

### features



- Ø12.7mm Mounting
- RIA 12 approved, spike and transient protected with a reverse protection diode
- Black anodised aluminium housing, sealed to IP67
- Silver plated brass termination tags
- Internally potted for use in high vibration applications
- · Smoked lens for high on/ off contrast ratio
- Pack Quantity = 10 Pieces

## specifications

Typical characteristics (Ta = 25°C)

Part Number	Colour	Voltage Vac/dc	Current DC (mA)	Luminous Intensity (mcd)	Wave Length (nm)	Operating Temp. (°C)	Storage Temp. (°C)	De-rating Graphs
675-501-00-50	Red	70 Vdc	12	600	630	-40 - +80	-40 - +100	D

^ = Voltage for 20mA product is Vf at 20mA, not Vopr

#### to order

to order please contact us on: t: +44 (0)1229 582 430

f: +44 (0)1229 585 155 e: sales@marl.co.uk w: www.leds.co.uk





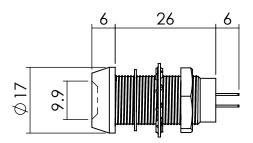


<sup>-</sup> Products must be de-rated according to the de-rating information. Each de-rating graph refers to specific LEDs. Please refer to graphs on page 3.

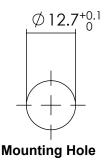
<sup>-</sup> Luminous intensity is measured at 20mA on a discrete LED unless otherwise stated.



#### technical data







Dimensions in mm (typical)

Not to scale

Anode termination denoted by red indicator Mounting hole to be clean and burr free

### housing material

push on connectors

Body Black Anodised Aluminium Nickel Plated Brass

Panel Seal Viton

Fresnel Lens

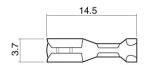
Encapsulation

Lock Washer

Termination Header Polycarbonate
Spring Steel

Silver plated brass. 2.8mm flat tags

-



675-000-00 is brass tin plated - for use with 675 series lamps
Dimensions in mm (typical). Not to scale.

#### technical characteristics

Series	Max. Power Dissipation	Max. Reverse Voltage	Panel Cutout	Nut Mounting Torque	Min. Mounting Centres	Max. Panel Thickness
675	1000	1000^	12.7	1.0	19.5	1.5 - 8.0
units	mW	Vdc	mm	Nm	mm	mm

<sup>\* =</sup> Current Version

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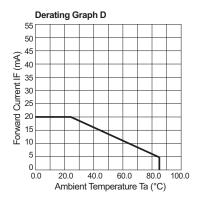




<sup>^ =</sup> Voltage Version



## de-rating information



#### also available

## Part numbers also available in the 675 series:

Part	Colour	Voltage		
Number	Colour	Vopr		
675-501-25-50	Red	110 Vdc		
675-502-75	Red	110 Vac 50 Hz		
675-930-00-50	Blue	70 Vdc		
675-930-00-51	Blue	52 Vdc		
675-930-00-52	Blue	70 Vdc		

The products listed here illustrate all of the options available to order. These products may have custom modifications that alter their operation beyond the generic information contained within this datasheet. Please contact sales for further information.

\* = These products do not contain integral resistors

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### design considerations

#### Electro-Static Discharge (ESD)

Build up of electro-static discharge occurs in many situations involving people moving and handling products. The range of possible situations is very diverse but voltage levels as high as several thousand volts can and do arise in many individual situations. When an operator charged up to these levels handles a static sensitive device, there is a very probable likelihood that the device will be irreversibly damaged. It is essential that precautions are taken at all stages during manufacture and assembly of these products. Although LEDs were never considered to be static sensitive devices, changes in manufacturing technology and materials used to produce higher intensity products over a large range of the wavelength spectrum have changed this. Marl has an approved system of ESD control from goods in, through production and into final packing and despatch. Marl recommend all users of LED based products follow the guidelines of BS 100015.

#### **Power De-Rating**

The forward voltage/ current value of an LED is dependant upon the ambient temperature of the environment in which it is operated. Therefore, care must be taken to operate the LED at the correct voltage/ current values, depending upon the ambient temperature. Consequently, a recommendation regarding operating voltages and currents is given in order to address these temperature effects. This recommendation is termed 'de-rating'. It is usual for forward voltages and currents to be specified for ambient temperature of 25°C. However, because the values of these qualities vary with temperature, please refer to the de-rating graphs for correct operation. Marl accept no liability for any product that is operated higher than the stated voltage.

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