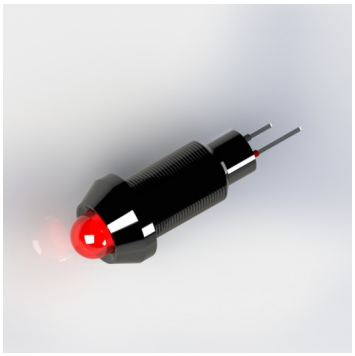
623 series

features



- **Minimum line quantity 20**
- **Panel sealing meets and exceeds IP67 rating**
- **Excellent wide viewing angle**
- **Black anodised aluminium housing**
- **Suitable for high vibration applications**

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
623-503-22	Red	24 Vdc	20	80	625	-40 - +85	-40 - +85	B
623-503-23	Red	28 Vdc	20	80	625	-40 - +85	-40 - +85	B
623-509-22	Yellow	24 Vdc	20	45	590	-40 - +85	-40 - +85	B
623-512-22	Green	24 Vdc	20	45	565	-40 - +85	-40 - +85	C
623-512-23	Green	28 Vdc	20	45	565	-40 - +85	-40 - +85	C

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

to order

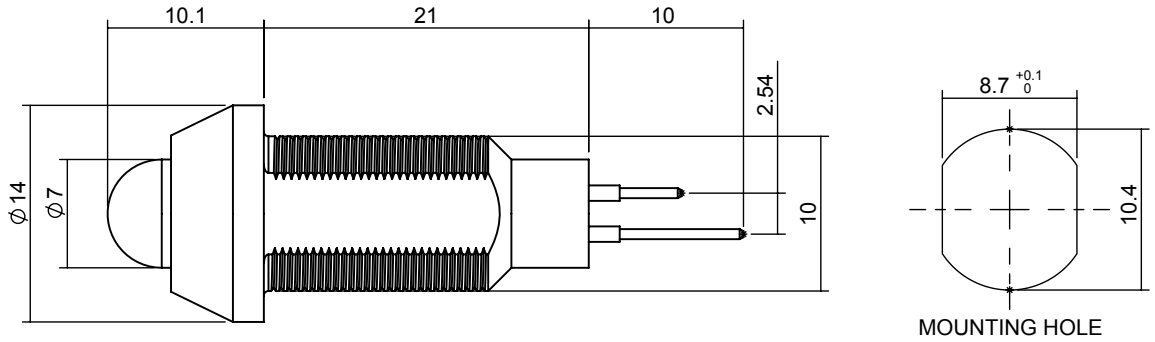
to order please contact us on: t: +44 (0)1229 582 430
f: +44 (0)1229 585 155 e: sales@marl.co.uk w: www.leds.co.uk

BS EN ISO 9001:2008 approved manufacturer

high performance panel lamps

623 series

technical data



Anode termination indicated by long pin.
Mounting hole to be clean and burr free.

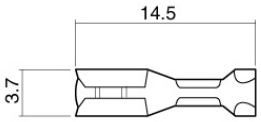
Dimensions in mm (typical)
Not to scale

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

housing material

Body	Black Anodised Aluminium
Nut	Black Anodised Aluminium
Panel Seal	Viton
Fresnel Lens	Polycarbonate
Encapsulation	Epoxy
Lock Washer	Spring Steel
Termination	-
Header	-

push on connectors



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
623	825	1000	10.2	0.7	17.5	1.5-9.0
units	mW	Vdc	mm	Nm	mm	mm

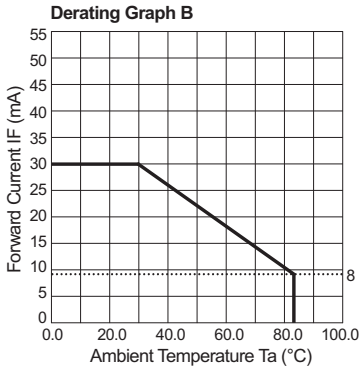
* = Current Version ^ = Voltage Version

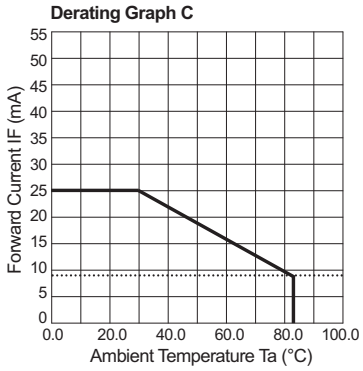
to order

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

623 series

de-rating information





also available

Part numbers also available in the 623 series:

Part Number	Colour	Voltage Vopr
623-503-22-07	Red	24 Vdc
623-503-22-50	Red	24 Vdc
623-503-23-50	Red	28 Vdc
623-503-67	Red	18 Vac 50 Hz
623-509-22-07	Yellow	24 Vdc
623-525-22-50	Green	24 Vdc
623-997-22-50	White	24 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

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

BS EN ISO 9001:2008 approved manufacturer

623 series

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.

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