

features



- Ø8.1mm mounting
- · Robust bright nickel plated brass housing
- · Low profile lens styling, domed lens available
- Smoked lens
- Sealed to IP67, suitable for high vibration applications
- Internal reverse protection diode fitted as standard in all voltage models
- Pack Quantity = 10 Pieces

specifications

Typical characteristics (Ta = 25°C)

RS Part Number	Marl Part Number	Colour	Voltage Vac/dc	Current DC (mA)	Luminous Intensity (mcd)	Wave Length (nm)	Operating Temp. (°C)	Storage Temp. (°C)	De-rating Graphs
3106808	508-501-21	Red	12 Vdc	20	600	630	-40 - +80	-40 - +100	D
3106842	508-501-22	Red	24 Vdc	19	600	630	-40 - +80	-40 - +100	D
3106820	508-521-21	Yellow	12 Vdc	20	600	585	-40 - +80	-40 - +100	D
3106864	508-521-22	Yellow	24 Vdc	19	600	585	-40 - +80	-40 - +100	D
3106814	508-532-21	Green	12 Vdc	20	800	515	-40 - +80	-40 - +100	F
3106858	508-532-22	Green	24 Vdc	20	800	515	-40 - +80	-40 - +100	F
3106836	508-997-21	White	12 Vdc	20	1100	* See below	-30 - +85	-40 - +100	ı
3106870	508-997-22	White	24 Vdc	20	1100	* See below	-30 - +85	-40 - +100	ı

997F-C	*Typical emission colour White				
х	0.31	-	-	-	
у	0.32	-	-	-	

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

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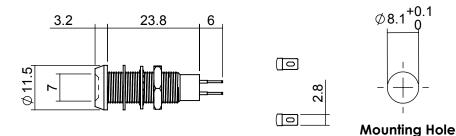
⁻ Products must be de-rated according to the de-rating information. Each de-rating graph refers to specific LEDs. Please refer to graphs on page 3.

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

⁻ Intensities (Iv) and colour shades of white (x, y co-ordinates) may vary between LEDs within a batch



technical data



Anode termination indicated by red sleeve. Mounting hole to be clean and burr free.

Dimensions in mm (typical) Not to scale

housing material push on connectors

Brass to BS 2874 CZ121, Nickel plated to BS 1224 **Body** Brass to BS 2874 CZ121, Nickel plated to BS 1224 Nut 14.5 **Panel Seal Termination** Brass to BS 2874 CZ108. Copper flash base, silver flash finish Lens Polycarbonate 925-000-00 is brass tin plated - for use PC5430 Resin **Encapsulation** with 508 series lamps Zinc Plated Steel **Lock Washer** Dimensions in mm (typical). Not to scale. Header

technical characteristics

Series	Max. Power Dissipation	Max. Reverse Voltage	Panel Cutout	Nut Mounting Torque	Min. Mounting Centres	Max. Panel Thickness
508	700	3*/1000^	8.1	0.65	14.5	1.5 - 13.0
units	mW	Vdc	mm	Nm	mm	mm

optional flying lead terminators

Order Code Suffix	Supply Voltage	Wire Colour	Wire Length	No/Diameter of Conductor	<u>Diameter</u> Insulation	Comments
15	DC products	Red-anode/ Black-cathode	150mm			
15	AC products	Brown-live/ Blue-neutral	150mm	19/0.15mm	1.2mm	Customised
19	DC products	Red-anode/ Black-cathode	1000mm	19/0.1511111	1.211111	lengths available
19	AC products	Brown-live/ Blue-neutral	1000mm			avaliable

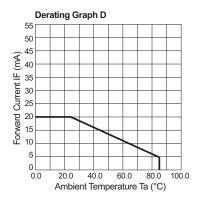
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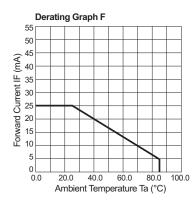


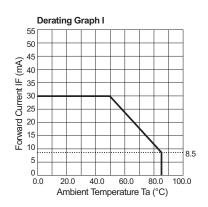




de-rating information







also available

Part numbers also available in the 508 series:

Part	Colour	Voltage	
Number	Colour	Vopr	
508-501-21-15	Red	12 Vdc	
508-501-23	Red	28 Vdc	
508-501-25-50	Red	110 Vdc	
508-501-56	Red	72 Vdc	
508-502-21-29	Red	12 Vdc	
508-502-75	Red	110 Vac 50 Hz	
508-512-21	Green	12 Vdc	
508-512-23	Green	28 Vdc	
508-512-75-15	Green	110 Vac 50 Hz	
508-521-04	Yellow	20 mA dc	
508-521-20	Yellow	5/6 Vdc	
508-521-21-29	Yellow	12 Vdc	
508-521-23	Yellow	28 Vdc	
508-521-75	Yellow	110 Vac 50 Hz	
508-532-20	Green	5/6 Vdc	
508-532-21-15	Green	12 Vdc	
508-532-22-51	Green	24 Vdc	
508-532-23	Green	28 Vdc	
508-532-25-50	Green	110 Vdc	
508-532-46	Green	35 Vdc	
508-532-75-15	Green	110 Vac 50 Hz	
508-535-21-15	Red/Green	12 Vdc	
508-930-21	Blue	12 Vdc	
508-930-22	Blue	24 Vdc	
508-930-23	Blue	28 Vdc	
508-997-23	White	28 Vdc	
508-997-25-50	White	110 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.

RP = Reverse Polarity

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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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