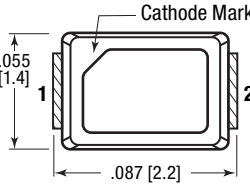


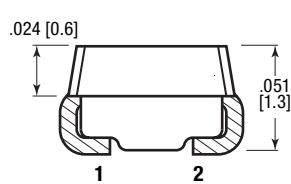
Schematic

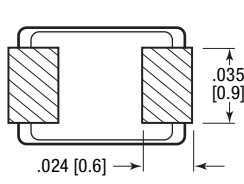


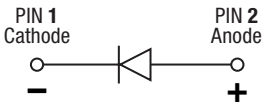
# Top View | Mini PLCC-2 & PLCC-2

|  | Color : Wavelength (nm)                         |     |     | Material | Test Current (mA) | Intensity (mcd) |      |      | Typ Fwd Voltage (V) |     | Viewing Angle | Operating Temp (°C) | Storage Temp (°C) |  |
|-----------------------------------------------------------------------------------|-------------------------------------------------|-----|-----|----------|-------------------|-----------------|------|------|---------------------|-----|---------------|---------------------|-------------------|--|
|                                                                                   | Min                                             | Typ | Max |          |                   | Min             | Typ  | Max  | Typ                 | Max |               |                     |                   |  |
|                                                                                   | Mini PLCC-2 ▶ 2.2 x 1.4 x 1.3 mm / Single Color |     |     |          |                   |                 |      |      |                     |     |               |                     |                   |  |
| 598-8C10-107F                                                                     | ● R : 620                                       | 625 | 630 | AlInGaP  | 20                | 280             | 405  | 530  | 1.8                 | 2.4 | 120           | -40 to +85          | -40 to +100       |  |
| 598-8C30-107F                                                                     | ● O : 600                                       | 605 | 610 |          |                   | 230             | 290  | 350  | 1.8                 | 2.4 |               |                     |                   |  |
| 598-8C40-107F                                                                     | ● Y : 585                                       | 590 | 595 |          |                   | 280             | 405  | 530  | 1.8                 | 2.4 |               |                     |                   |  |
| 598-8C60-107F                                                                     | ● YG : 565                                      | 570 | 575 |          |                   | 40              | 65   | 90   | 1.8                 | 2.4 |               |                     |                   |  |
| 598-8C80-107F                                                                     | ● G : 520                                       | 525 | 550 | InGaN    |                   | 1500            | 1900 | 2300 | 2.8                 | 3.3 |               |                     |                   |  |
| 598-8C90-107F                                                                     | ● B : 465                                       | 470 | 475 |          |                   | 350             | 440  | 530  | 2.8                 | 3.3 |               |                     |                   |  |









Top

Side

Bottom

Schematic

## PLCC-2 ▶ 3.5 x 2.8 x 1.9 mm / Single Color Low Current

597-3008-207F

● R : 624

630

636

597-3208-207F

● O : 600

606

609

597-3308-207F

● G : 566

570

575

597-3408-207F

● Y : 580

587

595

AlInGaP

2

7.1

12.6

18

1.8

2.2

11.2

19.6

28

1.8

2.2

3.55

6.28

9.0

1.8

2.2

9

15.7

22.4

1.8

2.2

120

-40 to +100

-40 to +100

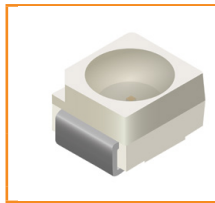
Top

Side

Bottom

PIN 1 Cathode (-) PIN 2 Anode (+)

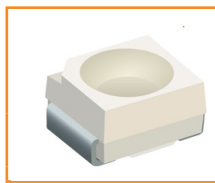
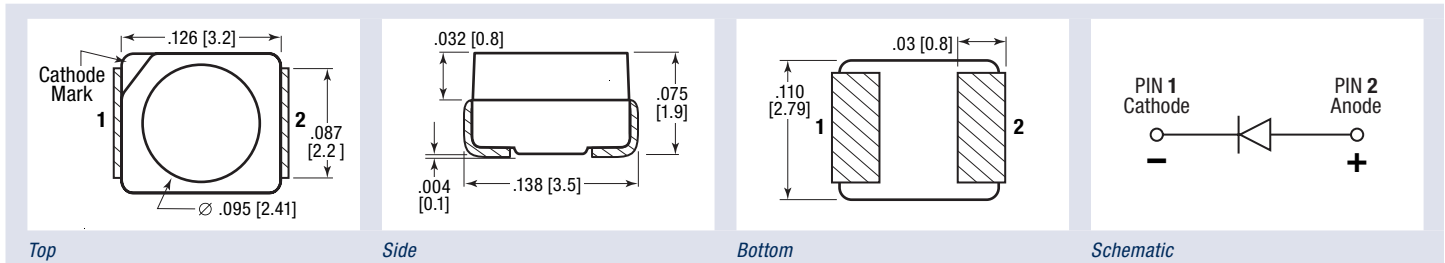
Schematic



| Color : Wavelength (nm) |     |     | Material | Test Current (mA) | Intensity (mcd) |     |     | Typ Fwd Voltage (V) |     | Viewing Angle | Operating Temp (°C) | Storage Temp (°C) |
|-------------------------|-----|-----|----------|-------------------|-----------------|-----|-----|---------------------|-----|---------------|---------------------|-------------------|
| Min                     | Typ | Max |          |                   | Min             | Typ | Max | Typ                 | Max |               |                     |                   |

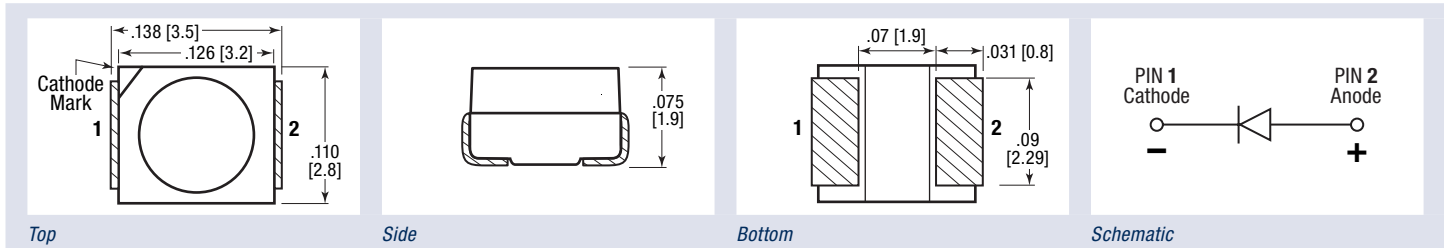
## PLCC-2 ▶ 3.5 x 2.8 x 1.9 mm / Single Color

|               |           |     |     |           |    |       |      |     |     |      |     |             |             |
|---------------|-----------|-----|-----|-----------|----|-------|------|-----|-----|------|-----|-------------|-------------|
| 597-3001-207F | ● R : -   | 628 | -   | GaAsP     | 10 | 4.5   | -    | 18  | 2   | 2.5  | 120 | -40 to +100 | -40 to +100 |
| 597-3002-307F | ● R : -   | 633 | -   | AlInGaP   | 20 | 112   | 160  | 224 | 2   | 2.3  |     | -55 to +100 | -55 to +100 |
| 597-3211-207F | ● O : -   | 602 | -   | GaP       | 20 | 11.2  | 15   | -   | 2.2 | 2.6  |     | -40 to +100 | -40 to +100 |
| 597-3225-307F | ● A : -   | 592 | -   | AlInGaP   | 20 | 112.5 | 140  | -   | 2.2 | 2.6  |     | -55 to +100 | -55 to +100 |
| 597-3231-207F | ● Y : 580 | 587 | 595 | AlInGaP   | 20 | 71    | 100  | 140 | 2   | 2.4  |     | -40 to +100 | -40 to +100 |
| 597-3301-207F | ● G : 564 | 570 | 576 | GaAsP/GaP | 10 | 11.2  | 19.6 | 28  | 2   | 2.5  |     | -55 to +100 | -55 to +100 |
| 597-3306-207F | ● G : 564 | 570 | 576 | GaAlP     | 10 | 14    | 24   | 36  | 2   | 2.5  |     | -40 to +100 | -40 to +100 |
| 597-3323-307F | ● G : -   | 525 | -   | InGaP     | 20 | 180   | 224  | -   | 3.7 | 4.36 |     | -40 to +100 | -40 to +100 |
| 597-3401-207F | ● Y : 580 | 587 | 595 | GaAsP/GaP | 10 | 7.1   | 12.6 | 18  | 2   | 2.5  |     | -40 to +100 | -40 to +100 |
| 597-3601-207F | ● B : 465 | 471 | 477 | InGaP     | 10 | 14    | -    | 34  | 3.1 | 3.7  |     | -40 to +100 | -40 to +100 |

