



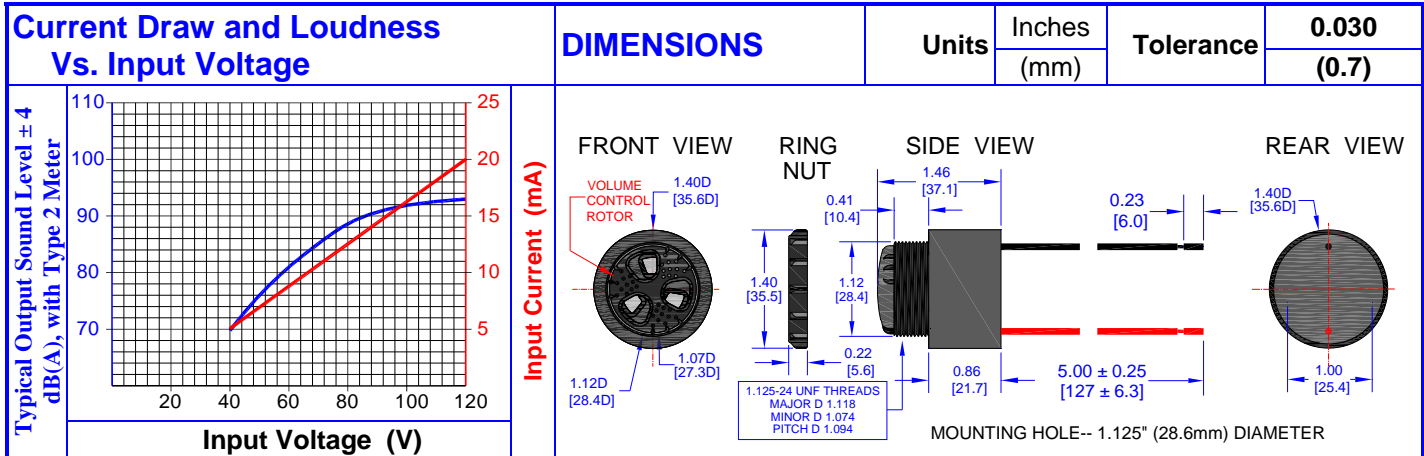
# PRODUCT INFORMATION

Part #: **CE-CM201AVW**

Revision: 1-2014



| DESCRIPTION   |  | FEATURES  |                     |                     |                 |
|---|--|---|---------------------|---------------------|-----------------|
| <b>Challenge Electronics CONTINUOUS Tone, MEDIUM Loud, 40 to 120 Vac, A style back panel mounted case, Sound Pressure Level of 93 dB(A) at 117 Vac at 61 cm, 2,900 Hz. Output Frequency, Wire Leads 5" Long termination, Piezoelectric Alarm with a mechanical Volume Control, Rear Panel Mount Piezoelectric Alarm, RoHS Compliant</b> |  | <ul style="list-style-type: none"> <li>◆ Reliable Solid State Piezoelectric Technology</li> <li>◆ Corrosion resistant Stainless Steel Diaphragm</li> <li>◆ Flame Retardant Plastic</li> <li>◆ Extended storage temperature</li> <li>◆ Hermetically Sealed Alarm</li> <li>◆ Water Proof, NEMA 3R, 4X, or 12 with Gasket (not supplied)</li> <li>◆ RoHS, Lead Free Compliance</li> <li>◆ ISO 9001:2008 &amp; ISO-TS 16949:2009 Certified</li> </ul> |                     |                     |                 |
| SPECIFICATIONS  |  |   |                     |                     |                 |
| Operating Mode  | Medium Loud, Continuous Tones  | Pulse Rate  |                     |                     |                 |
| Operating Voltage   | 40 to 120 Vac  | Nominal Operating Voltage   | 117 Vac             | Operating Frequency | 2,900 ± 500 Hz. |
| Typical Loudness  | At 40 Vac  | 70±5 dB(A)  | At 117 Vac          | 93±3 dB(A)          |                 |
|   | SPL is measured at 30 cm, 25°C, Sound Level meter # 2240, Type 2, Fast Response, A-Weighted  |   |                     |                     |                 |
| Volume Control  | Maximum Sound Pressure Level can be restricted up to 20 dB from maximum output. (Note, The Volume Control Rotor may reduce maximum loudness)<br>To install, simply, push the ROTOR onto the front of alarm until it snapped in place<br>To attenuate sound, while alarm is turned on, rotate the ROTOR until maximum desired sound is achieved |   |                     |                     |                 |
| Typical Operating Current   | 10 mA at 40 Vac  |   | 25 mA at 117 Vac    |                     |                 |
| Operating Temperature   | -30°C to +65°C   |   | Storage Temperature | -40°C to +100°C     |                 |
| Surge Voltage   | 20% over maximum Operating Voltage for less than 5 minutes   |   |                     |                     |                 |
| Materials   | Alarm Case   | Plastic, "A" Case, NORYL™, PX9406 or equal, flame retardant UL 94-V0, Black   |                     |                     |                 |
|   | Diaphragm  | Stainless Steel 304   |                     |                     |                 |
|   | Encapsulation  | Silicon Potting covering SMD components topped with 2 parts epoxy potting, Black  |                     |                     |                 |
|   | Termination  | Two (2) Wires Leads, 18 AWG (7X32), GXL Automotive, Copper, XPLE insulated, 5.0 (127) long. Struck 0.235 (6.0mm), Red and Black   |                     |                     |                 |
| Physical Dimensions   | Length or Diameter (L/D)   | 1.4" (35.6 mm) ø  | Width (W)           | Height (H)          | 1.46" (37.1 mm) |
| Approximate Weight  | 37 grams   | Removable Washing Label   | No                  | Compliance          | RoHS            |
| Available Options   |  |   |                     |                     |                 |
| RELIABILITY   |  |   |                     |                     |                 |
| Thermal Operating Temperature Test  | 96 hours continuous operation at Rated Voltage, at Maximum Rated Operating Temperature *   |   |                     |                     |                 |
|   | 96 hours continuous operation at Rated Voltage, at Minimum Rated Operating Temperature *   |   |                     |                     |                 |
| Thermal Storage Temperature Test  | 96 hours storage at Maximum Rated Storage Temperatures *   |   |                     |                     |                 |
