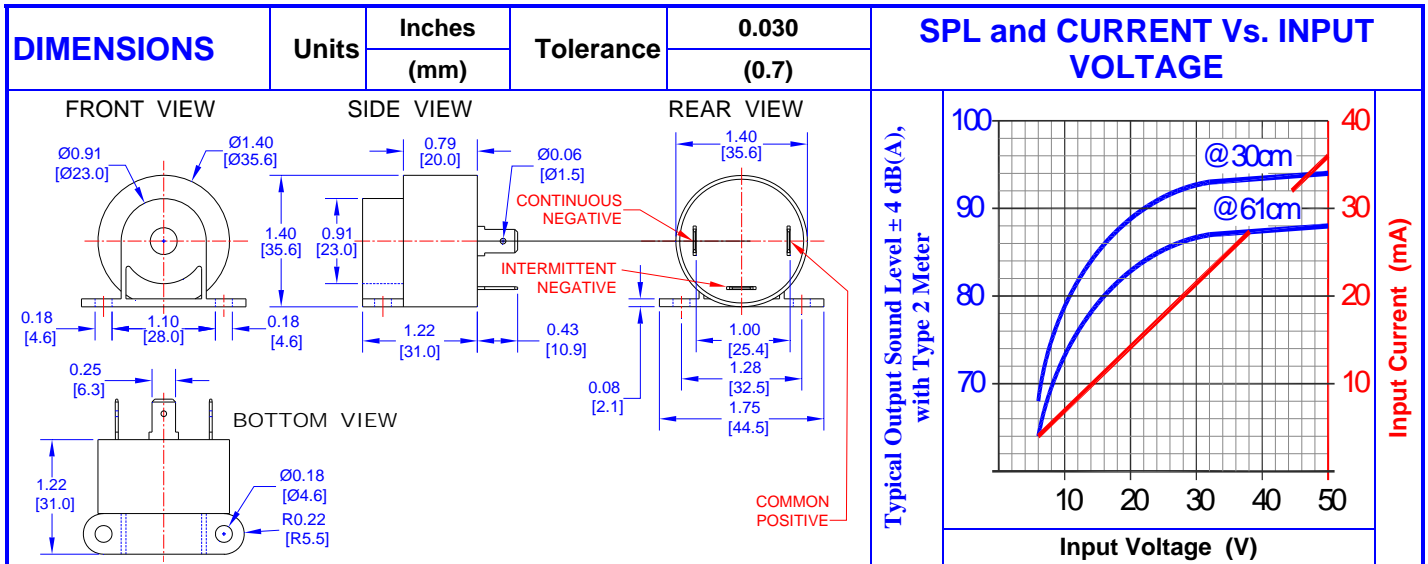




# PRODUCT INFORMATION

|   |  |   |   |                        |                                 |                         |
|---|--|---|---|------------------------|---------------------------------|-------------------------|
|   | <b>Part Number</b>   | <b>CEC-532BC</b>  |   |                        |                                 | <b>Revision: 3-2013</b> |
| <b>Dual Function Intermittent or Continuous Soft Tones Piezoelectric Alarm</b>  |  |   |   |                        |                                 |                         |
| <b>DESCRIPTION</b>  |  |   | <b>FEATURES</b>   |                        |                                 |                         |
| Challenge Electronics Piezoelectric Alarm; <b>SOFT DUAL FUNCTION INTERMITTENT / CONTINUOUS</b> Tones; <b>9 to 48 Vdc</b> , <b>85 dB(A)</b> at maximum Voltage and 61 cm; with a frequency of <b>215 Hz</b> . Piezoelectric Alarm; Includes <b>4,700 Ω</b> Shunt from positive to negative terminals for False Alarm; Panel Mounted with 2 screws; Terminated with three 0.25" (6.4 mm) <b>Quick Disconnect Blades</b> |  |   | <ul style="list-style-type: none"> <li>◆ <b>Reliable Solid State Piezoelectric Technology</b></li> <li>◆ <b>Corrosion resistant Stainless Steel Diaphragm</b></li> <li>◆ <b>Flame Retardant Plastic</b></li> <li>◆ <b>Extended storage temperature</b></li> <li>◆ <b>Hermetically Sealed Alarm</b></li> <li>◆ <b>RoHS, Lead Free Compliance</b></li> <li>◆ <b>ISO 9001 Certified</b></li> </ul> |                        |                                 |                         |
| <b>SPECIFICATIONS</b>   |  |   |   |                        |                                 |                         |
| <b>Operating Mode</b>   | <b>Dual Function Continuous or Intermittent, Soft Loud Tones</b>   |   |   | <b>Pulse Rate:</b>     | <b>1 ± 20% Pulse per Second</b> |                         |
| <b>Operating Voltage</b>  | <b>9 to 48 Vdc</b>   |   | <b>Nominal Operating Voltage</b>  | <b>36 Vdc</b>          |                                 |                         |
| <b>Operating Frequency</b>  | <b>Main Frequency: 215 ± 20% Hz. with a 2,900 ± 20% Hz. Harmonic</b>   |   |   |                        |                                 |                         |
| <b>Sound Pressure Level</b>   | <b>At Minimum Voltage</b>  | <b>70 ± 5 dB(A) at: 9 Vdc, 24 inches (61 cm), 25°C</b>  |   |                        |                                 |                         |
|   | <b>At Maximum Voltage</b>  | <b>85 ± 4 dB(A) at: 48 Vdc, 24 inches (61 cm), 25°C</b>   |   |                        |                                 |                         |
| <b>Maximum Current</b>  | <b>At Minimum Voltage</b>  | <b>8 mA</b>   | <b>At Maximum Voltage</b>   | <b>35 mA</b>           | <b>At Nominal Voltage</b>       |                         |
|   | <b>Surge Voltage</b> 10% over maximum Operating Voltage for less than 1 minutes  |   |   |                        |                                 |                         |
| <b>False Operation</b>  | <b>Alarm includes 4,700 Ohms Shunts from Positive to each Negative to eliminate false sound due to leakage current</b>   |   |   |                        |                                 |                         |
| <b>Operating Temperature</b>  | <b>-30°C to +65°C</b>  |   | <b>Storage Temperature</b>  | <b>-40°C to +85°C</b>  |                                 |                         |
| <b>Materials</b>  | <b>Alarm Case</b>  | <b>Plastic, "J" Case, NORYL™, PX9406 or equal, flame retardant UL 94-V0, Black</b>                        |   |                        |                                 |                         |
|   | <b>Diaphragm</b>   | <b>Stainless Steel 304</b>  |   |                        |                                 |                         |
|   | <b>Encapsulation</b>   | <b>Two parts epoxy resin and/or silicone potting, Black</b>   |   |                        |                                 |                         |
|   | <b>Termination</b>   | <b>Three (3), 0.25 (6.4 mm) Quick Disconnect Blades, 0.032Ø (0.8Ø mm) wide, Brass, Electro-Tin plated</b> |   |                        |                                 |                         |
| <b>Physical Dimensions</b>  | <b>Length or Diameter (L/D)</b>  | <b>1.40" (35.7 mm) Ø</b>  | <b>Width (W)</b>  | <b>1.78" (45.2 mm)</b> | <b>Height (H)</b>               | <b>1.65" (41.9 mm)</b>  |
| <b>Approximate Weight</b>   | <b>27 grams</b>  | <b>Compliance</b>   | <b>RoHS</b>   |                        |                                 |                         |
| <b>RELIABILITY</b>  |  |   |   |                        |                                 |                         |