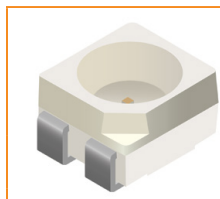


## 3528 Package ▶ 3.5 x 2.8 x 1.9 mm / Single Color

|               |            |     |     |         |    |      |      |      |     |     |     |            |             |
|---------------|------------|-----|-----|---------|----|------|------|------|-----|-----|-----|------------|-------------|
| 598-8B10-107F | ● R : 615  | 623 | 630 | AlInGaP | 20 | 200  | 380  | 560  | 1.8 | 2.4 | 120 | -40 to +85 | -40 to +100 |
| 598-8B30-107F | ● O : 600  | 605 | 610 |         |    | 260  | 345  | 430  | 1.8 | 2.4 |     |            |             |
| 598-8B40-107F | ● Y : 585  | 590 | 595 |         |    | 200  | 315  | 430  | 1.8 | 2.4 |     |            |             |
| 598-8B60-107F | ● YG : 565 | 570 | 575 |         |    | 40   | 80   | 120  | 1.8 | 2.4 |     |            |             |
| 598-8B80-107F | ● G : 520  | 525 | 530 | InGaP   | 20 | 1200 | 1750 | 2300 | 2.8 | 3.5 |     |            |             |
| 598-8B90-107F | ● B : 465  | 470 | 475 |         |    | 230  | 395  | 560  | 2.8 | 3.5 |     |            |             |



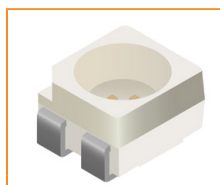
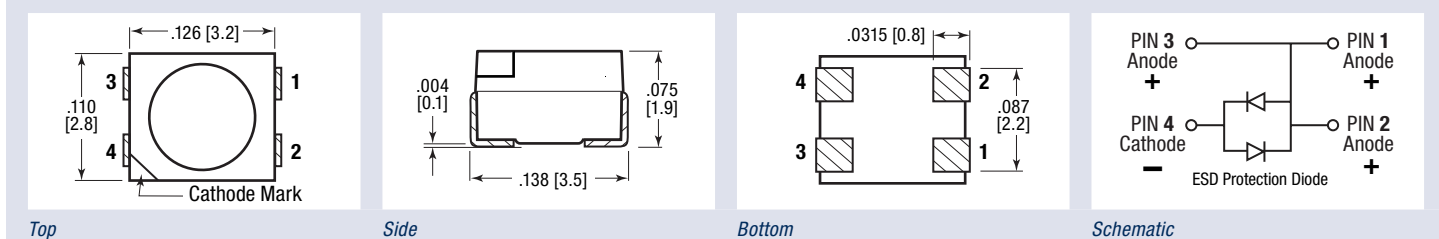
# Top View | PLCC-4



| Color : Wavelength (nm) |     |     | Material | Test Current (mA) | Intensity (mcd) |     |     | Typ Fwd Voltage (V) |     | Viewing Angle | Operating Temp (°C) | Storage Temp (°C) |
|-------------------------|-----|-----|----------|-------------------|-----------------|-----|-----|---------------------|-----|---------------|---------------------|-------------------|
| Min                     | Typ | Max |          |                   | Min             | Typ | Max | Typ                 | Max |               |                     |                   |

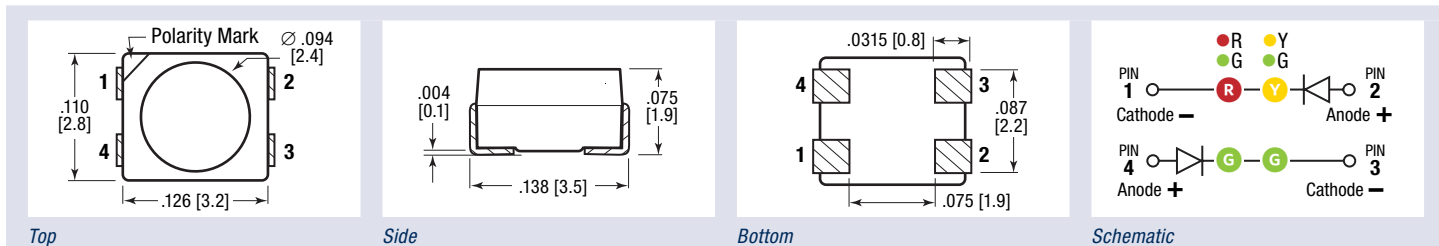
## PLCC-4 ▶ 3.5 x 2.8 x 1.9 mm / Single Color High Current

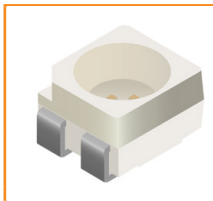
|               |                       |     |     |         |    |      |      |      |      |      |     |             |             |
|---------------|-----------------------|-----|-----|---------|----|------|------|------|------|------|-----|-------------|-------------|
| 597-3029-207F | ● R : 620             | 625 | 630 | AlInGaP | 50 | 1120 | 1800 | 2800 | 2.15 | 2.5  | 120 | -40 to +110 | -40 to +110 |
| 597-3209-207F | ● O : 600             | 606 | 609 | AlInGaP | 50 | 1400 | 2240 | 4500 | 2.15 | 2.5  |     |             |             |
| 597-3329-207F | ● G : 516             | 525 | 540 | InGaN   | 30 | 1120 | 1800 | 2240 | 3.4  | 3.8  |     |             |             |
| 597-3409-207F | ● Y : 586             | 589 | 595 | AlInGaP | 50 | 1120 | 1800 | 2240 | 2.15 | 2.65 |     |             |             |
| 597-3609-207F | ● B : 463             | 469 | 475 | InGaN   | 30 | 280  | 450  | 710  | 3.4  | 3.8  |     |             |             |
| 597-3909-207F | ○ W : X=0.30 / Y=0.28 |     |     | InGaN   | 30 | 1120 | 1600 | 2240 | 3.3  | 3.8  |     |             |             |



## PLCC-4 ▶ 3.5 x 2.8 x 1.9 mm / Bicolor Low Current

|               |           |     |     |         |   |     |   |      |     |     |     |             |             |
|---------------|-----------|-----|-----|---------|---|-----|---|------|-----|-----|-----|-------------|-------------|
| 597-7701-207F | ● R : 624 | 630 | 636 | AlInGaP | 2 | 4.5 | — | 18   | 1.8 | 2.2 | 120 | -40 to +100 | -40 to +100 |
|               | ● G : 566 | 570 | 575 |         |   | 2.8 | — | 11.2 | 1.8 | 2.2 |     |             |             |
| 597-7721-207F | ● Y : 580 | 587 | 595 | AlInGaP |   | 4.5 | — | 18   | 1.8 | 2.2 |     |             |             |
|               | ● G : 566 | 570 | 575 |         |   | 2.8 | — | 11.2 | 1.8 | 2.2 |     |             |             |

