

# OEM SERIES

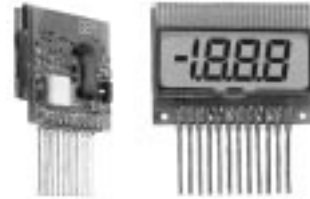
ULTRA-MINIATURE, COMPONENT STYLE METERS

**MARTEL METERS**  
ELECTRONICS

Designed as component style meters, the OEM Series are ideally suited to both medium and high volume applications. Typical uses for this series include personal instrumentation, integral sensor indicators and power supply monitoring.

The range consists of two LCD meters, a bare PCB style meter & metal framed version and a potted LED meter. The LED meter is dimensionally compatible with the metal framed LCD version and has the same digit height. The LED meter is supplied with a red filter as standard.

In addition, Martel is able to provide a custom design service for the family of modules. If you require different configurations to the standard modules shown, please contact our sales team to discuss your specific requirements (subject to minimum order quantity).



## DC Voltmeter

**Stock No.**

**OEM 1**

- 3-1/2 digit LCD
- 5.5mm (0.22") digit height
- 150µA @ 7 to 14VDC operation
- Auto-zero, auto-polarity
- Selectable decimal points
- 200mV full scale reading (when using 100mV reference)
- SIL connection

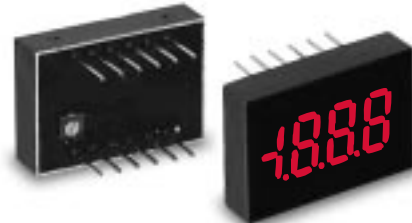


## DC Voltmeter

**Stock No.**

**OEM 1B**

- 3-1/2 digit LCD
- 8mm (0.31") digit height
- 150µA @ 7.5 to 14VDC operation
- Auto-zero, auto-polarity
- Selectable decimal points
- 200mV full scale reading
- DIL connection



## DC Voltmeter

**Stock No.**

**OEM 1B-LED**

- 3-1/2 digit LED
- 8mm (0.31") digit height
- 50mA (typ.) @ 5VDC operation
- Auto-zero, auto-polarity
- Selectable decimal points
- 200mV full scale reading
- DIL connection

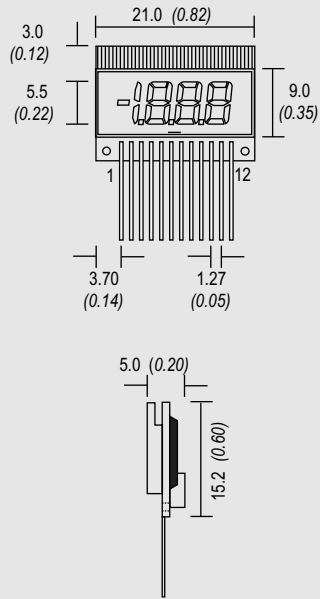
**MARTEL METERS**  
ELECTRONICS

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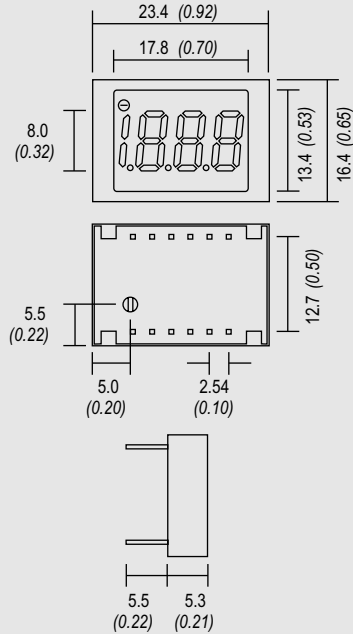
## Mechanical Specification

All dimensions in mm (inches)