|   | 96 hours storage at Minimum Rated Storage Temperatures *   |   |                     |                     |                 |
| Thermal Shock Test  | 5 cycles of Minimum and Maximum Operating Temperature<br>Each cycle shall be set per diagram below and is 3 hours long *   |   |                     |                     |                 |
| Humidity Test   | 120 Hours at +60°C±2°C. 90-95% RH *  |   |                     |                     |                 |
| Salt Spray  | Withstand exposure to salt spray per ASTM B117 for a period of 300 hours *   |   |                     |                     |                 |
| Water & Dust Exposure   | Withstands water submergence and dust exposure per IP-68 *   |   |                     |                     |                 |
| Vibration Test  | 2 Hours at 1.5 mm with 10 to 55 Hz. of vibration frequency to each of 3 perpendicular direction *  |   |                     |                     |                 |
| Drop Test   | Dropped naturally from 1 meter height onto the surface of 10mm wooden board, 2 directions upper and side of the part are applied *   |   |                     |                     |                 |
| Termination Strength  | Maximum of 15 pounds (6.8 Kg) load pull test   |   |                     |                     |                 |
| * Reliability Test Performance  | Parts should conform to original performance within ±3 dB, after 3 hours of recovery and dry period  |   |                     |                     |                 |
| Life Test   | Intermittent   | 1,000 hours of a 1 minute on 4 minutes off cycle at room temperature and maximum rated voltage  |                     |                     |                 |
|   | Continuous   | 250 hours continuous operation at maximum rated Voltage and maximum Operating Temperatures  |                     |                     |                 |
| Warranty  | For a period of one (1) year from date of shipping under normal operations conditions<br>This warranty does not apply to products damaged through misuse, abuse, improper installation, alteration, rework, or attempt to repair   |   |                     |                     |                 |



**PACKAGING**

| ONE TRAY: | TWO BUNDLE | MARKING                | TRAY                |                   |
|-----------|------------|------------------------|---------------------|-------------------|
|           |            | <b>Bundle</b>          |                     |                   |
|           |            | Part Number            | Dimensions          | <b>X1</b> 34.7 cm |
|           |            | Other PN if required   |                     | <b>Y1</b> 34.7 cm |
|           |            | Quantity               | Quantity            | <b>Z1</b> 21.2 cm |
|           |            | Lot and/or Date Code   | <b>BUNDLE</b>       |                   |
|           |            | Bundle Number          | <b>X2</b>           | cm                |
|           |            | <b>Shipping Box</b>    | Dimensions          | <b>Y2</b> cm      |
|           |            | Part Number            |                     | <b>Z2</b> cm      |
|           |            | Other PN (if required) | Quantity            |                   |
|           |            | Quantity               | <b>SHIPPING BOX</b> |                   |
|           |            | Lot and/or Date Code   | <b>X3</b>           | 35 cm             |
|           |            | PO Number              | Dimensions          | <b>Y3</b> 35 cm   |
|           |            | Net Weight             |                     | <b>Z3</b> 22.5 cm |
|           |            | Gross Weight           | Number of Bundles   | <b>1</b>          |
|           |            | Box Number of Boxes    | Quantity            | <b>250</b>        |
|           |            | <b>Made in China</b>   | Approximate Weight  | <b>9 Kg.</b>      |

| Revision | Description                                | By        | Date      |
|----------|--|-----------|-----------|
| 1-2014   | Modified the Sound Pressure Specifications | Ely Zofan | 5/14/2014 |
|          |  |           |           |
|          |  |           |           |