

● PROFESSIONAL LED INDICATORS Ø13mm Mounting

FEATURES



528 SERIES

PACK QUANTITY = 10 PIECES

- Robust stainless steel housing
- Low profile styling, sunlight readable LEDs
- 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 DC (Vdc) Vopr | CURRENT DC (mA) Iopr | LUMINOUS INTENSITY Iv@20mA (mcd) | WAVE LENGTH λp (nm) | OPERATING TEMP Topr | STORAGE TEMP Tstg | |
|-----------------------|------------|-----------------|--------------------------|-------------------------|-------------------------------------|------------------------|------------------------|----------------------|-----|
| HIGH INTENSITY | | | | | | | | | |
| 528-501-21 | Red | Colour Diffused | 12 | 19 | 11000 | 643 | -40 ~ +95 [^] | -40 ~ +100 | Yes |
| 528-521-21 | Yellow | Colour Diffused | 12 | 19 | 16000 | 591 | -40 ~ +95 [^] | -40 ~ +100 | Yes |
| 528-532-21 | Green | Colour Diffused | 12 | 20 | 23000 | 527 | -40 ~ +95 [^] | -40 ~ +100 | Yes |
| 528-930-21 | Blue | Colour Diffused | 12 | 20 | 7000 | 470 | -40 ~ +95 [^] | -40 ~ +100 | Yes |
| 528-997-21 | Cool White | Colour Diffused | 12 | 20 | 14000 | *see below | -40 ~ +95 [^] | -40 ~ +100 | Yes |
| 528-501-23 | Red | Colour Diffused | 24-28 | 20 | 11000 | 643 | -40 ~ +95 [^] | -40 ~ +100 | Yes |
| 528-521-23 | Yellow | Colour Diffused | 24-28 | 20 | 16000 | 591 | -40 ~ +95 [^] | -40 ~ +100 | Yes |
| 528-532-23 | Green | Colour Diffused | 24-28 | 20 | 23000 | 527 | -40 ~ +95 [^] | -40 ~ +100 | Yes |
| 528-930-23 | Blue | Colour Diffused | 24-28 | 20 | 7000 | 470 | -40 ~ +95 [^] | -40 ~ +100 | Yes |
| 528-997-23 | Cool White | Colour Diffused | 24-28 | 20 | 14000 | *see below | -40 ~ +95 [^] | -40 ~ +100 | Yes |
| UNITS | | | Vdc | mA | mcd | nm | °C | °C | |



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

[^] = Products must be derated according to the derating information. Each derating graph refers to specific LEDs.

| 997F-C | *Typical emission colour cool white | | | |
|--------|-------------------------------------|-------|-------|-------|
| x | 0.245 | 0.361 | 0.356 | 0.264 |
| y | 0.229 | 0.385 | 0.351 | 0.220 |

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

How to Order:

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

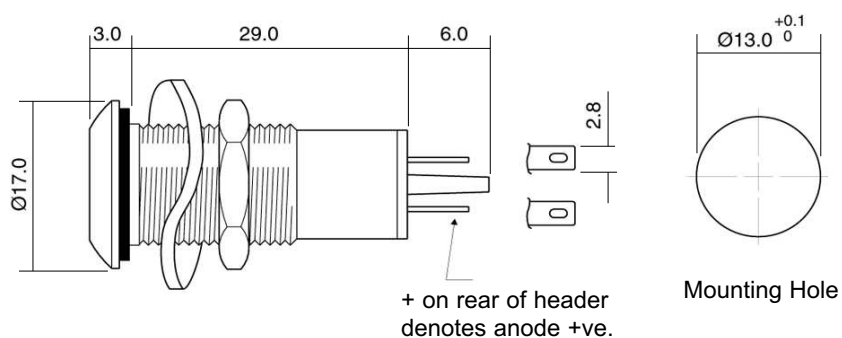
• Telephone +44 (0)1229 582430 • Fax: +44 (0)1229 585155

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528 Series



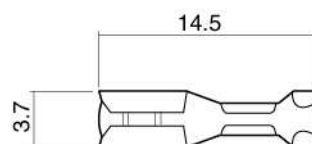
Dimensions in mm (Typical)
Not to scale

Mounting hole to be clean and burr free

MATERIALS

PUSH-ON CONNECTORS

| | |
|---------------|---|
| Body | Stainless steel grade 303 |
| Nut | Stainless steel grade 303 |
| Panel Seal | Viton |
| Termination | Brass to BS 2874 CZ108 Copper flash undercoat with silver flash finish |
| Lock Washer | Stainless steel |
| Fresnel lens | Polycarbonate |
| Encapsulation | PC5430 resin |
| Header | Nylon 6 A82 |



925-000-00 is brass tin plated.
For use with 528 series lamps.

