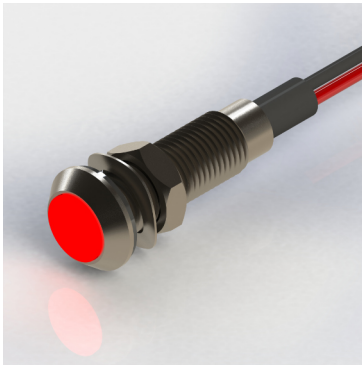


603 EMC SERIES PANEL INDICATOR LED



FEATURES

- EMC mesh under lens
- Ø5.0mm mounting
- Bright nickel plated brass housing
- Sealed to IP67 - weatherproof
- Colour diffused lens
- Internal potting
- 150mm flying leads as standard
- Range of LED colour options

BENEFITS

- Protects against EMI/RFI
- Standard industrial mounting size
- Suitable for harsh environments
- Suitable for external applications
- Wide viewing angle
- Suitable for high vibration applications
- Rapid installation
- Suitable for status panel indication
- Outstanding reliability
- Vandal resistant

MARL Part Number	LED Colour	Typical Voltage Vf	Typical Current DC If	Typical LED Luminous Intensity	Typical LED Wavelength λp	Operating Temp Topr *	Storage Temp Tstg
603-301-04-58	Red	1.95	20	900	645	-40 to +85	-40 to +85
603-325-04-58	Yellow	2.0	20	2800	590	-40 to +85	-40 to +85
603-324-04-58	Green	3.2	20	36100	525	-30 to +85	-40 to +100
603-934-04-58	Blue	3.2	20	6550	465	-30 to +85	-40 to +100
603-998-04-58	Cool White	3.2	20	12900	See Below	-30 to +85	-40 to +100
603-303-04-58	Red (Standard Intensity)	2.0	20	131	627	-40 to +85	-40 to +85
603-309-04-58	Yellow (Standard Intensity)	2.1	20	43	590	-40 to +85	-40 to +85
603-312-04-58	Green (Standard Intensity)	2.2	20	131	565	-40 to +85	-40 to +85
		Vdc	mA	mcd	nm	°C	°C

Typical Emission Colours Cool White LED

X	0.296	0.283	0.330	0.330
Y	0.276	0.305	0.360	0.318

NOTES

Intensities (Iv) and colour shades of white (X-Y co-ordinates) may vary between LEDs within a batch. Additional LED Colours, Voltage Options and Flying Lead lengths available for semi-custom projects. Please contact our Sales Team. All LED components are supplied in anti-static packaging.

* Characteristics at Ta = 25°C. For operating temperature derating graphs, please refer to sheet 2.

To order please contact us on +44 (0) 1229 582 430
 F +44 (0) 1229 585 155 | E sales@marl.co.uk | www.leds.co.uk
 in company/marl-international-limited



603 EMC SERIES PANEL INDICATOR LED



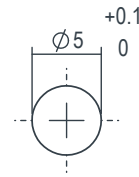
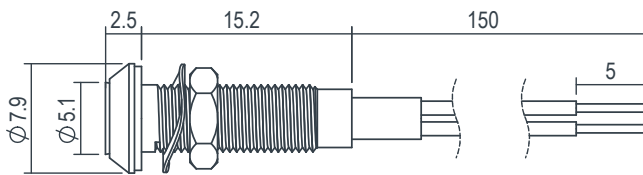
TECHNICAL CHARACTERISTICS

Series	Max. Power Dissipation	Max. Reverse Voltage	Panel Cutout	Nut Mounting Torque	Min. Mounting Centres	Min - Max. Panel Thickness
603	425 mW	5 Vdc	5.0 mm	0.35 Nm	10.0 mm	1.5 - 8.0 mm

TECHNICAL DRAWING

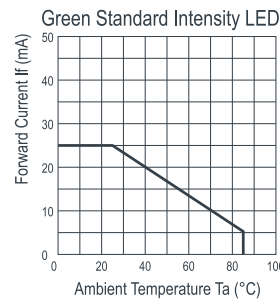
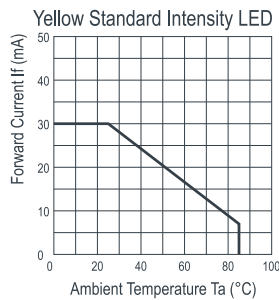
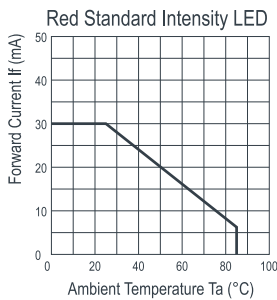
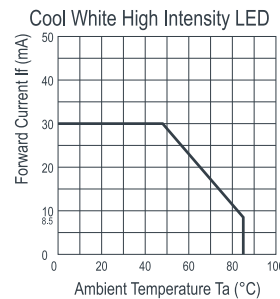
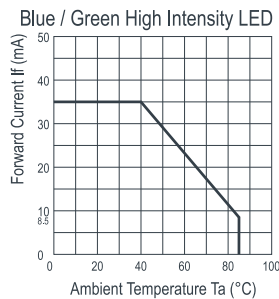
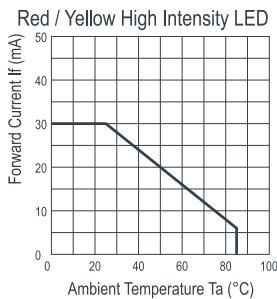
Weight (g): 1.75

Dimensions in mm (typical). Not to scale. Mounting hole to be clean and burr free. Anode termination denoted by red flying lead.



Mounting hole

DE-RATING GRAPHS



MATERIALS

Body	Bright Nickel Plated Brass	Encapsulation	Black Polyurethane
Nut	Bright Nickel Plated Brass	Lock Washer	Beryllium Copper
Panel Seal	Viton	Termination	Defence Standard 61/12, Part 18 chemical & flame retardant 150mm colour coded flying leads
Fresnel Lens	Polycarbonate	EMC Mesh	Stainless Steel

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 dispatch. MARL recommend all users of LED based products follow the current BSI guidelines for protection of electronic devices from electrostatic phenomena.

Voltage, Current and Temperature

The forward voltage / current value of an LED is dependent 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.

MARL should be contacted if the device is to be operated outside the temperature range specified. MARL accept no liability for any product that is operated outside the stated voltage or temperature range.

To order please contact us on +44 (0) 1229 582 430
F +44 (0) 1229 585 155 | E sales@marl.co.uk | www.leds.co.uk

in company/marl-international-limited

