

**CHIP - standard**

A range of surface mount, chip LEDs with a white diffused lens, available in three industry standard sizes. Suitable for many applications including LCD/keypad backlighting, dot matrix displays and panel illumination. Supplied taped and reeled.

**Case & Viewing Angle****0603 Chip**

Viewing angle 170°

**NORMAL BRIGHTNESS**

| Emitted Colour | Lens Colour    | Peak Wavelength nm | Typ. Luminous Intensity (I <sub>F</sub> = 20mA) mcd |
|----------------|----------------|--------------------|-----------------------------------------------------|
| Red            | white-diffused | 660                | 17                                                  |
| Orange         | white-diffused | 610                | 6                                                   |
| Yellow         | white-diffused | 585                | 7                                                   |
| Green          | white-diffused | 568                | 10                                                  |

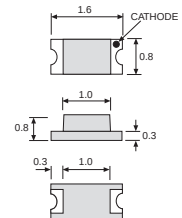
**HIGH BRIGHTNESS**

| Emitted Colour | Lens Colour    | Peak Wavelength nm | Typ. Luminous Intensity (I <sub>F</sub> = 20mA) mcd |
|----------------|----------------|--------------------|-----------------------------------------------------|
| Red            | white-diffused | 632                | 45                                                  |
| Orange         | white-diffused | 611                | 45                                                  |
| Yellow         | white-diffused | 593                | 45                                                  |
| Green          | white-diffused | 570                | 30                                                  |

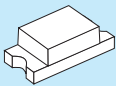
**Manf. Part No. & Anglia Order Code**

TOL1608MR  
TOL1608MO  
TOL1608MY  
TOL1608MG

TOL1608MRB  
TOL1608MOB  
TOL1608MYB  
TOL1608MGB

**Dimensions (mm)**

NOTE! - Polarity is reversed for TOL1608MR

**Case & Viewing Angle****0805 Chip**

Viewing angle 170°

**NORMAL BRIGHTNESS**

| Emitted Colour | Lens Colour    | Peak Wavelength nm | Typ. Luminous Intensity (I <sub>F</sub> = 20mA) mcd |
|----------------|----------------|--------------------|-----------------------------------------------------|
| Red            | white-diffused | 660                | 17                                                  |
| Orange         | white-diffused | 610                | 6                                                   |
| Yellow         | white-diffused | 585                | 7                                                   |
| Green          | white-diffused | 568                | 10                                                  |

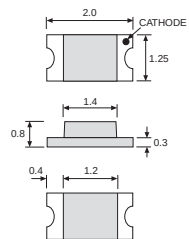
**HIGH BRIGHTNESS**

| Emitted Colour | Lens Colour    | Peak Wavelength nm | Typ. Luminous Intensity (I <sub>F</sub> = 20mA) mcd |
|----------------|----------------|--------------------|-----------------------------------------------------|
| Red            | white-diffused | 632                | 45                                                  |
| Orange         | white-diffused | 611                | 45                                                  |
| Yellow         | white-diffused | 593                | 45                                                  |
| Green          | white-diffused | 570                | 30                                                  |

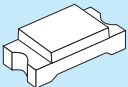
**Manf. Part No. & Anglia Order Code**

TOL2012MR  
TOL2012MO  
TOL2012MY  
TOL2012MG

TOL2012MRB  
TOL2012MOB  
TOL2012MYB  
TOL2012MGB

**Dimensions (mm)**

NOTE! - Polarity is reversed for TOL2012MR

**Case & Viewing Angle****1206 Chip**

Viewing angle 170°

**NORMAL BRIGHTNESS**

| Emitted Colour | Lens Colour    | Peak Wavelength nm | Typ. Luminous Intensity (I <sub>F</sub> = 20mA) mcd |
|----------------|----------------|--------------------|-----------------------------------------------------|
| Red            | white-diffused | 660                | 17                                                  |
| Orange         | white-diffused | 610                | 6                                                   |
| Yellow         | white-diffused | 585                | 7                                                   |
| Green          | white-diffused | 568                | 10                                                  |

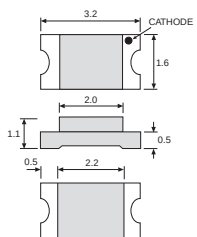
**HIGH BRIGHTNESS**

| Emitted Colour | Lens Colour    | Peak Wavelength nm | Typ. Luminous Intensity (I <sub>F</sub> = 20mA) mcd |
|----------------|----------------|--------------------|-----------------------------------------------------|
| Red            | white-diffused | 632                | 45                                                  |
| Orange         | white-diffused | 611                | 45                                                  |
| Yellow         | white-diffused | 593                | 45                                                  |
| Green          | white-diffused | 570                | 30                                                  |

**Manf. Part No. & Anglia Order Code**

TOL3216MR  
TOL3216MO  
TOL3216MY  
TOL3216MG

TOL3216MRB  
TOL3216MOB  
TOL3216MYB  
TOL3216MGB

**Dimensions (mm)**

NOTE! - Polarity is reversed for TOL3216MR

**Packaging**

TAPE : 8mm wide, 4mm pitch

REEL : 178mm dia.



For the very latest information and news on the full range of TITAN OPTO products available from Anglia, visit our website :

[www.angliac.com/titan-opto](http://www.angliac.com/titan-opto)

Alternatively, contact our Sales Desk to discuss your specific requirements.