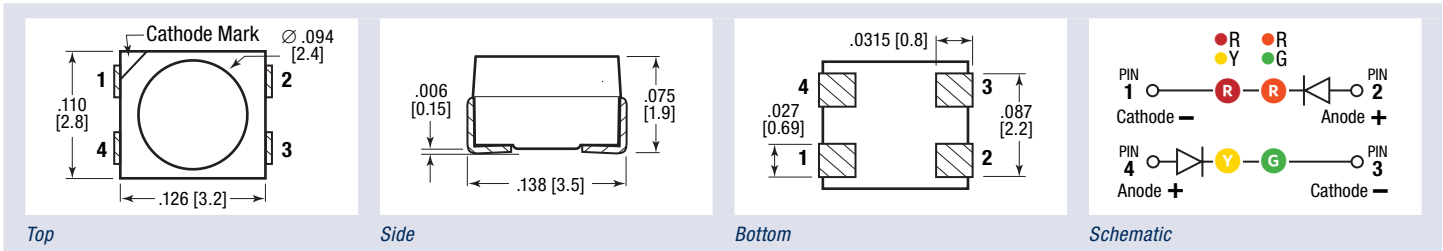




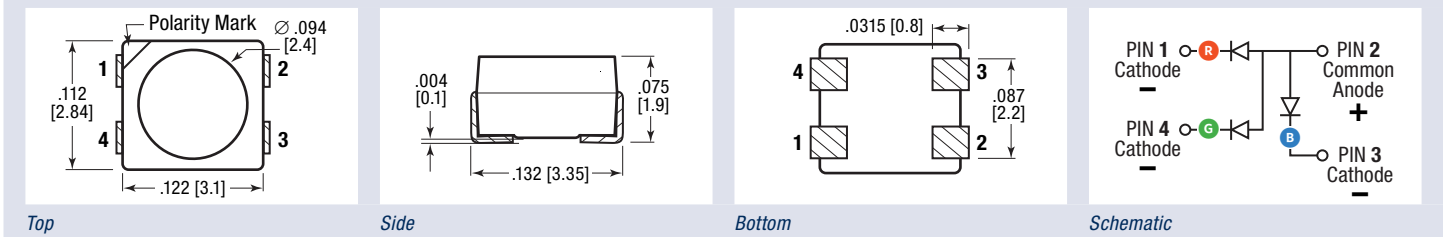
| Color : Wavelength (nm) |     |     | Material | Test Current (mA) | Intensity (mcd) |     |     | Typ Fwd Voltage (V) |     | Viewing Angle | Operating Temp (°C) | Storage Temp (°C) |
|-------------------------|-----|-----|----------|-------------------|-----------------|-----|-----|---------------------|-----|---------------|---------------------|-------------------|
| Min                     | Typ | Max |          |                   | Min             | Typ | Max | Typ                 | Max |               |                     |                   |

### PLCC-4 ▶ 3.5 x 2.8 x 1.9 mm / Bicolor and Tricolor

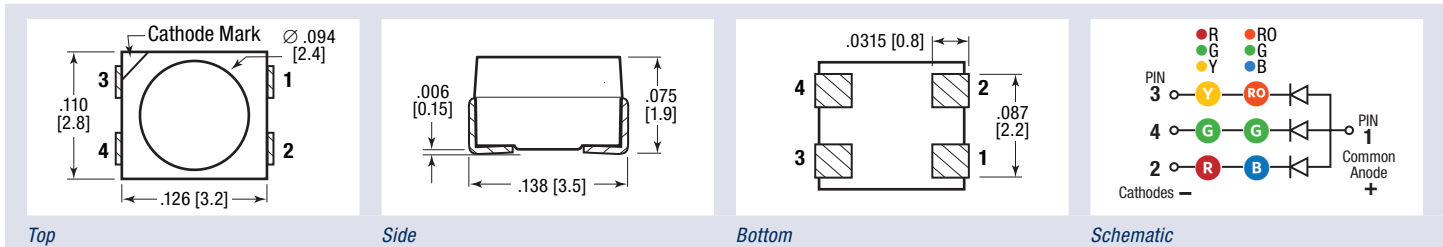
|               |           |     |     |         |    |     |     |      |     |     |     |             |             |
|---------------|-----------|-----|-----|---------|----|-----|-----|------|-----|-----|-----|-------------|-------------|
| 597-7731-207F | ● R : 627 | 633 | 639 | AllnGaP | 20 | 56  | 112 | 140  | 2.0 | 2.3 | 120 | -40 to +100 | -40 to +100 |
|               | ● Y : 580 | 587 | 595 |         |    | 90  | 140 | 224  | 2.0 | 2.4 |     |             |             |
| 597-7752-007F | ● R : 620 | —   | 630 | AllnGaP |    | 200 | 400 | 600  | 2.0 | 2.2 |     |             |             |
|               | ● G : 515 | 520 | 530 | InGaN   |    | 650 | —   | 1500 | 3.2 | 3.6 |     |             |             |



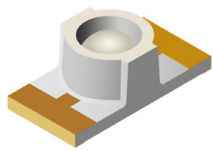
|               |       |     |  |         |    |    |     |     |     |      |     |             |             |
|---------------|-------|-----|--|---------|----|----|-----|-----|-----|------|-----|-------------|-------------|
| 597-7711-307F | ● R : | 626 |  | AllnGaP | 20 | 40 | 80  |     | 1.9 | 2.4  | 120 | -55 to +100 | -55 to +100 |
|               | ● G : | 525 |  | InGaN   |    | 99 | 160 | 180 | 3.4 | 4.05 |     |             |             |
|               | ● B : | 470 |  | InGaN   |    | 25 | 40  | 60  | 3.4 | 4.05 |     |             |             |



|               |            |     |       |               |    |     |      |      |     |     |     |            |             |
|---------------|------------|-----|-------|---------------|----|-----|------|------|-----|-----|-----|------------|-------------|
| 597-7714-007F | ● RO : 620 | 625 | 630   | AllnGaP       | 20 | 180 | 230  | 380  | 2.1 | 2.3 | 120 | -20 to +85 | -35 to +85  |
|               | ● G : 520  | 525 | 530   | InGaN         |    | 650 | 1000 | 1200 | 3.2 | 3.4 |     |            |             |
|               | ● B : 465  | 468 | 472.5 | InGaN         |    | 150 | 230  | 350  | 3.2 | 3.4 |     |            |             |
| 597-7791-907F | ● R : 620  | 625 | 630   | AllnGaP/ GaAs | 20 | 520 | 850  | 1150 | 2.1 | 2.4 | 120 | -30 to +85 | -40 to +100 |
|               | ● G : 525  | 530 | 535   | InGaN         |    | 800 | 1650 | 1900 | 3.2 | 3.6 |     |            |             |
|               | ● Y : 585  | 590 | 595   | AllnGaP/ GaAs |    | 520 | 800  | 1150 | 2.1 | 2.4 |     |            |             |



# Reverse Mount | 1206



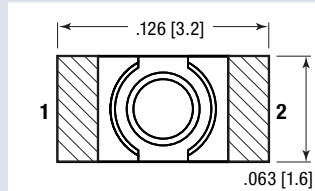
| Color : Wavelength (nm) |     |     | Material | Test Current (mA) | Intensity (mcd) |     |     | Typ Fwd Voltage (V) |     | Viewing Angle | Operating Temp (°C) | Storage Temp (°C) |
|-------------------------|-----|-----|----------|-------------------|-----------------|-----|-----|---------------------|-----|---------------|---------------------|-------------------|
| Min                     | Typ | Max |          |                   | Min             | Typ | Max | Typ                 | Max |               |                     |                   |

