

PANEL INDICATOR LEDs - Ø9.5mm Mounting

## FEATURES



### 423 SERIES

PACK QUANTITY = 20 PIECES

- Front panel replaceability
- Must be used in conjunction with 905-000-00 panel socket. See datasheet DS084/04
- Domed fresnel lens for wide angle viewing
- Smoked & water clear lens options
- Sealed to IP40
- Product illustrated 423-532-22 in 905-000-00 panel mounting socket

## SPECIFICATIONS

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

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

PART NUMBER	COLOUR	LENS	VOLTAGE DC Vopr	CURRENT DC Iopr	LUMINOUS INTENSITY Iv@20mA	WAVE LENGTH λp	OPERATING TEMP Topr	STORAGE TEMP Tstg		
<b>HIGH INTENSITY</b>										
423-501-21	Red		Colour Diffused	12	20	11000	643	-0 ~ +85 <sup>^</sup>	-0 ~ +85	Yes
423-521-21	Yellow		Colour Diffused	12	20	16000	591	-0 ~ +85 <sup>^</sup>	-0 ~ +85	Yes
423-532-21	Green		Colour Diffused	12	20	23000	527	-0 ~ +85 <sup>^</sup>	-0 ~ +85	Yes
423-930-21	Blue		Colour Diffused	12	20	7000	470	-0 ~ +85 <sup>^</sup>	-0 ~ +85	Yes
423-997-21	Cold White		Colour Diffused	12	20	14000	*see below	-0 ~ +85 <sup>^</sup>	-0 ~ +85	Yes
423-501-23	Red		Colour Diffused	24-28	17.5	11000	643	-0 ~ +85 <sup>^</sup>	-0 ~ +85	Yes
423-521-23	Yellow		Colour Diffused	24-28	17.5	16000	591	-0 ~ +85 <sup>^</sup>	-0 ~ +85	Yes
423-532-23	Green		Colour Diffused	24-28	17.5	23000	527	-0 ~ +85 <sup>^</sup>	-0 ~ +85	Yes
423-930-23	Blue		Colour Diffused	24-28	17.5	7000	470	-0 ~ +85 <sup>^</sup>	-0 ~ +85	Yes
423-997-23	Cold White		Colour Diffused	24-28	17.5	14000	*see below	-0 ~ +85 <sup>^</sup>	-0 ~ +85	Yes
<b>UNITS</b>			<b>Vdc</b>	<b>mA</b>	<b>mcd</b>	<b>nm</b>	<b>°C</b>	<b>°C</b>		



997F-C	*Typical emission colour cold 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.

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

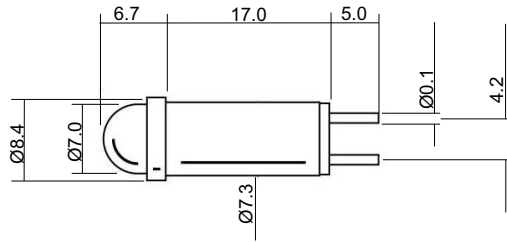
### How to Order:

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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### 423 SERIES



Dimensions in mm (Typical)  
Not to scale

Termination pins are off axis for polarity insertion into socket

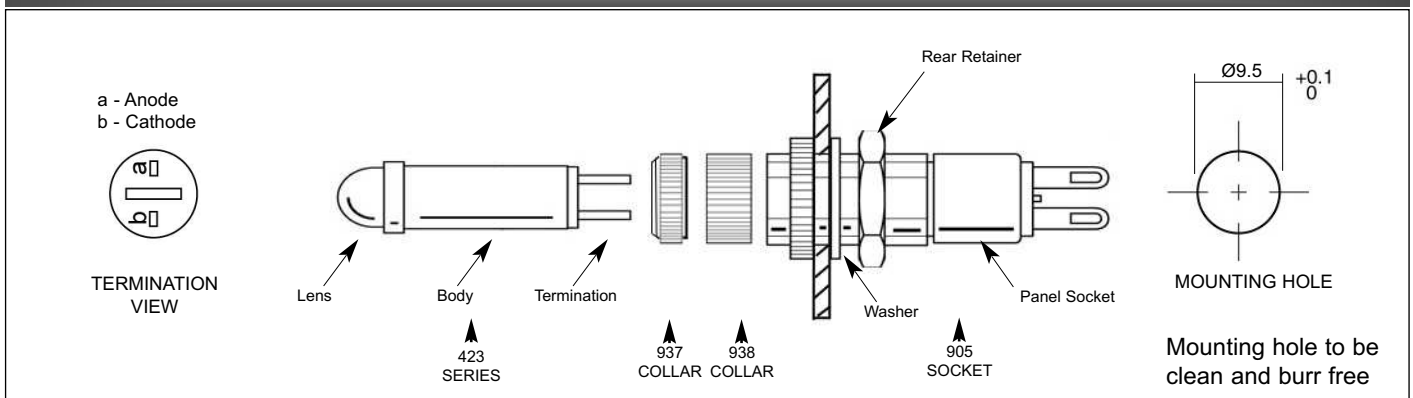
### MATERIALS

Body	Nylon 6
Termination Pins	Tin on Nickel Plated Phosphor Bronze
Fresnel lens	Polycarbonate
Header	Black Acetal
Mounting Hardware	Use with socket 905-000-00.

