



# PRODUCT INFORMATION

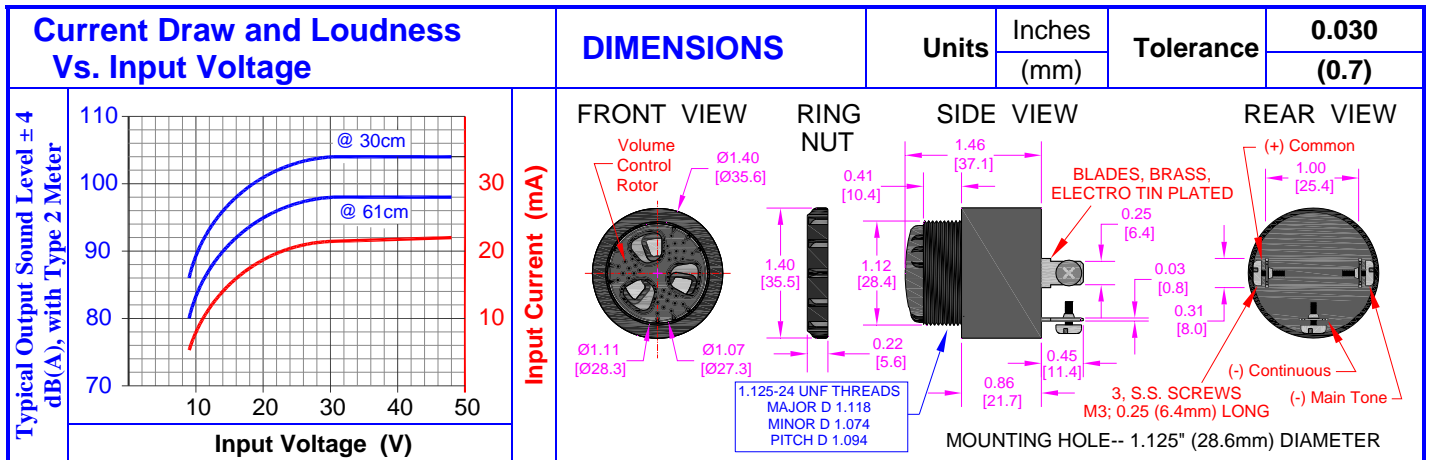
Part #: **CE-BCM948AVSF**

Revision: 3-2012



| DESCRIPTION  |   | FEATURES   |                           |                           |                 |
|--|---|--|---------------------------|---------------------------|-----------------|
| <p><b>Challenge Electronics Dual-Function BEEPING or CONTINUOUS Tones, MEDIUM Loud, 9 to 48 Vdc, A style case Rear Panel Mounting in 1.125" (28.6 mm) Hole, Sound Pressure Level of 98 dB(A) at 48 Vdc at 61 cm, 2,900 Hz. Output Frequency, S three 0.25" (6.4 mm) Blades with M3 0.25" (6.4 mm) long Stainless Steel Screws termination, Fast Rate 3 pulses per second, Piezoelectric Alarm with a mechanical Volume Control, RoHS Compliant</b></p> |   | <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 Certified</li> </ul> |                           |                           |                 |
| SPECIFICATIONS   |   |  |                           |                           |                 |
| Operating Mode   | Medium Loud, Fast Intermittent or Continuous Tones  |  | Pulse Rate                | 3 ± 10% Pulses per Second |                 |
| Operating Voltage  | 9 to 48 Vdc   |  | Nominal Operating Voltage | 36 and 48 Vdc             |                 |
| Operating Frequency  | 2,900 ± 250 Hz.   |  |                           |                           |                 |
| Typical Loudness   | At Minimum Voltage  | 88 ± 5 dB(A), at 9 Vdc, 24 inches (61 cm), 25°C  |                           |                           |                 |
|  | At Maximum Voltage  | 98 ± 3 dB(A), at 48 Vdc, 24 inches (61 cm), 25°C   |                           |                           |                 |
| Volume Control   | <p>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</p> |  |                           |                           |                 |
| Typical Operating Current  | At Minimum Voltage  | 10 mA at 9 Vdc   | At Maximum Voltage        | 25 mA at 48 Vdc           |                 |
| Operating Temperature  | -30°C to +65°C  |  | Storage Temperature       | -40°C to +105°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   | Two parts epoxy resin or silicone potting, Black   |                           |                           |                 |
|  | Termination   | Three, 0.25 (6.4 mm) Quick Connect Blades, 0.032Ø (0.8Ø mm) Wide, Brass, Electro-Tin plated With M3 0.25" (6.4 mm) long Stainless Steel Screws.  |                           |                           |                 |
| Physical Dimensions  | Length or Diameter (L/D)  | 1.46" (37.1 mm) Ø  | Width (W)                 | Height (H)                | 1.46" (37.1 mm) |
| Approximate Weight   | 44 grams  | Removable Washing Label  | No                        | Compliance                | RoHS            |
| Available Options  |   |  |                           |                           |                 |
| RELIABILITY  |   |  |                           |                           |                 |
| Thermal Operating Temperature Test   | 240 hours continuous operation at Rated Power, at Maximum Rated Operating Temperature *   |  |                           |                           |                 |
|  | 240 hours continuous operation at Rated Power, 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   | <p>5 cycles of Minimum and Maximum Operating Temperature<br/>           Each cycle shall be set per diagram below and is 3 hours long *</p>   |  |                           |                           |                 |