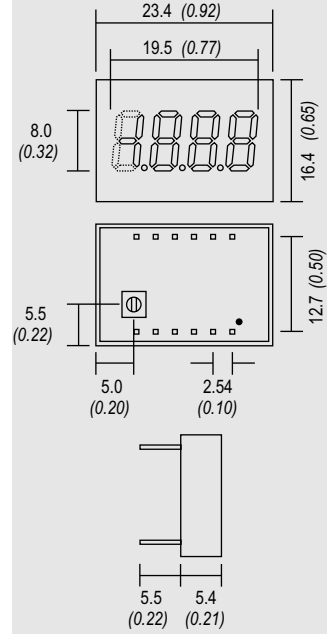
### OEM 1



### OEM 1B



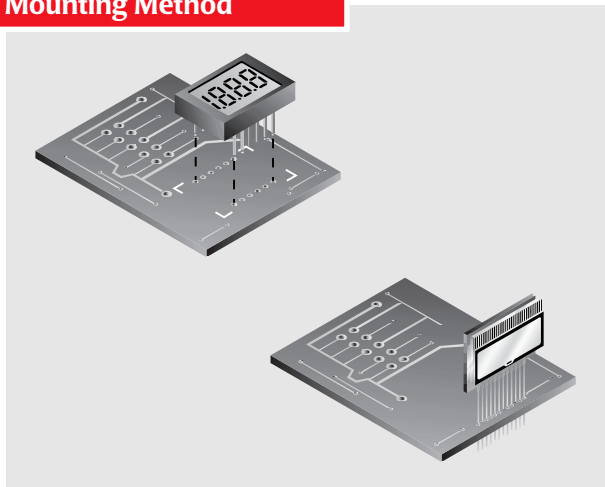
### OEM 1B-LED



| Dimensions                  | OEM 1                        |                     | OEM 1B                       |                     | OEM 1B-LED                    |                     |
|-----------------------------|------------------------------|---------------------|------------------------------|---------------------|-------------------------------|---------------------|
| Digit height                | 5.5mm                        | 0.22"               | 8.0mm                        | 0.31"               | 8.0mm                         | 0.31"               |
| Size (W x H x D) excl. pins | 21.0 x 15.2 x 5.0mm          | 0.82 x 0.60 x 0.20" | 23.4 x 16.4 x 5.3mm          | 0.92 x 0.65 x 0.21" | 23.4 x 16.4 x 5.4mm           | 0.92 x 0.65 x 0.21" |
| Specification               |                              |                     |                              |                     |                               |                     |
| Accuracy (overall error)*   | 0.1% ( $\pm 1$ count) (typ.) |                     | 0.1% ( $\pm 1$ count) (typ.) |                     | 0.05% ( $\pm 1$ count) (typ.) |                     |
| Full scale reading          | $\pm 200$ mVDC               |                     | $\pm 200$ mVDC               |                     | $\pm 200$ mVDC                |                     |
| Linearity                   | $\pm 1$ count (max.)         |                     | $\pm 1$ count (max.)         |                     | $\pm 1$ count (max.)          |                     |
| Sample rate                 | 3 samples/sec.               |                     | 2.5 samples/sec.             |                     | 2.5 samples/sec.              |                     |
| Operating temperature range | 0°C to 50°C                  |                     | 0°C to 50°C                  |                     | 0°C to 50°C                   |                     |
| Temperature stability       | 200ppm/°C                    |                     | 100ppm/°C                    |                     | 150ppm/°C                     |                     |
| Warm-up time                | -                            |                     | -                            |                     | 10 minutes                    |                     |
| Supply voltage              | 9VDC (typ.)                  |                     | 9VDC (typ.)                  |                     | 5VDC (typ.)                   |                     |
| Supply current              | 150 $\mu$ A (typ.)           |                     | 150 $\mu$ A (typ.)           |                     | 50mA (typ.)                   |                     |
| Input leakage current       | 10pA (max.)                  |                     | 10pA (max.)                  |                     | 10pA (max.)                   |                     |

\* To ensure maximum accuracy, re-calibrate periodically.

## Mounting Method



## Connection