### TECHNICAL CHARACTERISTICS

SERIES	MAXIMUM POWER DISSIPATION	MAXIMUM REVERSE VOLTAGE	PANEL CUTOUT	MINIMUM MOUNTING CENTRES	MAX. PANEL THICKNESS
423	500	3	9.5	16.5	6.5
UNITS	mW	Vdc	mm	mm	mm

### PANEL SOCKETS & CONNECTORS



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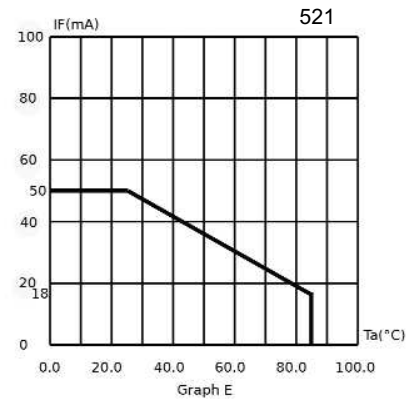
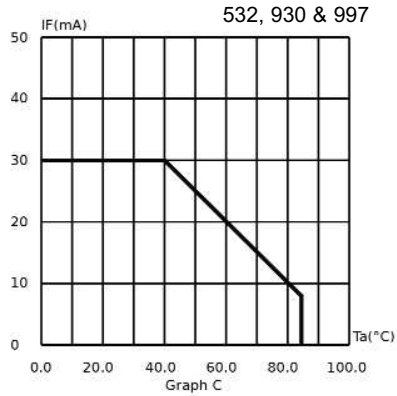
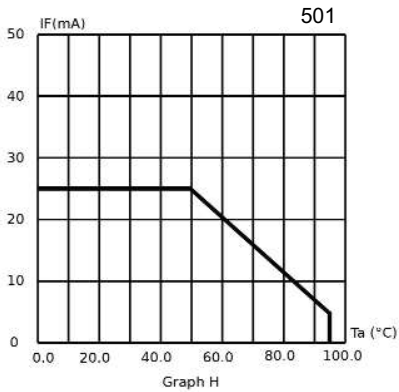


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### Optional Reverse Protection Diode

ORDER CODE SUFFIX	CIRCUIT	COMMENTS
01		Available on all indicators except Bi-Colour devices.

### De-rating Information



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## 423 Series

Part numbers also available in the 423 Series:

PART NO.	COLOUR	VOLTAGE (Vdc) Vopr
423-501-04	Red	20mA
423-501-20	Red	5/6Vdc
423-501-22	Red	24Vdc
423-501-24	Red	48Vdc
423-502-21	Red	12Vdc
423-503-04	Red	20mA
423-503-20	Red	5/6Vdc
423-503-22	Red	24Vdc
423-503-22-01	Red	24Vdc
423-503-24	Red	48Vdc
423-503-72	Red	24Vac
423-506-04	Orange	20mA
423-506-21	Orange	12Vdc
423-506-22	Orange	24Vdc
423-506-22-01	Orange	24Vdc
423-506-74	Orange	48Vac
423-506-74-50	Orange	48Vac
423-509-04	Yellow	20mA
423-509-20	Yellow	5/6Vdc
423-509-21	Yellow	12Vdc
423-509-22	Yellow	24Vdc
423-509-24	Yellow	48Vdc
423-512-04	Green	20mA
423-512-20	Green	5/6Vdc
423-512-21	Green	12Vdc
423-512-22	Green	24Vdc
423-512-22-01	Green	24Vdc
423-512-24	Green	48Vdc
423-512-72	Green	24Vac
423-521-04	Yellow	20mA
423-521-20	Yellow	5/6Vdc
423-521-22	Yellow	24Vdc
423-521-24	Yellow	48Vdc
423-521-74	Yellow	48Vac
423-532-04	Green	20mA
423-532-21	Green	12Vdc
423-532-22	Green	24Vdc
UNITS		

PART NO.	COLOUR	VOLTAGE (Vdc) Vopr
423-532-24	Green	48Vdc
423-930-04	Blue	20mA
423-930-22	Blue	24Vdc
423-930-24	Blue	48Vdc
423-993-04	Warm White	20mA
423-993-23	Warm White	24-28Vdc
423-993-24	Warm White	48Vdc
423-993-73	Warm White	28Vac
423-997-04	White	20mA
423-997-21	White	12Vdc
423-997-22	White	24Vdc
423-997-24	White	48Vdc
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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