| 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 and of 4 lb. per inch driving torque on screw  |  |                           |                           |                 |
| * Reliability Test Performance   | Parts should conform to original performance within ±3dB, 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  |  |                           |                           |                 |

The information contained herein is believed to be correct, but no guarantee or warranty, express or implied, with respect to accuracy, completeness or results is extended and no liability is assumed.  
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| PACKAGING              |                          | MARKING                | TRAY                |               |                |
|------------------------|--------------------------|------------------------|---------------------|---------------|----------------|
| <b>ONE TRAY:</b><br>   | <b>TWO BUNDLE:</b><br>   | <b>Bundle</b>          | Dimensions          | <b>X1</b>     | <b>34.7 cm</b> |
|                        |                          | Customer PN            |                     | <b>Y1</b>     | <b>34.7 cm</b> |
| Other PN if required   | <b>Z1</b>                | <b>21.2 cm</b>         |                     |               |                |
|                        |                          | Quantity               | Quantity            | <b>42</b>     |                |
|                        |                          | Lot and/or Date Code   | <b>BUNDLE</b>       |               |                |
| <b>ONE BUNDLE:</b><br> | <b>SHIPPING BOX:</b><br> | Bundle Number          | Dimensions          | <b>X2</b>     | <b>cm</b>      |
|                        |                          | Shipping Box           |                     | <b>Y2</b>     | <b>cm</b>      |
|                        |                          | Customer Part Number   | <b>Z2</b>           | <b>cm</b>     |                |
|                        |                          | Other PN (if required) | Quantity            |               |                |
|                        |                          | Quantity               | <b>SHIPPING BOX</b> |               |                |
|                        |                          | Lot and/or Date Code   | Dimensions          | <b>X3</b>     | <b>35 cm</b>   |
|                        |                          | PO Number              |                     | <b>Y3</b>     | <b>35 cm</b>   |
|                        |                          | Net Weight             |                     | <b>Z3</b>     | <b>22.5 cm</b> |
|                        |                          | Gross Weighjt          | Number of Bundles   | <b>1</b>      |                |
|                        |                          | Box Number             | Quantity            | <b>250</b>    |                |
|                        |                          | of Number of Boxes     | Approximate Weight  | <b>14 Kg.</b> |                |
|                        |                          | <b>Made in China</b>   |                     |               |                |

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