

# PRODUCT DATA SHEET

Part Number:

195M025X

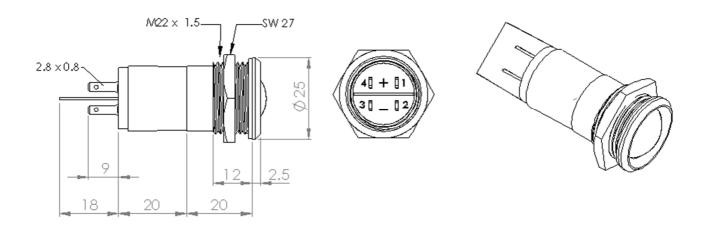
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| Туре | Size | Rating | Description                           |
|------|------|--------|---------------------------------------|
| uLED | M22  | 12Vdc  | Panel mount indicator - multifunction |

#### **Description:**

The CML-IT uLED is a multi-coloured LED indicator with a built in micro controller. The unit comes preprogramed with 4 operating modes, each of which can be selected by a logic table using the mode select pins. No user programing is required as the four modes of operation are factory set. A range of standard modes are available, others are available upon request.

### **Dimensions (mm):**



### **Pin description:**

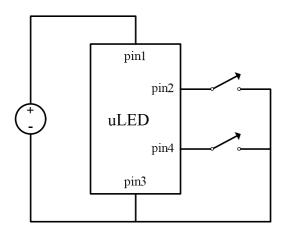
| Pin | Function |  |
|-----|----------|--|
| 1   | +Vdc     |  |
| 2   | MSB      |  |
| 3   | Ground   |  |
| 4   | LSB      |  |

#### Note:

Pins 2 and 4 are pulled up to logic '1' internally. Therefore, if these pins are left unconnected, the default output will be logic '11' as shown in the tables at the end of this document. This is to prevent an accidental open circuit from inhibiting a warning signal. For example on part 195M025C, if control cables are accidentally cut, the indicator will illuminate flashing red rather than green.

Do not apply any voltage to these mode select pins.

### Suggested circuit diagram:



## **Optical characteristics:**

| Colour                             | Red | Green | Blue |
|------------------------------------|-----|-------|------|
| luminous intensity<br>@ 20mA (mcd) | 620 | 1200  | 280  |

Note: Typical characteristics of the LED component before diffusion.

#### **Electrical characteristics:**

|         | Rating   | Notes  |
|---------|----------|--------|
| Voltage | 12Vdc    | + 5%   |
| Current | 50-115mA | +/- 5% |

#### Notes:

- 1. Current consumption depends on mode of operation.
- 2. Also available in 6Vdc and 24Vdc versions.

### **Mechanical characteristics:**

|                        | Rating              | Notes            |
|------------------------|---------------------|------------------|
| Storage temperature    | -25 °C to +80 °C    |                  |
| Operating temperature  | -20 °C to +60 °C    |                  |
| Protection rating      | IP67                | DIN EN 60529     |
| Bezel material         | Chrome plated brass |                  |
| Body material          | Polycarbonate       |                  |
| Contact material       | Tin plated brass    | Pin 1 not plated |
| Mounting hole diameter | 22mm                |                  |

#### **Technical notes:**

- 1. Colour, intensity and flash rate may vary slightly due to component tolerances.
- 2. Terminals are not qualified for soldering.
- 3. Part is not user programmable, operating modes are pre-set at the factory.

## **Mode select table:**

| Part n         | umber          | 195M025A   | 195M025B       | 195M025C         |
|----------------|----------------|------------|----------------|------------------|
| MSB<br>(pin 2) | LSB<br>(pin 4) | Output     | Output         | Output           |
| 0              | 0              | Green      | Green          | Green            |
| 0              | 1              | Red        | Amber          | Green (flashing) |
| 1              | 0              | Blue       | Red            | Red              |
| 1              | 1              | Cool white | Red (flashing) | Red (flashing)   |

#### Notes:

- 1. Flashing function is approximately 1Hz at 50% duty. (0.5 seconds on).
- 2. Other modes available upon request.

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