### CHIP - standard

**NEW**

**SMD**

Case &  
Viewing  
Angle

**0603 Chip**



Viewing angle 140°

Emitted  
Colour

Lens  
Colour

Peak  
Wavelength  
nm

Typ. Luminous  
Intensity  
(I<sub>F</sub> = 20mA)  
mcd

Chip  
Height  
(H) mm

Manf. Part No.  
& Anglia  
Order Code

Dimensions (mm)

#### NORMAL BRIGHTNESS

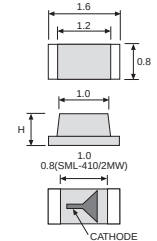
|            |                |     |     |      |
|------------|----------------|-----|-----|------|
| Red        | water-clear    | 650 | 4   | 0.8  |
| Red        | water-clear    | 660 | 10  | 0.8  |
| Orange     | water-clear    | 610 | 6.3 | 0.8  |
| Yellow     | water-clear    | 585 | 6.3 | 0.8  |
| Green      | water-clear    | 570 | 16  | 0.8  |
| Green      | white-diffused | 570 | 16  | 0.55 |
| Green      | white-diffused | 570 | 16  | 0.4  |
| Pure-Green | water-clear    | 555 | 4   | 0.8  |

#### HIGH BRIGHTNESS

|        |                |     |     |      |
|--------|----------------|-----|-----|------|
| Red    | white-diffused | 630 | 40  | 0.55 |
| Red    | white-diffused | 630 | 63  | 0.55 |
| Orange | white-diffused | 611 | 40  | 0.55 |
| Orange | white-diffused | 611 | 63  | 0.55 |
| Yellow | white-diffused | 590 | 40  | 0.55 |
| Yellow | white-diffused | 590 | 63  | 0.55 |
| Green  | white-diffused | 570 | 40  | 0.55 |
| Green  | white-diffused | 570 | 40  | 0.4  |
| Green* | water-clear    | 523 | 90  | 0.8  |
| Green* | water-clear    | 518 | 200 | 0.8  |
| Blue*  | water-clear    | 428 | 3.6 | 0.8  |
| Blue*  | water-clear    | 468 | 14  | 0.8  |
| Blue*  | water-clear    | 468 | 63  | 0.8  |

**SML-310VT**  
**SML-310LT**  
**SML-310DT**  
**SML-310YT**  
**SML-310MT**  
**SML-510MW**  
**SML-410MW**  
**SML-310PT**

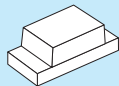
**SML-511UW**  
**SML-512UW**  
**SML-511DW**  
**SML-512DW**  
**SML-511WW**  
**SML-512WW**  
**SML-512MW**  
**SML-412MW**  
**SML311EBT**  
**SML312ECT**  
**SML310BAT**  
**SML311BBT**  
**SML312BCT**



\*These LEDs are electrostatic sensitive devices. Observe precautions for handling

Case &  
Viewing  
Angle

**0805 Chip**



Viewing angle 140°

Emitted  
Colour

Lens  
Colour

Peak  
Wavelength  
nm

Typ. Luminous  
Intensity  
(I<sub>F</sub> = 20mA)  
mcd

Chip  
Height  
(H) mm

Manf. Part No.  
& Anglia  
Order Code

Dimensions (mm)

#### NORMAL BRIGHTNESS

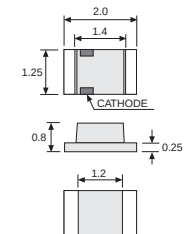
|            |             |     |     |     |
|------------|-------------|-----|-----|-----|
| Red        | water-clear | 650 | 4   | 0.8 |
| Red        | water-clear | 660 | 10  | 0.8 |
| Orange     | water-clear | 610 | 6.3 | 0.8 |
| Yellow     | water-clear | 585 | 6.3 | 0.8 |
| Green      | water-clear | 570 | 16  | 0.8 |
| Pure-Green | water-clear | 555 | 4   | 0.8 |

#### HIGH BRIGHTNESS

|        |             |     |    |     |
|--------|-------------|-----|----|-----|
| Red    | water-clear | 639 | 63 | 0.8 |
| Orange | water-clear | 611 | 63 | 0.8 |
| Yellow | water-clear | 591 | 63 | 0.8 |

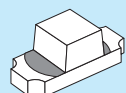
**SML-210VT**  
**SML-210LT**  
**SML-210DT**  
**SML-210YT**  
**SML-210MT**  
**SML-210PT**

**SML-212VT**  
**SML-212DT**  
**SML-212YT**



Case &  
Viewing  
Angle

**1305 Chip  
Reverse Mounting**



Viewing angle 140°

Emitted  
Colour

Lens  
Colour

Peak  
Wavelength  
nm

Typ. Luminous  
Intensity  
(I<sub>F</sub> = 20mA)  
mcd

Chip  
Height  
(H) mm

Manf. Part No.  
& Anglia  
Order Code

Dimensions (mm)

#### NORMAL BRIGHTNESS

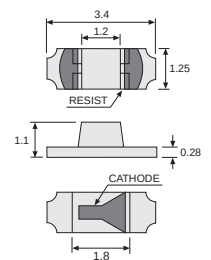
|       |             |     |    |     |
|-------|-------------|-----|----|-----|
| Green | water-clear | 570 | 16 | 1.1 |
|-------|-------------|-----|----|-----|

#### HIGH BRIGHTNESS

|       |             |     |    |     |
|-------|-------------|-----|----|-----|
| Green | water-clear | 570 | 40 | 1.1 |
|-------|-------------|-----|----|-----|

**SML-810MT**

**SML-812MT**



Reverse mounting types, ideal for backlight applications

#### Packaging

TAPE : 8mm wide, 4mm pitch

REEL : 178mm dia.