Dimensions in mm (Typical)
Not to scale

TECHNICAL CHARACTERISTICS

| SERIES | MAXIMUM POWER DISSIPATION | MAXIMUM REVERSE VOLTAGE | PANEL CUTOUT | NUT MOUNTING TORQUE | MINIMUM MOUNTING CENTRES | MIN/MAX. PANEL THICKNESS |
|--------|---------------------------|-------------------------|--------------|---------------------|--------------------------|--------------------------|
| 528 | 825 | 1000 | 13.0 | 1.0 | x,y=26.0 | 2.0-10.0 |
| | mw | Vdc | mm | Nm | mm | mm |

* = current version

• = voltage version

OPTIONAL FLYING LEAD TERMINATIONS

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

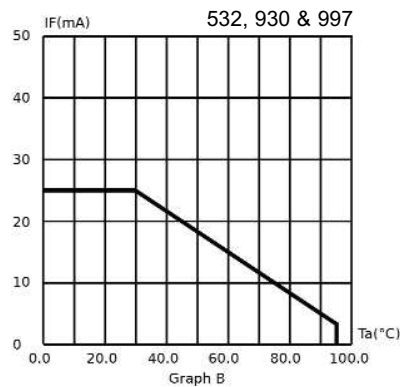
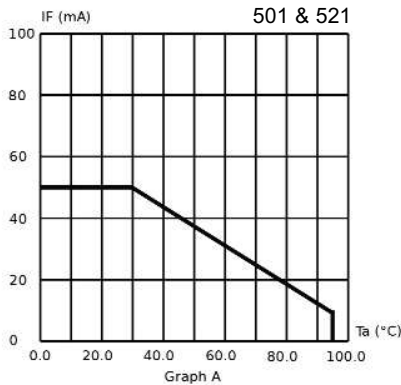
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DERATING INFORMATION



ALSO AVAILABLE

Part numbers also available in the 528 Series:

| PART NO. | COLOUR | VOLTAGE DC (Vdc) Vopr |
|---------------|--------|-----------------------|
| 528-000-00-50 | | 125 VDC |
| 528-501-04 | Red | 20mA |
| 528-501-21-15 | Red | 12 VDC |
| 528-501-21-19 | Red | 12 VDC |
| 528-501-22 | Red | 24 VDC |
| 528-501-22-15 | Red | 24 VDC |
| 528-501-22-19 | Red | 24 VDC |
| 528-501-22-50 | Red | 24 VDC |
| 528-501-23-15 | Red | 28 VDC |
| 528-501-24-19 | Red | 48 VDC |
| 528-501-25 | Red | 110 VDC |
| 528-501-72 | Red | 24 VAC |
| 528-501-75 | Red | 110 VAC |
| 528-501-76 | Red | 230 VAC |
| 528-501-76-15 | Red | 230 VAC |
| 528-501-76-50 | Red | 230 VAC |
| 528-501-86 | Red | 115 VAC |
| 528-506-23 | Orange | 28 VDC |
| 528-512-21-15 | Green | 12 VDC |
| 528-512-22-15 | Green | 24 VDC |
| 528-512-76 | Green | 230 VAC |
| 528-521-04 | Yellow | 20mA |
| 528-521-21-19 | Yellow | 12 VDC |
| 528-521-22 | Yellow | 24 VDC |
| 528-521-22-15 | Yellow | 24 VDC |
| 528-521-22-19 | Yellow | 24 VDC |
| 528-521-22-50 | Yellow | 24 VDC |
| UNITS | | |

| PART NO. | COLOUR | VOLTAGE DC (Vdc) Vopr |
|---------------|--------|-----------------------|
| 528-521-23-15 | Yellow | 28 VDC |
| 528-521-23-50 | Yellow | 28 VDC |
| 528-521-53 | Yellow | 50 VDC |
| 528-521-72 | Yellow | 24 VAC |
| 528-521-75 | Yellow | 110 VAC |
| 528-521-76 | Yellow | 230 VAC |
| 528-521-76-50 | Yellow | 230 VAC |
| 528-521-86 | Yellow | 115 VAC |
| 528-532-04 | Green | 20mA |
| 528-532-20 | Green | 5/6 VDC |
| 528-532-21-19 | Green | 12 VDC |
| 528-532-22 | Green | 24 VDC |
| 528-532-22-19 | Green | 24 VDC |
| 528-532-22-50 | Green | 24 VDC |
| 528-532-24 | Green | 48 VDC |
| 528-532-25 | Green | 110 VDC |
| 528-532-42 | Green | 15 VDC |
| 528-532-72 | Green | 24 VAC |
| 528-532-74 | Green | 48 VAC |
| 528-532-75 | Green | 110 VAC |
| 528-532-76 | Green | 230 VAC |
| 528-532-76-19 | Green | 230 VAC |
| 528-532-76-21 | Green | 230 VAC |
| 528-532-76-50 | Green | 230 VAC |
| 528-532-86 | Green | 115 VAC |
| 528-930-04 | Blue | 20mA |
| 528-930-04-15 | Blue | 20mA |
| UNITS | | |

| PART NO. | COLOUR | VOLTAGE DC (Vdc) Vopr |
|---------------|--------|-----------------------|
| 528-930-04-50 | Blue | 20mA |
| 528-930-04-51 | Blue | 20mA |
| 528-930-21-19 | Blue | 12 VDC |
| 528-930-22 | Blue | 24 VDC |
| 528-930-25 | Blue | 110 VDC |
| 528-930-75 | Blue | 110 VAC |
| 528-930-76 | Blue | 230 VAC |
| 528-997-04 | White | 20mA |
| 528-997-21-19 | White | 12 VDC |
| 528-997-22 | White | 24 VDC |
| 528-997-22-19 | White | 24 VDC |
| 528-997-22-50 | White | 24 VDC |
| 528-997-24 | White | 48 VDC |
| 528-997-72 | White | 24 VAC |
| 528-997-75 | White | 110 VAC |
| 528-997-76 | White | 230 VAC |
| 528-997-76-19 | White | 230 VAC |
| 528-997-76-50 | White | 230 VAC |
| 528-997-86 | White | 115 VAC |
| UNITS | | |

The products listed above 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.

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- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

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JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели, кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



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