## 1206 Package Reverse Mount ▶ 3.2 x 1.6 x 1.1 mm / Single Color

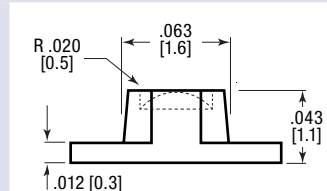
|               |                         |     |     |          |    |     |   |      |     |      |     |            |            |
|---------------|-------------------------|-----|-----|----------|----|-----|---|------|-----|------|-----|------------|------------|
| 597-6001-607F | ● R : -                 | 631 | -   | AllInGaP | 20 | 18  | - | 280  | 2.0 | 2.4  | 70  | -55 to +85 | -55 to +85 |
| 597-6201-607F | ● O : -                 | 605 | -   | AllInGaP |    | 71  | - | 450  | 2.0 | 2.4  |     |            |            |
| 597-6301-607F | ● G : -                 | 525 | -   | InGaN    |    | 280 | - | 1120 | 3.0 | 3.8  |     |            |            |
| 597-6401-607F | ● Y : -                 | 587 | -   | AllInGaP |    | 28  | - | 450  | 2.0 | 2.4  |     |            |            |
| 597-6501-607F | ● YG : 567              | -   | 577 | AllInGaP |    | 28  | - | 180  | 2.0 | 2.4  |     |            |            |
| 597-6601-607F | ● B : 465               | -   | 475 | InGaN    |    | 112 | - | 280  | 3.0 | 3.8  |     |            |            |
| 597-6901-607F | ○ W : X=0.304 / Y=0.301 |     |     | InGaN    | 5  | 45  |   | 112  | 3.0 | 3.15 | 150 | -20 to +80 | -40 to +85 |

## 1206 Reverse Mount ▶ 3.2 x 1.6 x 1.1 mm / Single Color with Zener Diode

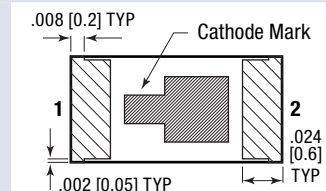
|               |           |   |     |       |    |     |   |      |     |     |    |            |             |
|---------------|-----------|---|-----|-------|----|-----|---|------|-----|-----|----|------------|-------------|
| 597-6325-607F | ● G : 520 | - | 535 | InGaN | 20 | 280 | - | 1120 | 3.0 | 3.8 | 70 | -20 to +80 | -30 to +100 |
|---------------|-----------|---|-----|-------|----|-----|---|------|-----|-----|----|------------|-------------|



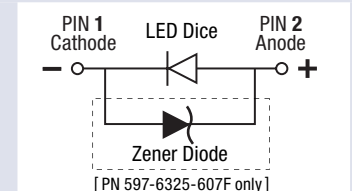
Top



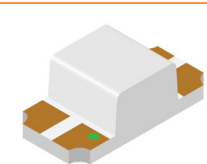
Side



Bottom

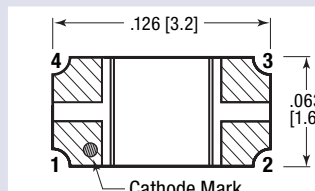


Schematic

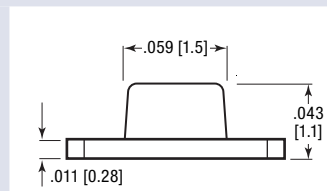


## 1206 Reverse Mount ▶ 3.2 x 1.6 x 1.1 mm / BiColor

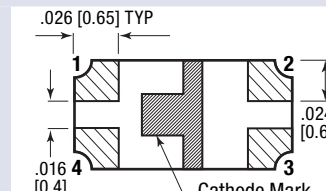
|               |           |     |     |          |    |    |    |     |     |     |            |             |             |
|---------------|-----------|-----|-----|----------|----|----|----|-----|-----|-----|------------|-------------|-------------|
| 597-7703-607F | ● R : -   | 631 | -   | AllInGaP | 20 | 28 | 55 | 112 | 2.0 | 2.4 | 130        | -30 to +85  | -40 to +85  |
|               | ● G : 567 | 571 | 577 |          |    | 28 | 45 | 112 | 2.0 | 2.4 |            |             |             |
| 597-7783-607F | ● R : -   | 631 | -   | AllInGaP |    | 28 | 45 | 112 | 2.0 | 2.4 |            | -20 to +80  | -30 to +100 |
|               | ● B : -   | 470 | -   | InGaN    |    | 28 | 45 | 180 | 3.3 | 3.8 |            |             |             |
| 597-7784-607F | ● O : -   | 605 | -   | AllInGaP |    | 71 | -  | 180 | 2.0 | 2.4 | -20 to +80 | -30 to +100 |             |
|               | ● B : -   | 470 | -   | InGaN    |    | 45 | -  | 112 | 3.3 | 3.8 |            |             |             |



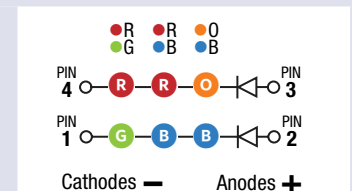
Top



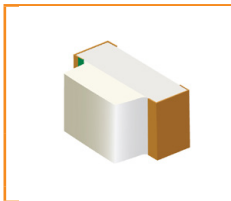
Side



Bottom



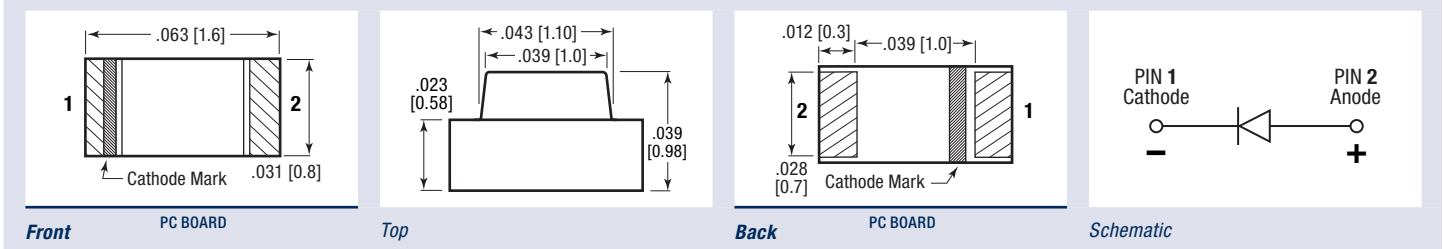
Schematic



| Color : Wavelength (nm) |     |     | Material | Test Current (mA) | Intensity (mcd) |     |     | Typ Fwd Voltage (V) |     | Viewing Angle | Operating Temp (°C) | Storage Temp (°C) |
|-------------------------|-----|-----|----------|-------------------|-----------------|-----|-----|---------------------|-----|---------------|---------------------|-------------------|
| Min                     | Typ | Max |          |                   | Min             | Typ | Max | Typ                 | Max |               |                     |                   |

