

● PROFESSIONAL LED INDICATORS Ø8.1mm Mounting

## FEATURES



### 503 SERIES

PACK QUANTITY = 10 PIECES

- Robust bright nickel plated brass housing
- Raised profile styling, sunlight readable LEDs
- Sealed to IP67
- 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 λ,p (nm)	OPERATING TEMP Topr	STORAGE TEMP Tstg	
<b>HIGH INTENSITY</b>									
503-501-21	Red	Colour Diffused	12	20	11000	643	-40 ~ +95 <sup>^</sup>	-40 ~ +100	Yes
503-521-21	Yellow	Colour Diffused	12	20	16000	591	-40 ~ +95 <sup>^</sup>	-40 ~ +100	Yes
503-532-21	Green	Colour Diffused	12	20	23000	527	-40 ~ +95 <sup>^</sup>	-40 ~ +100	Yes
503-930-21	Blue	Colour Diffused	12	20	7000	470	-40 ~ +95 <sup>^</sup>	-40 ~ +100	Yes
503-997-21	Cool White	Colour Diffused	12	20	14000	*see below	-40 ~ +95 <sup>^</sup>	-40 ~ +100	Yes
503-501-23	Red	Colour Diffused	24-28	20	11000	643	-40 ~ +95 <sup>^</sup>	-40 ~ +100	Yes
503-521-23	Yellow	Colour Diffused	24-28	20	16000	591	-40 ~ +95 <sup>^</sup>	-40 ~ +100	Yes
503-532-23	Green	Colour Diffused	24-28	20	23000	527	-40 ~ +95 <sup>^</sup>	-40 ~ +100	Yes
503-930-23	Blue	Colour Diffused	24-28	20	7000	470	-40 ~ +95 <sup>^</sup>	-40 ~ +100	Yes
503-997-23	Cool White	Colour Diffused	24-28	20	14000	*see below	-40 ~ +95 <sup>^</sup>	-40 ~ +100	Yes
<b>UNITS</b>			<b>Vdc</b>	<b>mA</b>	<b>mcd</b>	<b>nm</b>	<b>°C</b>	<b>°C</b>	



<b>997F-C</b>	*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.

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

<sup>^</sup> = Products must be derated according to the derating information. Each derating graph refers to specific LEDs. Refer to page 3.

### How to Order:

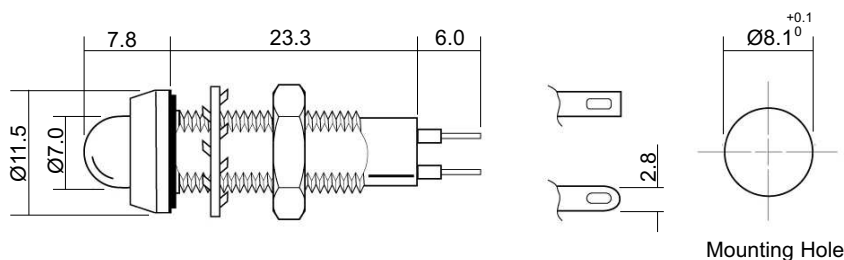
website: [www.marl.co.uk](http://www.marl.co.uk) • email: [sales@marl.co.uk](mailto:sales@marl.co.uk) •  
 • Telephone +44 (0)1229 582430 • Fax: +44 (0)1229 585155

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### 503 Series



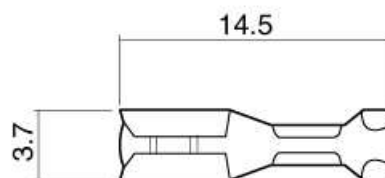
Dimensions in mm (Typical)  
Not to scale

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

#### MATERIALS

#### PUSH-ON CONNECTORS

Body	Brass to BS 2874 CZ121 Nickel plated to BS 1224
Nut	Brass to BS 2874 CZ121 nickel plated to BS 1224
Panel Seal	Viton
Termination	Brass to BS 2874 CZ108 Copper flash undercoat with silver flash finish
Lock Washer	Zinc plated steel
Fresnel lens	Polycarbonate
Encapsulation	PC5430 resin



925-000-00 is brass tin plated.  
For use with 503 series lamps.

Dimensions in mm (Typical)  
Not to scale

#### TECHNICAL CHARACTERISTICS

SERIES	MAXIMUM POWER DISSIPATION	MAXIMUM REVERSE VOLTAGE	PANEL CUTOUT	MOUNTING TORQUE	MINIMUM MOUNTING CENTRES	MIN/MAX. PANEL THICKNESS
503	700	3* / 1000*	8.1	0.65	x,y=14.5	1.5-13.0
	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			

website: [www.marl.co.uk](http://www.marl.co.uk) • email: [sales@marl.co.uk](mailto:sales@marl.co.uk) •

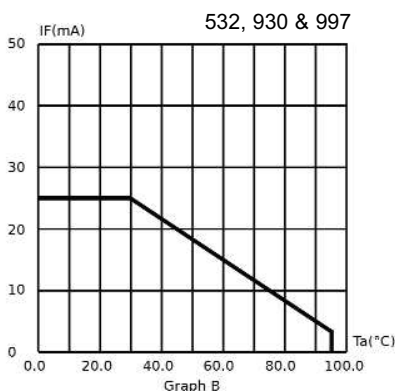
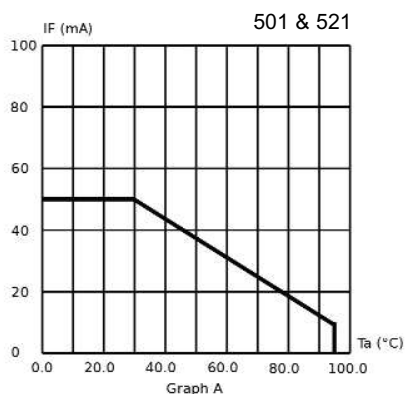
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## DERATING INFORMATION



## ALSO AVAILABLE

Part numbers also available in the 503 Series:

PART NO.	COLOUR	VOLTAGE DC (Vdc) Vopr
503-502-22	Red	24 VDC
503-503-04	Red	20mA
503-503-20	Red	5/6 VDC
503-503-23	Red	28 VDC
503-503-24-50	Red	48 VDC
503-506-75-15	Orange	110 VAC
503-509-22-09	Yellow	24 VDC
503-512-21	Green	12 VDC
503-512-22	Green	24 VDC
503-512-75	Green	110 VAC
503-512-75-15	Green	110 VAC
503-521-22	Yellow	24 VDC
503-521-75-15	Yellow	110 VAC
503-532-75-15	Green	110 VAC
503-578-75-15	Amber	110 VAC
503-930-75-15	Blue	110 VAC
503-997-75-15	White	110 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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