1-631-595-2217 Fax: 1-631-586-5899

EMAIL: SALES@CHALLELEC.COM WEB: WWW.CHALLENGEELECTRONICS.COM

PRODUCT INFORMATION CEPB138A075-316C40P7.6LR PART #: Revision: 0-2013 RoHS_ Mini PIEZOELECTRIC BUZZER COMPLIANCE DESCRIPTION **FEATURES** Challenge Electronics Piezoelectric Buzzer, 13.8 mm Diameter, G style case, 7.5 mm High, 3-16 Vdc, Continuous Tone Medium Loud, 5 & 12 Vdc Nominal Voltage, 4,000 Hz Resonant • RoHS Compliant Frequency, Minimum Sound Pressure Level at 90 dB(A) at 10 cm • ISO 9001 Certified and 12 Vdc, PC Pins 7.6 mm Spacing, with Removable Washing Label, RoHS Compliant **SPECIFICATIONS** Medium Loud, Continuous Tone **Pulse Rate** Alarm Type **Operating Voltage** 3 - 16 Vdc Nominal Voltage 5 and 12 Vdc **Resonant Frequency** $4.000 \pm 500 Hz$. **Sound Pressure Level** Minimum at 5 Vdc 80 dB(A), at 12 Vdc 90 dB(A) at: 10 cm, Nominal Voltage, 25°C **Operating Current** at 5 Vdc 5 mA, at 12 Vdc 12 mA, Storage Temperature -40 °C to + 85°C **Operating Temperature** -40°C to + 85°C Housing Plastic, PPO - SE1-GNF2 or equal, Black Diaphragm **Brass** Material **Encapsulation Epoxy Potting** 2 PC Pins, 0.7 mm Diameter, Plated Brass, Positive 5.5 mm Long, Negative 4.0 mm Long **Termination Physical Dimensions** Length/ Diameter (L/D) 13.8 mm Ø Width (W) Height (H) 7.5 mm Pin Spacing 7.6 mm Removable Washing Label Yes **RoHS Approximate Weight** 0.8 grams Compliance Packaging RELIABILITY 96 hours continuous operation at Rated Voltage, at Maximum Rated Operating Temperature **Thermal Operating Temperature** 96 hours continuous operation at Rated Voltage, at Minimum Rated Operating Temperature 96 hours storage at Maximum Rated Storage Temperatures Thermal Storage Temperature Test 96 hours storage at Minimum Rated Storage Temperatures SINGLE CYCLE Maximum °C 5 cycles of Minimum and Maximum Operating Temperature, **Thermal Shock Test** Each cycle shell be set per diagram and is 3 hours 25°C Minutes long 15 30 45 60 120 150 210 Minimum °C **120 Hours** at +55°C±2°C. 90-95% RH * **Humidity Test Vibration Test** 2 Hours of at 1.5 mm with 10 to 55 Hz. vibration frequency to each of 3 perpendicular directions Maximum of 9.8 N (1.0 Kg) load pull test, applied to each terminal in axial direction for 10 seconds **Termination Strength** Dropped naturally from 750 mm height onto the surface of 40 mm wooden board, 3 axes (X,Y,Z) directions, 3 **Drop Test** times (6 times total) * Terminal leads are immersed in rosin for 5 seconds and then immersed in solder-bath of +270°C for 3±1 Solderability seconds Terminal leads are immersed, up to 1.5 mm from part case, in rosin for 5 seconds and then immersed in Soldering Heat Resistance solder-bath of +350±5°C for 3±0.5 seconds or +260±5°C for 10±1 seconds Parts should conform to original performance within ±3dB, after 3 hours of recovery period * Reliability Test Performance Intermittent 1,000 hours of a 1 minute on 4 minutes off cycle at room temperature and maximum rated voltage Life Test Continuous 250 hours continuous operation at maximum rated Voltage and maximum Operating Temperatures For a period of one (1) year from date of shipping under normal operations conditions Warranty This warranty does not apply to products damaged through misuse, abuse, improper installation, alteration, rework, or attempt to repair

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DIMENSIONS Units in: mm SPL and Current vs. Input Voltage Response Tolerance: ± 0.5 mm **TOP VIEW** SIDE VIEW **BOTTOM VIEW** 통₁₀₀ Sound Port 2 Ea.0.7 Ø (A)] at 10 95 (+) 90) B 80 Δ. Washing Label **Epoxy Potting** Part Number Date Code: 13- 2013 K= Nov. Vdc 10

SOLDERING RECOMMENDATIONS

This product should not be exposed to extremely high temperatures for prolonged time period. Excessive heat will degrade the internal structure of the unit, soldering should be conducted as quickly as possible

Hand soldering

Wave soldering

With ABS, Hi-Temp ABS, FR ABS, or NYLON Plastic Case

With NORYL, PBT, PPO, or PPS Plastic Case

300°C Thermal Iron

256°C within 3 seconds
350°C within 1 seconds

WASHING RECOMMENDATIONS

- 1. Parts with "Remove After Washing" Label, could be washed following the recommended Solvent Process
- **2.** In view of the recent requirement for total elimination of ozone-depleting chemicals, we recommend: Cleaning solvent: Deionized Water; Solvent temperature: 55±5°C; Immersion time: 5±0.5 minutes

PACKAGING