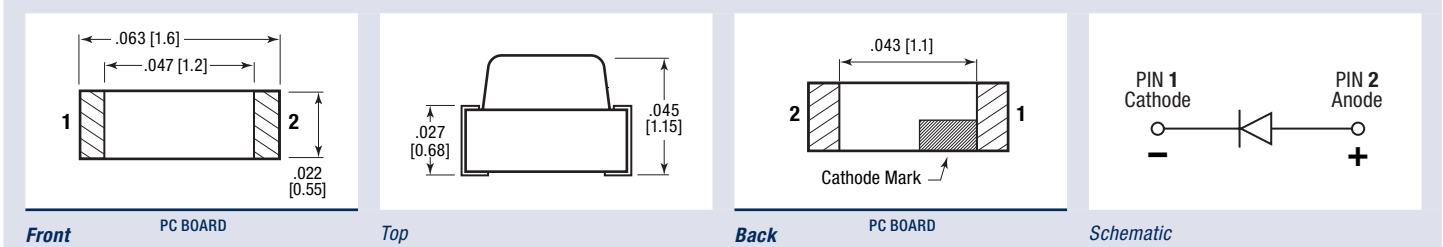
## 0603 Package Right Angle ▶ 1.6 x 1.0 x 0.8 mm / Single Color

|               |            |     |     |         |    |     |     |     |     |     |     |            |             |
|---------------|------------|-----|-----|---------|----|-----|-----|-----|-----|-----|-----|------------|-------------|
| 598-8D10-107F | ● R : 630  | 635 | 640 | AlInGaP | 20 | 30  | —   | 90  | 1.8 | 2.4 | 140 | -40 to +85 | -40 to +100 |
| 598-8D20-107F | ● R0 : 620 | 625 | 630 |         |    | 150 | 240 | 330 | 1.8 | 2.4 |     |            |             |
| 598-8D30-107F | ● O : 600  | 605 | 610 |         |    | 90  | 145 | 200 | 1.8 | 2.4 |     |            |             |
| 598-8D40-107F | ● Y : 585  | 590 | 595 |         |    | 120 | 160 | 200 | 1.8 | 2.4 |     |            |             |
| 598-8D60-107F | ● YG : 565 | 570 | 575 |         |    | 28  | 54  | 80  | 1.8 | 2.4 |     |            |             |
| 598-8D80-107F | ● G : 510  | 525 | 535 | InGaN   | 20 | 70  | 135 | 200 | 2.8 | 3.5 | 140 | -40 to +85 | -40 to +100 |
| 598-8D90-107F | ● B : 460  | 470 | 475 |         |    | 350 | 440 | 530 | 2.8 | 3.5 |     |            |             |



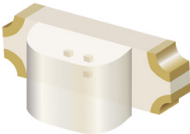
## 0605 Package Right Angle ▶ 1.6 x 1.15 x 0.55 mm / Single Color

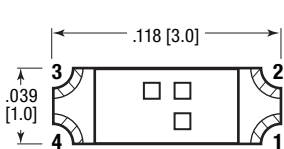
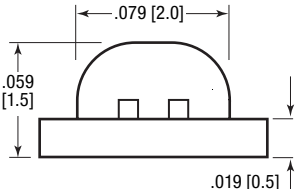
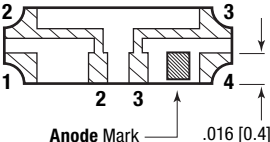
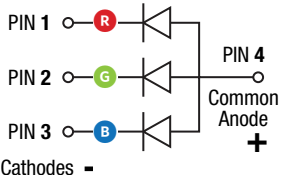
|               |                     |     |     |         |    |    |     |   |     |   |     |            |             |
|---------------|---------------------|-----|-----|---------|----|----|-----|---|-----|---|-----|------------|-------------|
| 597-2003-507F | ● R : 625           | 630 | 635 | AlInGaP | 20 | 16 | 40  | — | 2.2 | — | 135 | -40 to +85 | -40 to +100 |
| 597-2033-507F | ● R : 615           | 620 | 625 | AlInGaP |    | 25 | 63  | — | 2.2 | — | 135 |            |             |
| 597-2203-507F | ● O : 602           | 605 | 608 | AlInGaP |    | 40 | 100 | — | 2.2 | — | 135 |            |             |
| 597-2323-507F | ● G : 520           | 527 | 535 | InGaN   | 5  | 22 | 56  | — | 3.0 | — | 130 |            |             |
| 597-2403-507F | ● Y : 587           | 590 | 593 | AlInGaP | 20 | 36 | 63  | — | 2.0 | — | 135 |            |             |
| 597-2503-507F | ● YG : 569          | 572 | 575 | AlInGaP |    | 10 | 25  | — | 2.2 | — | 135 |            |             |
| 597-2603-507F | ● B : 464           | 470 | 476 | InGaN   | 10 | 56 | 140 | — | 3.2 | — | 140 |            |             |
| 597-2903-507F | ○ W : X=0.31/Y=0.31 |     |     | InGaN   |    | 90 | 170 | — | 3.1 | — | 150 |            |             |



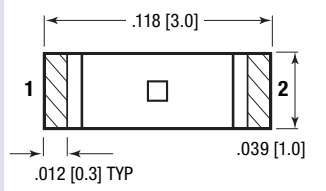
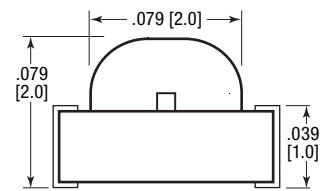
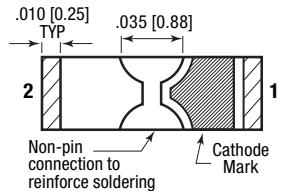
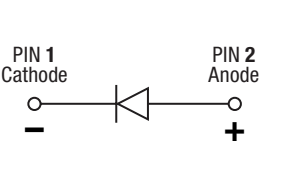
**NOTE:** Right Angle SMDs are shown in the diagrams in front, top, and back views, with front and back oriented with the PCB below. The front and back diagrams flip across the y-axis.

# Right Angle | 1208

|  | Color : Wavelength (nm)                                         |     |     | Material | Test Current (mA) | Intensity (mcd) |     |     | Typ Fwd Voltage (V) |     | Viewing Angle | Operating Temp (°C) | Storage Temp (°C) |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------|-----|-----|----------|-------------------|-----------------|-----|-----|---------------------|-----|---------------|---------------------|-------------------|
|                                                                                   | Min                                                             | Typ | Max |          |                   | Min             | Typ | Max | Typ                 | Max |               |                     |                   |
|                                                                                   | <b>1208 Package Right Angle ▶ 3.0 x 1.5 x 1.0 mm / TriColor</b> |     |     |          |                   |                 |     |     |                     |     |               |                     |                   |
| 597-2712-607F                                                                     | ● R :                                                           | 624 |     | AlInGaP  | 20                | 45              | —   | 180 | 2.0                 | 2.4 | 130           | -20 to +80          | -30 to +100       |
|                                                                                   | ● G :                                                           | 525 |     | InGaP    |                   | 112             | —   | 450 | 3.5                 | 3.8 |               |                     |                   |
|                                                                                   | ● B :                                                           | 470 |     | InGaP    |                   | 28              | —   | 180 | 3.5                 | 3.8 |               |                     |                   |

|                                                                                   |                                                                                   |                                                                                    |                                                                                     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |
| Front                                                                             | Top                                                                               | Back                                                                               | Schematic                                                                           |

|                                                                                   |           |     |  |           |    |     |      |   |     |     |     |            |             |
|-----------------------------------------------------------------------------------|-----------|-----|--|-----------|----|-----|------|---|-----|-----|-----|------------|-------------|
|  |           |     |  |           |    |     |      |   |     |     |     |            |             |
| 1208 Right Angle ▶ 3.0 x 2.0 x 1.0 mm / Single Color                              |           |     |  |           |    |     |      |   |     |     |     |            |             |
| 597-2002-407NF                                                                    | ● R :     | 626 |  | AlInGaP   | 20 | —   | —    | — | 1.9 | 2.4 | 130 | -40 to +85 | -40 to +100 |
| 597-2111-407F                                                                     | ● R :     | 647 |  | AlGaAs    |    | 6.2 | 12.4 | — | 1.7 | 2.3 |     | -30 to +85 | -40 to +100 |
| 597-2212-407NF                                                                    | ● O :     | 606 |  | GaAsP     |    | 68  | 150  | — | 1.9 | 2.4 |     | -40 to +85 | -40 to +120 |
| 597-2222-407F                                                                     | ● Y :     | 590 |  | AlInGaP   |    | 16  | 65   | — | 1.9 | 2.4 |     | -40 to +85 | -40 to +100 |
| 597-2311-407F                                                                     | ● G :     | 567 |  | GaP       |    | 2.6 | 5.2  | — | 2.1 | 2.8 |     | -30 to +85 | -40 to +100 |
| 597-2401-407F                                                                     | ● Y : 590 | 590 |  | GaAsP/GaP |    | 1.5 | 3    | — | 2.2 | 2.8 |     | -30 to +85 | -40 to +100 |
| 597-2413-407F                                                                     | ● Y :     | 586 |  | GaP       |    | 4.4 | 8.8  | — | 2.1 | 2.8 |     | -30 to +85 | -40 to +100 |

