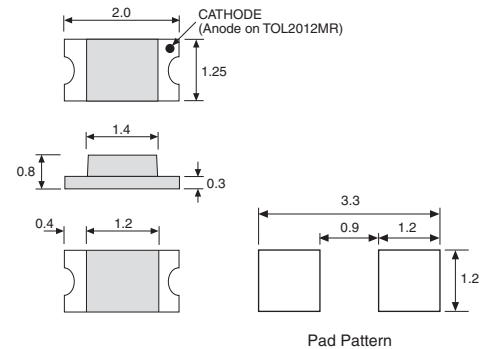


### TOL2012 series

#### Features

- ◆ Standard 0805 SMD package
- ◆ White diffused lens
- ◆ Choice of brightness
- ◆ Solid state reliability
- ◆ Supplied taped and reeled

#### Package



Dimensions are mm. Tolerance  $\pm 0.1$ mm unless otherwise stated.

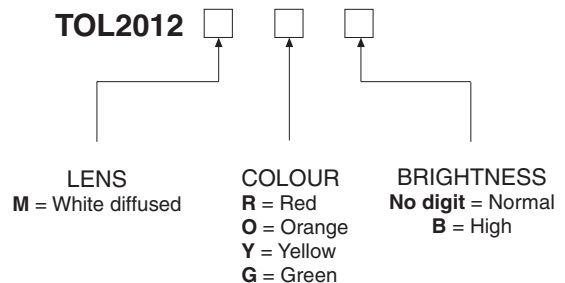
### Electrical & Optical Characteristics (at $T_A = 25^\circ\text{C}$ )

Part Number	LED Chip			Lens Colour	Peak Wavelength (nm) at 20mA	Luminous Intensity (mcd) at 20mA		Forward Voltage (V) at 20mA		Viewing Angle $2\theta^{1/2}$ (deg)
	Material	Emitted Colour	Brightness			min.	typ.	typ.	max.	
TOL2012MR	AlGaAs	Red	Normal	White diffused	660	9.0	17.0	1.8	2.2	170
TOL2012MO	GaAsP	Orange	Normal	White diffused	610	3.0	6.0	2.1	2.6	170
TOL2012MY	GaAsP	Yellow	Normal	White diffused	585	3.0	7.0	2.1	2.6	170
TOL2012MG	GaP	Green	Normal	White diffused	568	5.0	10.0	2.2	2.6	170
TOL2012MRB	AlGaInP	Red	High	White diffused	632	25.0	45.0	2.1	2.8	170
TOL2012MOB	AlGaInP	Orange	High	White diffused	611	25.0	45.0	2.1	2.8	170
TOL2012MYB	AlGaInP	Yellow	High	White diffused	593	25.0	45.0	2.1	2.8	170
TOL2012MGB	AlGaInP	Green	High	White diffused	570	15.0	30.0	2.2	2.8	170

### Maximum Ratings (at $T_A = 25^\circ\text{C}$ )

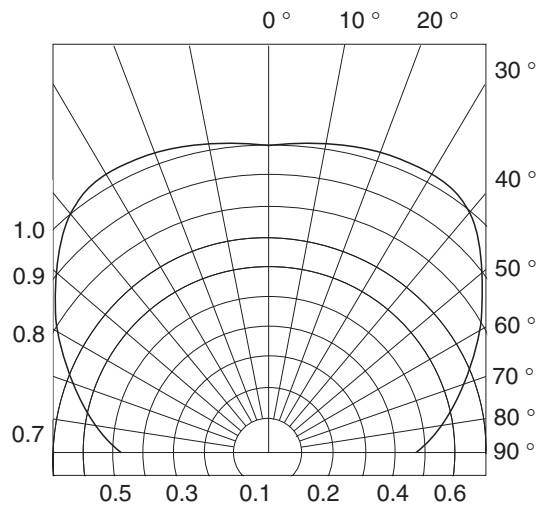
Reverse Voltage ( $<100\mu\text{A}$ ) ..... AlGaAs & AlGaInP 4.0V, others 5.0V  
 D.C. Forward Current ..... 30mA  
 Pulse Current (1/10 Duty Cycle, 0.1ms Pulse Width) ..... 100mA  
 Operating Temperature Range .....  $-30$  to  $+85^\circ\text{C}$   
 Storage Temperature Range .....  $-30$  to  $+100^\circ\text{C}$   
 Soldering Temperature .....  $260^\circ\text{C}$  for 5 sec.

### Part Number Key

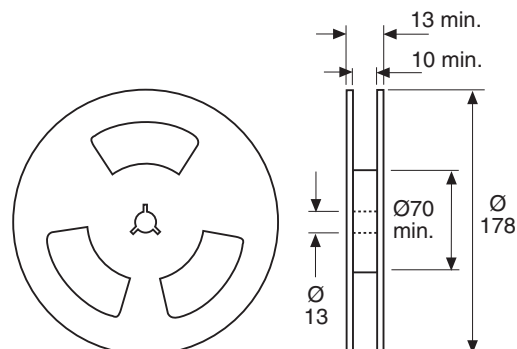
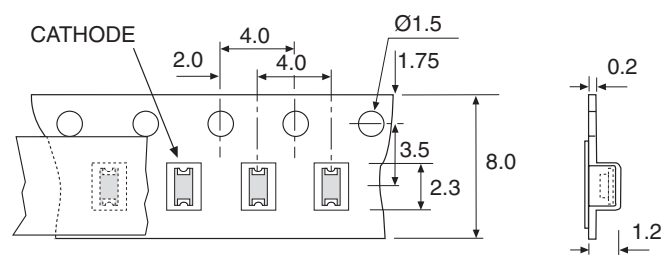


### TOL2012 series

#### Radiation Pattern



#### Tape & Reel Specification



Dimensions are mm.

Reel quantity: 4,000pcs