| <b>Thermal Operating Temperature Test</b>   | <b>96 hours</b> continuous operation <b>at Rated Power</b> , at <b>Maximum Rated Operating Temperature</b> *   |   |   |                        |                                 |                         |
|   | <b>96 hours</b> continuous operation <b>at Rated Power</b> , at <b>Minimum Rated Operating Temperature</b> *   |   |   |                        |                                 |                         |
| <b>Thermal Storage Temperature Test</b>   | <b>96 hours</b> storage at <b>Maximum Rated Storage Temperatures</b> *   |   |   |                        |                                 |                         |
|   | <b>96 hours</b> storage at <b>Minimum Rated Storage Temperatures</b> *   |   |   |                        |                                 |                         |
| <b>Thermal Shock Test</b>   | <b>5 cycles of Minimum and Maximum Operating Temperature</b><br>Each cycle shall be set per diagram below and is 3 hours long *  |   |   |                        |                                 |                         |
| <b>Humidity Test</b>  | <b>120 Hours</b> at +60°C ± 2°C. 90-95 % RH *  |   |   |                        |                                 |                         |
| <b>Salt Spray</b>   | Withstand exposure to salt spray per ASTM B117 for a period of <b>300 hours</b> *  |   |   |                        |                                 |                         |
| <b>Environmental Exposure</b>   | Dust, water, salt, dust-control agents, moisture-control agents, detergents, degreasers, diesel fuel, hydraulic fluid per IP-68 *  |   |   |                        |                                 |                         |
| <b>Vibration Test</b>   | <b>2 Hours</b> at 1.5 mm with 10 to 55 Hz. of vibration frequency to each of 3 perpendicular direction *   |   |   |                        |                                 |                         |
| <b>Drop Test</b>  | Dropped naturally from 1 meter height onto the surface of 10 mm wooden board, 2 directions upper and side of the part are applied *  |   |   |                        |                                 |                         |
| <b>Termination Strength</b>   | Maximum of 15 pounds (6.8 Kg) load pull test   |   |   |                        |                                 |                         |
| <b>* Reliability Test Performance</b>   | <b>Parts should conform to original performance within ± 3 dB</b>  |   |   |                        |                                 |                         |
| <b>Life Test</b>  | <b>Intermittent</b>  | 1,000 hours of a 1 minute on 4 minutes off cycle at room temperature and <b>Nominal Rated Voltage</b>     |   |                        |                                 |                         |
|   | <b>Continuous</b>  | 250 hours continuous operation at room temperature and <b>Nominal Rated Voltage</b>                       |   |                        |                                 |                         |
| <b>Warranty</b>   | 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**

Tray

Shipping Box

Carrying Information

|          |              |
|----------|--------------|
| MODEL :  |              |
| QTY :    |              |
| N.W :    |              |
| G.W :    |              |
| SIZE :   | 00 X 00 X 00 |
| LOT NO : |              |

| Tray                      |                      |
|---------------------------|----------------------|
| Dimensions                | X1      cm           |
|                           | Y1      cm           |
|                           | Z1      cm           |
| Quantity                  |                      |
| SHIPPING BOX              |                      |
| Dimensions                | X2      cm           |
|                           | Y2      cm           |
|                           | Z2      cm           |
| Part Number               |                      |
| Customer PN (if required) |                      |
| Number of Trays           |                      |
| Quantity                  |                      |
| Lot and/or Date Code      |                      |
| PO Number                 |                      |
| Net Weight                |                      |
| Gross Weight              |                      |
| Box Number                |                      |
| of Number of Boxes        |                      |
| Country of Origin         | <b>Made in China</b> |

| Revision | Description                   | By        | Date     |
|----------|-------------------------------|-----------|----------|
| 2-2013   | Updated Specifications Format | Ely Zofan | 4/3/2013 |
| 3-2013   | Corrected Tone Description    | Ely Zofan | 4/6/2013 |
|          |                               |           |          |

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.