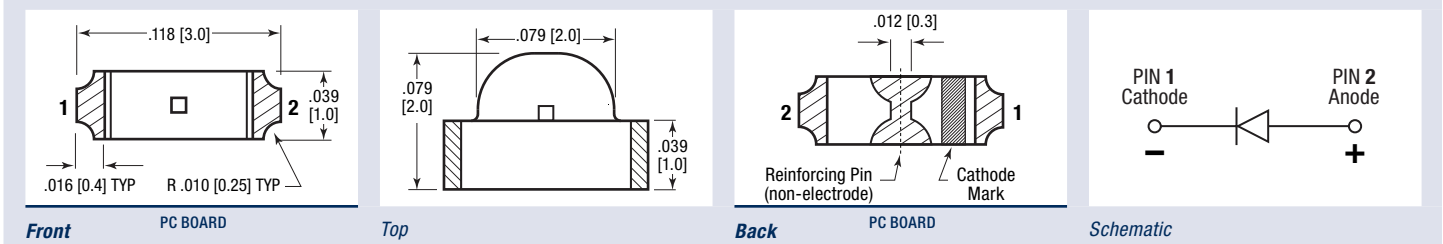
|                                                                                     |                                                                                     |                                                                                      |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |
| Front                                                                               | Top                                                                                 | Back                                                                                 | Schematic                                                                             |



| Color : Wavelength (nm) |     |     | Material | Test Current (mA) | Intensity (mcd) |     |     | Typ Fwd Voltage (V) |     | Viewing Angle | Operating Temp (°C) | Storage Temp (°C) |
|-------------------------|-----|-----|----------|-------------------|-----------------|-----|-----|---------------------|-----|---------------|---------------------|-------------------|
| Min                     | Typ | Max |          |                   | Min             | Typ | Max | Typ                 | Max |               |                     |                   |

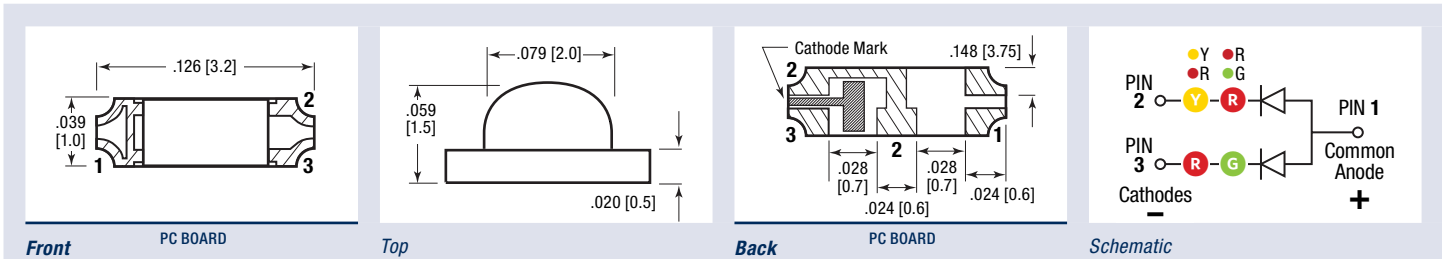
## 1208 Right Angle ▶ 3.0 x 2.0 x 1.0 mm / Single Color

|               |           |     |     |         |    |     |     |     |     |     |     |            |            |  |
|---------------|-----------|-----|-----|---------|----|-----|-----|-----|-----|-----|-----|------------|------------|--|
| 597-2002-607F | ● R : —   | 631 | —   | AlInGaP | 20 | 71  | 125 | 180 | 2.0 | 2.4 | 130 | -55 to +85 | -55 to +85 |  |
| 597-2211-607F | ● O : 598 | 605 | 612 |         |    | 71  | 125 | 180 | 2.0 | 2.4 |     |            |            |  |
| 597-2222-607F | ● Y : 587 | 589 | 592 |         |    | 71  | 125 | 180 | 2.0 | 2.4 |     |            |            |  |
| 597-2501-607F | ● G : 570 | 572 | 577 |         |    | 28  | 50  | 71  | 2.0 | 2.4 |     |            |            |  |
| 597-2601-607F | ● G : 520 | 525 | 535 | InGaN   |    | 112 | 195 | 280 | 3.2 | 3.6 |     |            |            |  |
| 597-2901-607F | ● B : 465 | 470 | 475 |         |    | 71  | 125 | 180 | 3.4 | 3.8 |     |            |            |  |

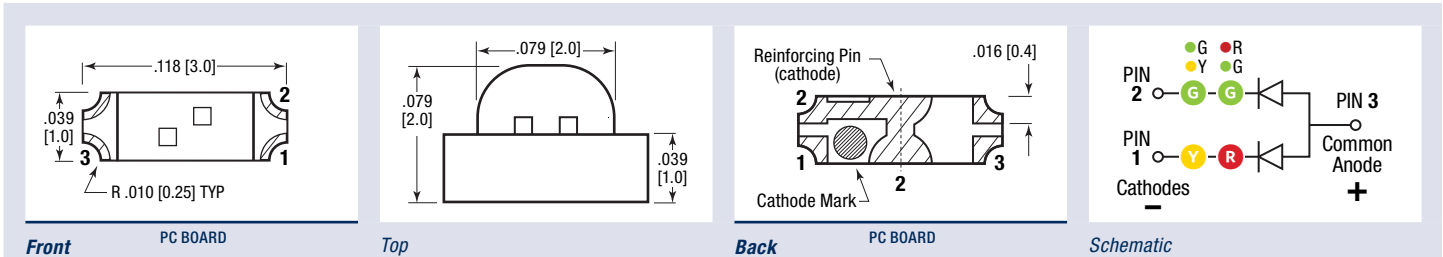


## 1208 Right Angle ▶ 3.0 x 2.0 x 1.0 mm / BiColor

|               |             |       |         |    |    |   |     |     |     |            |            |
|---------------|-------------|-------|---------|----|----|---|-----|-----|-----|------------|------------|
| 597-2732-607F | ● R : 624   | 638   | AlInGaP | 20 | 40 | — | 112 | 2.4 | 130 | -30 to +85 | -40 to +85 |
|               | ● Y : 587   | 594.5 |         |    | 45 | — | 180 | 2.4 |     |            |            |
| 597-2771-607F | ● R : 624   | 639   |         |    | 40 | — | 112 | 2.4 |     |            |            |
|               | ● G : 570.5 | 574   | 576.5   |    | 28 | — | 71  | 2.4 |     | -30 to +85 | -40 to +85 |

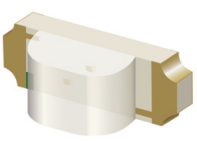


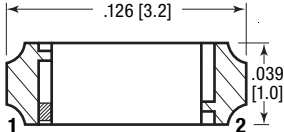
|                  |           |     |     |         |    |    |     |     |     |     |     |            |             |
|------------------|-----------|-----|-----|---------|----|----|-----|-----|-----|-----|-----|------------|-------------|
| 597-2723-607F    | ● G : 567 | 571 | 576 | AlInGaP | 20 | 18 | 35  | 112 | 2.0 | 2.4 | 130 | -55 to +85 | -55 to +85  |
|                  | ● Y : 582 | 589 | 597 |         |    | 28 | 75  | 118 | 2.0 | 2.4 |     |            |             |
| 597-2724-607F    | ● Y : —   | 589 | —   |         |    | 71 | 150 | 280 | 2.0 | 2.4 | 130 | -40 to +85 | -40 to +105 |
| Reverse Polarity | ● G : —   | 571 | —   |         |    | 18 | 50  | 112 | 2.0 | 2.4 |     |            |             |
| 597-2751-607F    | ● R : —   | 631 | —   | AlInGaP | 20 | 18 | 45  | —   | 2.0 | 2.4 | 130 | -55 to +85 | -55 to +85  |
|                  | ● G : 567 | 571 | 576 |         |    | 18 | 35  | 112 | 2.0 | 2.4 |     |            |             |



