



Part Number:

CE-BCU515EWf

Revision: 0-2015

Challenge Electronics Dual Function INTERMITTENT or CONTINUOUS Tones, ULTRA Loud; 5 to 15 Vdc; E style Round with PCB Standoffs mounting case; Sound Pressure Level of 107 dB(A) at 15 Vdc at 61 cm; 2,600 Hz. Output Frequency; Wire Leads 5" Long termination; Fast Rate; Piezoelectric Alarm

Specifications

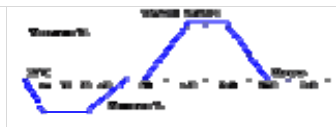
NEW Round Case IP67 Very Loud and Low Frequency Piezoelectric Alarm

| | | | | | | |
|---|---|--------------------------------|----------------------------|----------------------------|------------------|---------------|
| Operating Mode | Ultra Loud, Fast Intermittent or Continuous Tones | Operating Voltage Range | 5-15 Vdc | Nominal | 12 Vdc | |
| Operating Frequency | 2,600 ± 250 Hz. | | Pulse Rate | 3 ± 10 % Pulses per Second | | |
| Typical Loudness | At 5 Vdc | 95 ± 5 dB(A) | At 12 Vdc | 105 ± 4 dB(A) | At 15 Vdc | 107 ± 4 dB(A) |
| SPL is measured at 24" (61 cm), 25°C, Sound Level meter # 2240, Type 2, Fast Response, A-Weighted | | | | | | |
| Operating Current | 33 mA at 5 Vdc | | 65 mA at 12Vdc | | 81 mA at 15 Vdc | |
| 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 | | | | | |
| Polarity Protection | Protected against Reversed Voltage to the Maximum Operating Voltage | | | | | |

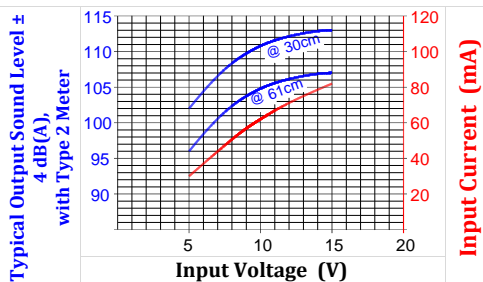
Features

- ◆ Reliable Solid State Piezoelectric Technology
- ◆ Corrosion resistant Stainless Steel Diaphragm
- ◆ Flame Retardant Plastic
- ◆ Extended storage temperature
- ◆ Hermetically Sealed Alarm
- ◆ Reliable Piezoelectric Technology
- ◆ Polarity and Voltage Surge Protected
- ◆ IP-67 Water and Dust Proof, NEMA 3R, 4X, or 12
- ◆ RoHS, Lead Free, and REACH Compliance
- ◆ ISO 9001:2008 & ISO-TS 16949:2009 Certified

| | | |
|---|----------------------------|---|
| Materials | Alarm Case | Plastic, "E" 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 | Three (3) Wires Leads, 18 AWG (7X32), GXL Automotive, Copper, XPLE insulated, 5.0 (127) long. Struck 0.235 (6.0mm), Red, Blue, and Black |
| Reliability | | * Parts should conform to original performance within ±3 dB, after 3 hours of recovery and dry period |
| Thermal Operating Temperature Test | | 96 hours continuous operation at Rated Voltage, at Maximum Rated Operating Temperature * |
| Thermal Storage Temperature Test | | 96 hours continuous operation at Rated Voltage, at Minimum Rated Operating Temperature * |
| | | 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 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-67 * |
| Vibration Test | Alarm Functionality | Withstand 2 Hours of Sweeping 10 to 55 Hz. Vibration Frequency and Vibration Amplitude of 1.5 mm, in each of 3 perpendicular directions * |
| | Mechanical Strength | Withstand 300 Hours of Continuous Reciprocating Vibrations, Vibration Range of 1.0" (25.4 mm) P-P and Vibration Frequency of 5 Hz. (300 rpm) * |
| 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 |
| 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 room temperature and maximum rated Voltage |
| Warranty | | For a period of two (2) years from date of shipping under normal operations conditions This warranty does not apply to products damaged through misuse, abuse, improper installation, alteration, rework, or attempt to repair |

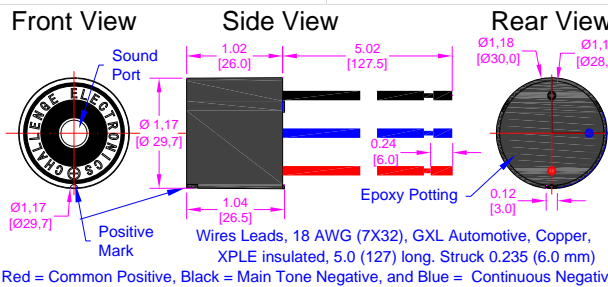


Current Draw and Loudness Vs. Input Voltage



Dimensions

Dimensions are in: Inches/(mm), Tolerance: ±0.025"/(±0.6 mm)



Part Marking

Challenge Electronics
Part Number
Sound Type
Operating V / Date Code
Made in China

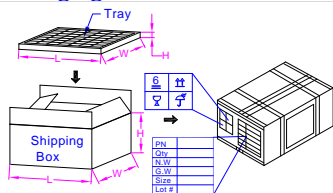
Substance Of Very High Concern (REACH) and RoHS Lead Free Compliance

This product does NOT contain any of the REACH Substances of Very High Concern (SVHC), and is in compliance with European Union REACH Regulation No.1907/2006 regarding chemical substances which must be registered or disclosed

(* European Union Directive 2011/65/EU (RoHS Directive) of the European Parliament. And of the Council of 8 June 2011 and all subsequent amendments. The ANNEX III of the Directive Applications exempted from the restriction in Article 4(1): 7(c)-I, Electrical and electronic components containing lead in ceramic matrix compound Piezoelectric is also known as Lead Zirconate Titanate (PZT) ceramics. Lead content, homogeneous material compound is between 58% and 68% by weight depending on the proportion of zirconium (Zr) and titanium (Ti)

| | | |
|--|-------------|------------------|
| Cadmium (Cd) / Cadmium Compounds | ≤ 100 ppm | In compliance |
| Lead (Pb) / Lead Compounds | ≤ 1,000 ppm | ≤ 10,000 ppm (*) |
| Mercury (Hg) / Mercury Compounds | ≤ 1,000 ppm | In compliance |
| Hexavalent-Chromium (Cr6+) | ≤ 1,000 ppm | In compliance |
| Poly Brominated Biphenyls (PBB) | ≤ 1,000 ppm | In compliance |
| Poly Brominated Diphenyl Ethers (PBDE) | ≤ 1,000 ppm | In compliance |
| Arsenic (As) | ≤ 1,000 ppm | In compliance |

Packaging



| Box Marking | | Tray | | Revisions | |
|------------------------|--|--------------------|-----|-----------|-------------|
| Part Number | | L | cm | Revision | Description |
| Other PN (if required) | | W | cm | | Date |
| Lot and/or Date Code | | Quantity | 50 | | |
| Shipping Box | | | | | |
| Quantity | | L | cm | | |
| PO Number | | W | cm | | |
| Net Weight | | H | cm | | |
| Gross Weight | | | | | |
| Box _ of _ | | Number of Trays | 5 | | |
| Made in China | | Quantity | 250 | | |
| | | Approximate Weight | Kg. | | |