



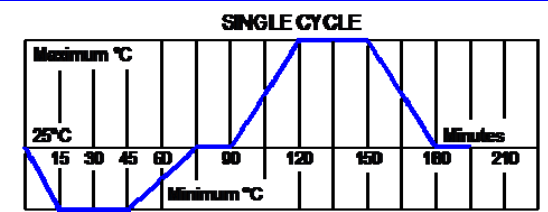
**PRODUCT INFORMATION**

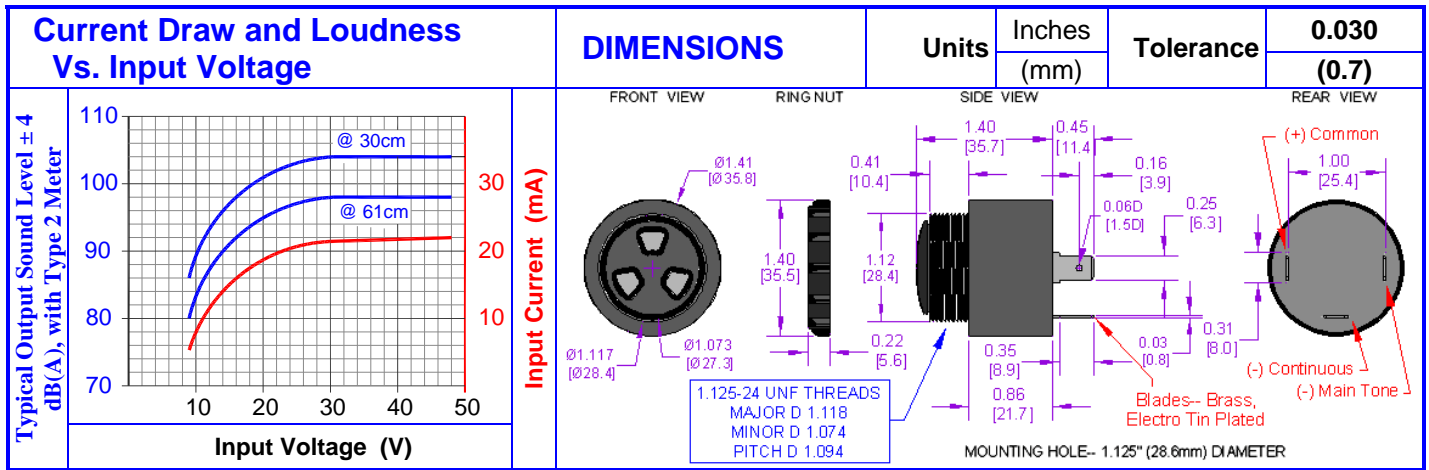


**Part #: CE-BCM948AQS**

**Revision: 4-2017**

| 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, three Quick Connect Blades termination, Slow Rate 1 pulse per second, Piezoelectric Alarm, 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> |                           |                          |                |
| <b>SPECIFICATIONS</b>  |  |  |                           |                          |                |
| Operating Mode   | Medium Loud, Slow Intermittent or Continuous Tones   |  | Pulse Rate                | 1 ± 10% Pulse 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   |                           |                          |                |
| 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  |                           |                          |                |
| Physical Dimensions  | Length or Diameter (L /D)  | 1.46" (37.1 mm) Ø  | Width (W)                 | Height (H)               | 1.4" (35.7 mm) |
| Approximate Weight   | 40 grams   | Removable Washing Label  | No                        | Compliance               | RoHS           |
| Available Options  |  |  |                           |                          |                |
| <b>RELIABILITY</b>   |  |  |                           |                          |                |
| 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   | 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 ±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 |  |                           |                          |                |





### PACKAGING

**ONE TRAY:** X1, Y1

**TWO BUNDLE**

**ONE BUNDLE:** X2, Y2, Z2

**SHIPPING BOX** X3, Y3, Z3

ITEM: C/NO: MADE IN CHINA

|    |    |
|----|----|
| 6  | ↑↑ |
| ↑↑ | ↑↑ |
| ↑↑ | ↑↑ |
| ↑↑ | ↑↑ |

|        |     |
|--------|-----|
| MODEL  |     |
| QTY    | PCS |
| N.W    | KG  |
| G.W    | KG  |
| SIZE   |     |
| LOT NO |     |

| MARKING                |                     | TRAY              |         |
|------------------------|---------------------|-------------------|---------|
| Bundle                 |                     | X1                | 34.7 cm |
| Customer PN            | Dimensions          | Y1                | 34.7 cm |
| Other PN if required   |                     | Z1                | 21.2 cm |
| Quantity               |                     | 42                |         |
| Lot and/or Date Code   | <b>BUNDLE</b>       |                   |         |
| Bundle Number          |                     | X2                | cm      |
| Shipping Box           | Dimensions          | Y2                | cm      |
| Customer Part Number   |                     | Z2                | cm      |
| Other PN (if required) |                     | Quantity          |         |
| Quantity               | <b>SHIPPING BOX</b> |                   |         |
| Lot and/or Date Code   |                     | X3                | 35 cm   |
| PO Number              | Dimensions          | Y3                | 35 cm   |
| Net Weight             |                     | Z3                | 22.5 cm |
| Gross Weight           |                     | Number of Bundles | 1       |
| Box Number             | Quantity            | 250               |         |
| of Number of Boxes     | Approximate Weight  | 12 Kg.            |         |
| <b>Made in China</b>   |                     |                   |         |

| Revision | Description   | By | Date       |
|----------|---|----|------------|
| 4-2017   | Updated mech. dwg. (changed terminal length from 10.9 to 11.4 mm) | WS | 2017-07-05 |
|          |   |    |            |

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.  
 Challenge Electronics reserves the right to make changes in any specification, data or material contained herein.