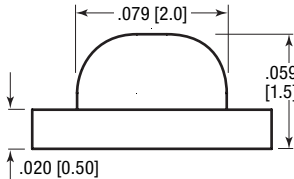


# Right Angle | 1208

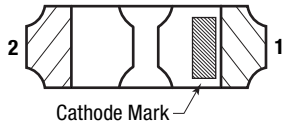
|  | Color : Wavelength (nm) |     |     | Material | Test Current (mA) | Intensity (mcd) |     |     | Typ Fwd Voltage (V) |     | Viewing Angle | Operating Temp (°C) | Storage Temp (°C) |
|-----------------------------------------------------------------------------------|-------------------------|-----|-----|----------|-------------------|-----------------|-----|-----|---------------------|-----|---------------|---------------------|-------------------|
|                                                                                   | Min                     | Typ | Max |          |                   | Min             | Typ | Max | Typ                 | Max |               |                     |                   |
| 1208 Right Angle ▶ 3.2 x 1.5 x 1.0 mm / Single Color                              |                         |     |     |          |                   |                 |     |     |                     |     |               |                     |                   |
| 598-8310-117F                                                                     | ● R : 625               | 635 | 640 | AlInGaP  | 20                | 40              |     | 90  | 2.1                 | 2.4 | 140           | -40 to +100         | -40 to +100       |
| 598-8320-117F                                                                     | ● RO : 620              | 625 | 630 |          |                   | 120             | 150 | 200 |                     |     |               |                     |                   |
| 598-8330-117F                                                                     | ● O : 600               | —   | 610 |          |                   | 70              | 110 | 150 |                     |     |               |                     |                   |
| 598-8340-117F                                                                     | ● Y : 590               | —   | 595 |          |                   | 90              | 140 | 200 |                     |     |               |                     |                   |
| 598-8350-117F                                                                     | ● Y : 585               | —   | 590 |          |                   | 90              | 140 | 200 |                     |     |               |                     |                   |
| 598-8360-117F                                                                     | ● YG : 570              | —   | 575 |          |                   | 43              | 65  | 80  |                     |     |               |                     |                   |
| 598-8370-117F                                                                     | ● G : 563               |     | 570 | InGaN    | 20                | 18              | 28  | 43  | 3.1                 | 3.4 | 140           | -40 to +100         | -40 to +100       |
| 598-8380-117F                                                                     | ● G : 515               | 520 | 525 |          |                   | 260             | 480 | 900 |                     |     |               |                     |                   |
| 598-8391-117F                                                                     | ● B : 465               | 470 | 475 |          |                   | 90              | 170 | 260 |                     |     |               |                     |                   |



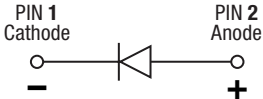
Front



Top



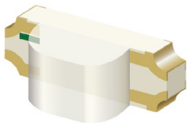
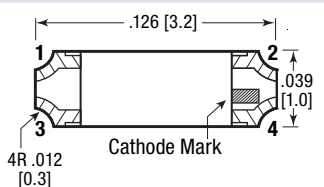
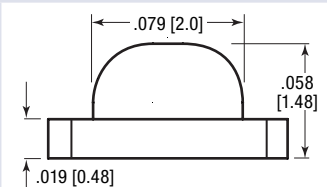
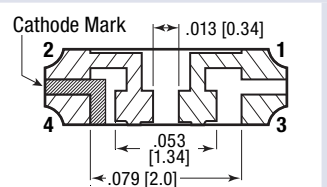
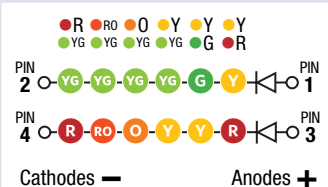
Back

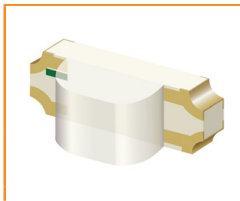


Schematic

PC BOARD

PC BOARD

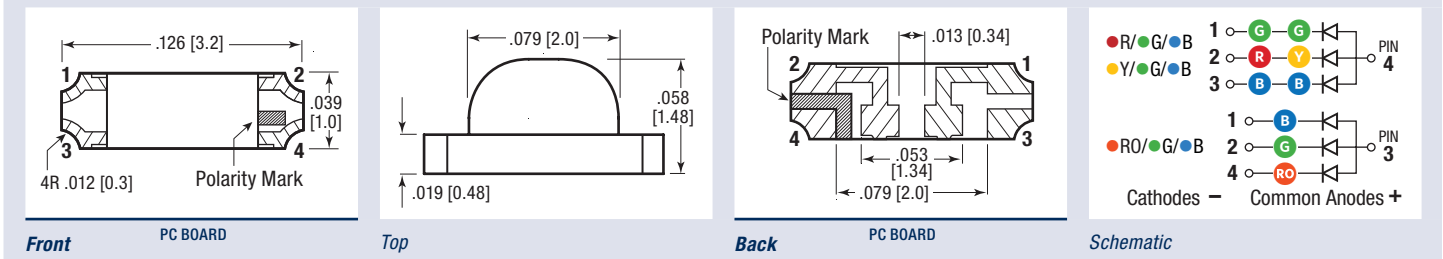
|                                                                                     |                        |            |            |                  |    |                                                                                     |            |            |   |     |     |             |             |                                                                                      |            |  |  |  |                                                                                       |  |  |  |  |  |  |
|-------------------------------------------------------------------------------------|------------------------|------------|------------|------------------|----|-------------------------------------------------------------------------------------|------------|------------|---|-----|-----|-------------|-------------|--------------------------------------------------------------------------------------|------------|--|--|--|---------------------------------------------------------------------------------------|--|--|--|--|--|--|
|  |                        |            |            |                  |    |                                                                                     |            |            |   |     |     |             |             |                                                                                      |            |  |  |  |                                                                                       |  |  |  |  |  |  |
| 1208 Right Angle ▶ 3.2 x 1.5 x 1.0 mm / BiColor                                     |                        |            |            |                  |    |                                                                                     |            |            |   |     |     |             |             |                                                                                      |            |  |  |  |                                                                                       |  |  |  |  |  |  |
| 598-8510-207F                                                                       | ● R : 625<br>● YG:562  | 632<br>567 | 640<br>575 | AlInGaP          | 20 | 40<br>30                                                                            | 80<br>40   | 120<br>50  | 2 | 2.4 | 140 | -40 to +100 | -40 to +100 |                                                                                      |            |  |  |  |                                                                                       |  |  |  |  |  |  |
| 598-8520-207F                                                                       | ● O : 620<br>● YG:562  | 625<br>567 | 630<br>570 | AlInGaP          |    | 90<br>30                                                                            | 150<br>40  | 200<br>50  |   |     |     |             |             |                                                                                      |            |  |  |  |                                                                                       |  |  |  |  |  |  |
| 598-8530-207F                                                                       | ● A : 600<br>● YG:562  | 605<br>567 | 610<br>570 | AlInGaP          |    | 90<br>30                                                                            | 150<br>40  | 200<br>50  |   |     |     |             |             |                                                                                      |            |  |  |  |                                                                                       |  |  |  |  |  |  |
| 598-8540-207F                                                                       | ● Y : 585<br>● YG:562  | 590<br>567 | 595<br>570 | AlInGaP          |    | 90<br>30                                                                            | 150<br>40  | 200<br>50  |   |     |     |             |             |                                                                                      |            |  |  |  |                                                                                       |  |  |  |  |  |  |
| 598-8550-207F                                                                       | ● Y : 587<br>● G : 515 | 590<br>525 | 597<br>530 | AlInGaP<br>InGaN |    | 90<br>260                                                                           | 150<br>560 | 200<br>900 |   |     |     |             |             | 2<br>3.2                                                                             | 2.4<br>3.4 |  |  |  |                                                                                       |  |  |  |  |  |  |
| 598-8560-207F                                                                       | ● Y : 587<br>● R : 630 | 590<br>635 | 597<br>640 | AlInGaP          |    | 90<br>40                                                                            | 150<br>65  | 200<br>90  |   |     |     |             |             | 2.2<br>2.2                                                                           | 2.4<br>2.4 |  |  |  |                                                                                       |  |  |  |  |  |  |
|  |                        |            |            |                  |    |  |            |            |   |     |     |             |             |  |            |  |  |  |  |  |  |  |  |  |  |
| Front                                                                               |                        |            |            |                  |    | Top                                                                                 |            |            |   |     |     |             |             | Back                                                                                 |            |  |  |  | Schematic                                                                             |  |  |  |  |  |  |
| PC BOARD                                                                            |                        |            |            |                  |    | PC BOARD                                                                            |            |            |   |     |     |             |             | Cathodes — Anodes +                                                                  |            |  |  |  |                                                                                       |  |  |  |  |  |  |



