

● PROFESSIONAL LED INDICATORS Ø16mm Mounting

FEATURES

**678 SERIES**

PACK QUANTITY = 10 PIECES

- Black anodised aluminium housing
- Sealed to IP67
- Excellent wide viewing angle characteristics
- 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		
STANDARD INTENSITY										
678-105-21	Red		Colour Diffused	12	19	100	627	-40 ~ +85^	-40 ~ +85	Yes
678-111-21	Yellow		Colour Diffused	12	20	50	590	-40 ~ +85^	-40 ~ +85	Yes
678-114-21	Green		Colour Diffused	12	20	60	565	-40 ~ +85^	-40 ~ +85	Yes
678-105-23	Red		Colour Diffused	24-28	20	100	627	-40 ~ +85^	-40 ~ +85	Yes
678-111-23	Yellow		Colour Diffused	24-28	20	50	590	-40 ~ +85^	-40 ~ +85	Yes
678-114-23	Green		Colour Diffused	24-28	20	60	565	-40 ~ +85^	-40 ~ +85	Yes
HIGH INTENSITY										
678-102-04	Red		Colour Diffused	1.85	20	450	660	-40 ~ +85^	-40 ~ +85	Yes
678-102-21	Red		Colour Diffused	12	20	450	660	-40 ~ +85^	-40 ~ +85	Yes
678-102-23	Red		Colour Diffused	24-28	20	450	660	-40 ~ +85^	-40 ~ +85	Yes
UNITS			Vdc	mA	mcd	nm	°C	°C		

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

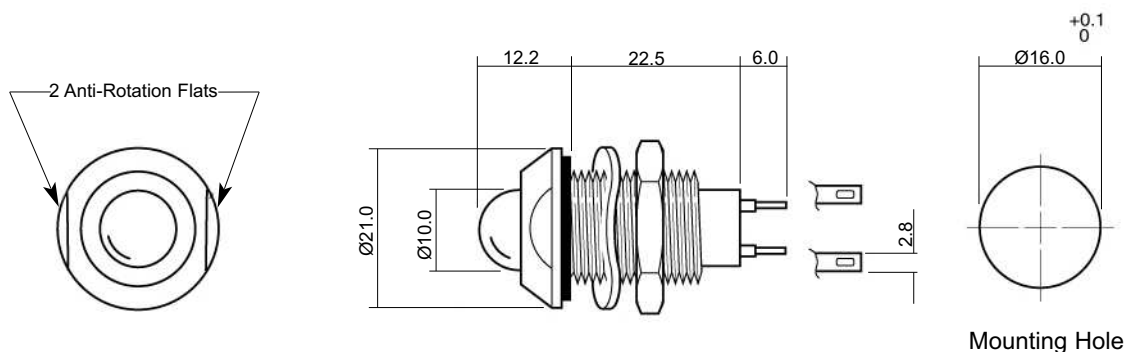
How to Order:

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

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

The information contained in this datasheet does not constitute part of any order or contract and should not be regarded as a representation relating to either products or service. Marl International reserve the right to alter without notice the specification or any conditions of supply for products or service.

678 SERIES



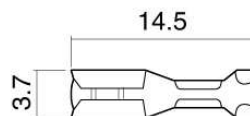
Dimensions in mm (Typical)
Not to scale

Anode termination indicated by red sleeve

MATERIALS

Body	Black anodised aluminium
Nut	Black anodised aluminium
Panel Seal	Viton
Termination Tags	Tin Plated Phosphor Bronze
Lens	Epoxy
Encapsulation	PC5430 resin
Lock Washer	Spring Steel

PUSH-ON CONNECTORS



925-000-00 is brass tin plated.
For use with 678 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
678	1700	3* / 1000•	16.0	1.0	x,y = 25.0	1.5-8.0
UNITS	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			

How to Order:

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

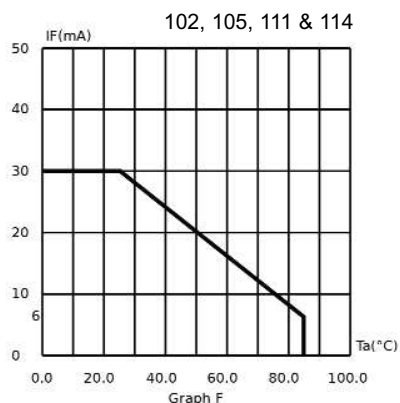
• Telephone +44 (0)1229 582430 • Fax: +44 (0)1229 585155

The information contained in this datasheet does not constitute part of any order or contract and should not be regarded as a representation relating to either products or service. Marl International reserve the right to alter without notice the specification or any conditions of supply for products or service.



BS EN ISO 9001:2000
Approved Manufacturer

DERATING INFORMATION



678 SERIES

Part numbers also available in the 307 Series:

PART NO.	COLOUR	VOLTAGE (Vdc) Vopr
678-102-22	Red	24Vdc
678-102-75	Red	110Vac
678-102-76	Red	230Vac
678-105-04	Red	20mA
678-105-22	Red	24Vdc
678-105-75	Red	110Vac
678-105-76	Red	230Vac
678-111-04	Yellow	20mA
678-111-22	Yellow	24Vdc
678-111-71	Yellow	12Vac
678-111-76	Yellow	230Vac
678-114-22	Green	24Vdc
678-114-45	Green	30Vdc
678-114-58	Green	70Vdc
678-114-75	Green	110Vac
678-114-76	Green	230Vac
678-114-86	Green	115Vac
678-521-00-50	Yellow	110Vdc
678-930-00-51	Blue	110Vdc
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.

How to Order:

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

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

The information contained in this datasheet does not constitute part of any order or contract and should not be regarded as a representation relating to either products or service. Marl International reserve the right to alter without notice the specification or any conditions of supply for products or service.



BS EN ISO 9001:2000
Approved Manufacturer