

PROFESSIONAL LED INDICATORS Ø12.7mm Mounting

# **FEATURES**



#### **512 SERIES**

PACK QUANTITY = 10 PIECES

- Robust bright nickel plated brass housing
- Sealed to IP67
- Flying lead terminations available
- Suitable for high vibration applications
- Internal reverse protection diode fitted as standard in all voltage models.

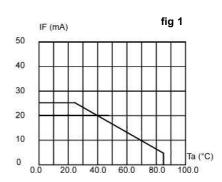
## **SPECIFICATION**

Ordering Information & Typical Technical Characteristics (Ta = 25°C)

Mean Time Between Failure = 100,000 Hours. Luminous intensity figures refer to the unmodified discrete LED.

| PART NUMBER    | COLOUR     | LENS   | VOLTAGE<br>DC (Vdc)<br>Vopr | CURRENT<br>DC (mA)<br>lopr | LUMINOUS<br>INTENSITY<br>Iv@20mA (mcd) | WAVE<br>LENGTH<br>λp (nm) | OPERATING<br>TEMP<br>Topr | STORAGE<br>TEMP<br>Tstg | RoHS       |
|----------------|------------|--------|-----------------------------|----------------------------|--|---------------------------|---------------------------|-------------------------|------------|
| HIGH INTENSITY |            |        |                             |                            |  |                           |                           |                         | 2002/93/60 |
| 512-501-21     | Red        | Smoked | 12                          | 19                         | 11000                                  | 643                       | -40 ~ +95^                | -40 ~ +100              | Yes        |
| 512-521-21     | Yellow     | Smoked | 12                          | 19                         | 16000                                  | 591                       | -40 ~ +95^                | -40 ~ +100              | Yes        |
| 512-532-21     | Green      | Smoked | 12                          | 20                         | 23000                                  | 527                       | -40 ~ +95^                | -40 ~ +100              | Yes        |
| 512-930-21     | Blue       | Smoked | 12                          | 20                         | 7000                                   | 470                       | -40 ~ +95^                | -40 ~ +100              | Yes        |
| 512-997-21     | Cool White | Smoked | 12                          | 20                         | 14000                                  | *                         | -40 ~ +95^                | -40 ~ +100              | Yes        |
| 512-501-23     | Red 0      | Smoked | 24-28                       | 20                         | 11000                                  | 624                       | -40 ~ +95^                | -40 ~ +100              | Yes        |
| 512-521-23     | Yellow     | Smoked | 24-28                       | 20                         | 16000                                  | 591                       | -40 ~ +95^                | -40 ~ +100              | Yes        |
| 512-532-23     | Green      | Smoked | 24-28                       | 20                         | 23000                                  | 527                       | -40 ~ +95^                | -40 ~ +100              | Yes        |
| 512-930-23     | Blue       | Smoked | 24-28                       | 20                         | 7000                                   | 470                       | -40 ~ +95^                | -40 ~ +100              | Yes        |
| 512-997-23     | Cool White | Smoked | 24-28                       | 20                         | 14000                                  | *                         | -40 ~ +95^                | -40 ~ +100              | Yes        |
| UNITS          |            |        | Vdc                         | mA                         | mcd                                    | nm                        | °C                        | °C                      |            |

#### Other voltages AC/DC available. Please contact our Technical Sales.



Max forward DC current vs ambient temperature (Tjmax=105°C)

### How to Order:

website: www.marl.co.uk • email: sales@marl.co.uk •

• Telephone +44 (0)1229 582430 • Fax: +44 (0)1229 585155

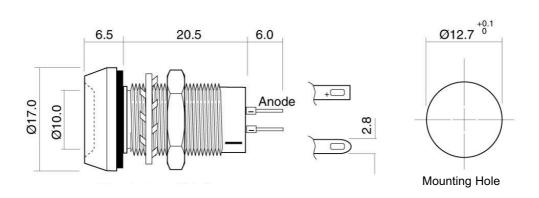
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<sup>\* =</sup> Typical emission colour: cool white x=0.31, y=0.32 Intensities (Iv) and colour shades of white (x,y co-ordinates) may vary between LEDs within a batch.

<sup>^ =</sup> Products must be derated when used above 40°C - Refer to fig 1.



## 512 Series



Dimensions in mm (Typical) Not to scale

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

|                                    | MATERIALS                                       | PUSH-ON CO                      | NNECTORS                   |  |  |
|------------------------------------|---|---------------------------------|----------------------------|--|--|
| Body Brass to BS 2874 CZ121        |   |                                 |                            |  |  |
|                                    | Nickel plated to BS 1224                        |                                 |                            |  |  |
| Nut                                | Brass to BS 2874 CZ121                          | 4.4                             |                            |  |  |
|                                    | nickel plated to BS 1224                        | 14.5                            |                            |  |  |
| Panel Seal Viton                   |   | 3.7                             |                            |  |  |
| Termination Brass to BS 2874 CZ108 |   |                                 |                            |  |  |
|                                    | Copper flash undercoat with silver flash finish |                                 |                            |  |  |
| Lock Washer                        | Zinc plated steel                               |                                 |                            |  |  |
| Fresnel lens                       | Polycarbonate                                   | 925-000-00 is brass tin plated. | Dimensions in mm (Typical) |  |  |
| Encapsulation PC5430 resin         |   | For use with 512 series lamps.  | Not to scale               |  |  |
|                                    |   |                                 |                            |  |  |

# TECHNICAL CHARACTERISTICS

| SERIES | MAXIMUM<br>POWER<br>DISSIPATION | MAXIMUM<br>REVERSE<br>VOLTAGE | PANEL<br>CUTOUT | NUT<br>MOUNTING<br>TORQUE | MINIMUM<br>MOUNTING<br>CENTRES | MIN/MAX.<br>PANEL<br>THICKNESS |
|--------|---------------------------------|-------------------------------|-----------------|---------------------------|--------------------------------|--------------------------------|
| 512    | 1000                            | 1000                          | 12.7            | 1.0                       | x,y=19.5                       | 1.5-8.0                        |
|        | mw                              | Vdc                           | mm              | Nm                        | mm                             | mm                             |

|                         | OPTIONAL FLYING LEAD TERMINATIONS |                           |                |                                 |                                |                                    |  |  |
|-------------------------|-----------------------------------|---------------------------|----------------|---------------------------------|--------------------------------|------------------------------------|--|--|
| ORDER<br>CODE<br>SUFFIX | SUPPLY<br>VOLTAGE                 | WIRE<br>COLOUR            | WIRE<br>LENGTH | NO/DIAMETER<br>OF<br>CONDUCTORS | DIAMETER<br>OVER<br>INSULATION | COMMENTS                           |  |  |
| 15                      | DC Products                       | Red-anode / Black-cathode | 150mm          |                                 |                                |                                    |  |  |
| 15                      | AC Products                       | Brown-live / Blue-neutral | 150mm          | 19/0.15mm                       | 1.2mm                          | Customised<br>lengths<br>available |  |  |
| 19                      | DC Products                       | Red-anode / Black-cathode | 1000mm         | 19/0.15/11/11                   |                                |                                    |  |  |
| 19                      | AC Products                       | Brown-live / Blue-neutral | 1000mm         | _                               |                                |                                    |  |  |

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