| Color : Wavelength (nm) |     |     |     | Material | Test Current (mA) | Intensity (mcd) |     |     | Typ Fwd Voltage (V) |     | Viewing Angle | Operating Temp (°C) | Storage Temp (°C) |
|-------------------------|-----|-----|-----|----------|-------------------|-----------------|-----|-----|---------------------|-----|---------------|---------------------|-------------------|
|                         | Min | Typ | Max |          |                   | Min             | Typ | Max | Typ                 | Max |               |                     |                   |

### 1208 Right Angle ▶ 3.2 x 1.5 x 1.0 mm / TriColor

|               |                                                                                     |     |     |          |    |     |  |     |  |  |     |             |             |
|---------------|-------------------------------------------------------------------------------------|-----|-----|----------|----|-----|--|-----|--|--|-----|-------------|-------------|
| 598-8810-307F | <div><div></div><div></div><div></div></div> <div>R : 630<br/>G : 517<br/>B :</div> | 635 | 640 | AllInGaP | 20 | 35  |  | 100 |  |  | 140 | -40 to +100 | -40 to +100 |
|               |                                                                                     | 521 | 525 | InGaN    |    | 200 |  | 560 |  |  |     |             |             |
|               |                                                                                     | 470 |     | InGaN    |    | 60  |  | 200 |  |  |     |             |             |
| 598-8820-307F | <div><div></div><div></div><div></div></div> <div>O : 620<br/>G : 517<br/>B :</div> | 625 | 630 | AllInGaP |    | 70  |  | 200 |  |  | 160 |             |             |
|               |                                                                                     | 521 | 525 | InGaN    |    | 200 |  | 560 |  |  |     |             |             |
|               |                                                                                     | 470 |     | InGaN    |    | 60  |  | 200 |  |  |     |             |             |
| 598-8840-307F | <div><div></div><div></div><div></div></div> <div>Y : 587<br/>G : 515<br/>B :</div> | 592 | 597 | AllInGaP |    |     |  |     |  |  | 160 |             |             |
|               |                                                                                     | 522 | 530 | InGaN    |    |     |  |     |  |  |     |             |             |
|               |                                                                                     | 470 |     | InGaN    |    |     |  |     |  |  |     |             |             |

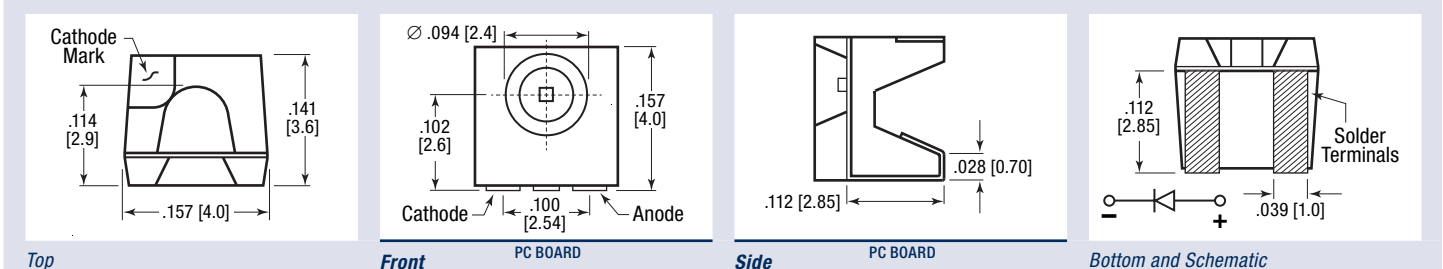


### 1616 Package Right Angle ▶ 4.0 x 4.0 x 3.6 mm / Single Color Low Current

|               |           |     |     |          |   |    |    |     |     |  |     |             |             |
|---------------|-----------|-----|-----|----------|---|----|----|-----|-----|--|-----|-------------|-------------|
| 597-2001-213F | ● R : 624 | 630 | 636 | AllInGaP | 2 | 20 | 40 | 60  | 1.8 |  | 120 | -40 to +100 | -40 to +100 |
| 597-2301-213F | ● G : 566 | 570 | 575 |          |   | 10 | 42 | 50  | 1.8 |  |     |             |             |
| 597-2401-213F | ● Y : 580 | 587 | 595 |          |   | 25 | 70 | 115 | 1.8 |  |     |             |             |

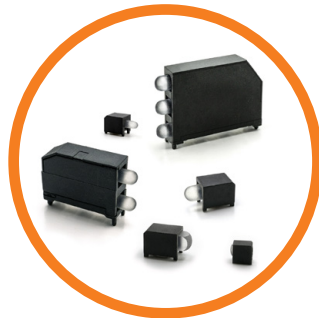
### 1616 Right Angle ▶ 4.0 x 4.0 x 3.6 mm / Single Color

|               |                       |     |     |          |    |     |   |     |     |  |     |             |             |
|---------------|-----------------------|-----|-----|----------|----|-----|---|-----|-----|--|-----|-------------|-------------|
| 597-2201-815F | ● Y : 580             | 587 | 595 | AllInGaP | 30 | 280 | — | 900 | 2.1 |  | 120 | -40 to +100 | -40 to +100 |
| 597-2301-824F | ● G : 519             |     | 537 |          | 20 | 45  | — | 900 | 2   |  |     |             |             |
| 597-2321-816F | ● G : 566             | 528 | 575 | InGaN    | 20 | 355 | — | 112 | 3.5 |  |     |             |             |
| 597-2601-817F | ● B : 464             | 470 | 476 |          | 2  | 90  | — | 224 | 3.6 |  |     |             |             |
| 597-2901-822F | ○ W : X=0.330/Y=0.330 |     |     |          | 20 | 355 | — | 710 | 3.6 |  |     |             |             |

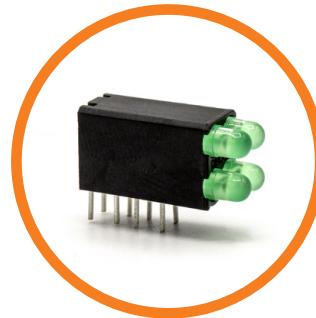


## More Optoelectronic Products from Dialight Signals & Components

### Board Mount Indication



Prism® SMD



CBI® Through Hole



Optopipe® Light Pipes

### Panel Mount Indication



Military & Relampable



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1501 Route 34 South  
Farmingdale, NJ 07727  
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[info@dialightsignalsandcomponents.com](mailto:info@dialightsignalsandcomponents.com)

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