



Part Number:

CE-CU516F24W

Revision: 4-2015



Challenge Electronics CONTINUOUS Tone; ULTRA Loud; 5 to 16 Vdc; F style Front Panel Self-Lock Mounting case; 2,400 Hz. Output Frequency; typical Sound Pressure Level of 107 dB(A) at 16 Vdc at 61 cm; Wire Leads 5" Long termination; Piezoelectric Alarm

Specifications

NEW FRONT PANEL MOUNT SELF-LOCKING Piezoelectric Alarm

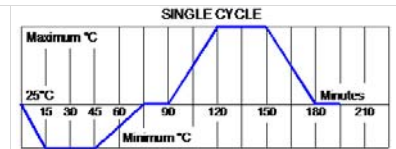
Operating Mode	Ultra Loud, Continuous Tone	Operating Voltage Range	5-16 Vdc	Nominal	12 Vdc	
Operating Frequency	2,400 ± 250 Hz.		Pulse Rate			
Typical Loudness	At 5 Vdc	97 ± 5 dB(A)	At 12 Vdc	106 ± 4 dB(A)	At 16 Vdc	107 ± 4 dB(A)
SPL is measured at 24" (61 cm), 25°C, Sound Level meter # 2240, Type 2, Fast Response, A-Weighted						
Operating Current	25 mA at 5 Vdc		50 mA at 12Vdc		70 mA at 16 Vdc	
Operating Temperature	-30°C to +65°C	Storage Temperature	-40°C to +90°C		Approximate Weight	37 grams
Surge Voltage	20% over maximum Operating Voltage for less than 5 minutes					
Polarity Protection	Protected against Reversed Voltage to the Maximum Operating Voltage					

Features

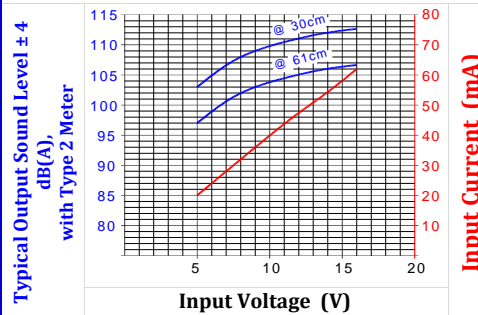
- Reliable Solid State Piezoelectric Technology
- Corrosion resistant Stainless Steel Diaphragm
- Flame Retardant Plastic
- Extended storage temperature
- Hermetically Sealed Alarm
- Reliable Piezoelectric Technology
- Polarity and Voltage Surge Protected
- IP-67
- Water and Dust Proof, NEMA 3R, 4X,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

Reliability

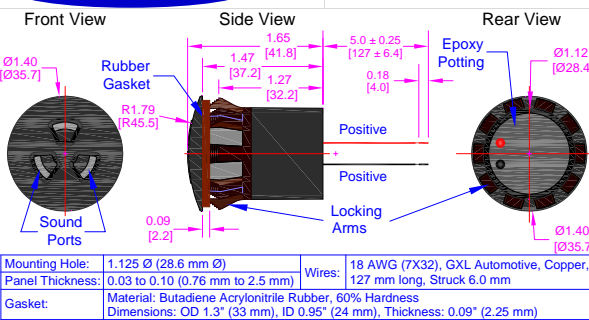
Alarm Case	Plastic, "F24" Case, MPP0 or equal, flame retardant UL 94-V0, Black
Diaphragm	Stainless Steel 304
Encapsulation	Silicon Potting covering SMD components topped with 2 parts epoxy potting, Black
Gasket	Material: Butadiene Acrylonitrile Rubber, 60% Hardness; OD 33 mm, ID 24 mm, Width 2.25 mm
Termination	Two Wires Leads, 18 (7X32) AWG, GXL, Copper, XPLE insulated, 127 mm long. Struck 6.0 mm, Red and Black
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 *
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	Withstand 2 Hours of Sweeping 10 to 55 Hz. Vibration Frequency and Vibration Amplitude of 1.5 mm, in each of 3 perpendicular directions *
Drop Test	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) *
Termination Strength	Dropped naturally from 1 meter height onto the surface of 10mm wooden board, 2 directions upper and side of the part are applied *
Life Test	Maximum of 15 pounds (6.8 Kg) load pull test and of 4 lb. per inch driving torque on screw
Warranty	1,000 hours of a 1 minute on 4 minutes off cycle at room temperature and maximum rated Voltage
	250 hours continuous operation at room temperature and maximum rated Voltage
	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

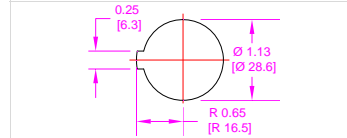


Dimensions



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

Recommended Mounting Hole



Part Marking

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

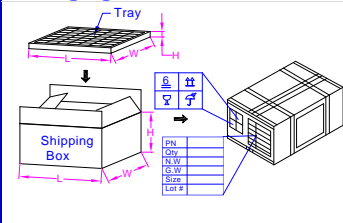
Substance Of Very High Concern (REACH) and RoHS Lead Free Compliance

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	Description	Date
Part Number	Dimensions	L	cm	Revision
Other PN (if required)	W	cm		1-2014
Lot and/or Date Code	Quantity	50		2-2014
Quantity	Shipping Box		Added Polarity Protection to specifications	7/21/2014
PO Number	L	cm	Corrected Text in Dimension Drawing	8/6/2014
Net Weight	W	cm	added alarm marking, Mechanical Vibration Reliability	8/25/2014
Gross Weight	H	cm	added alarm marking, Mechanical Vibration Reliability	8/25/2014
Box_of_	Number of Trays	5	New Format	5/8/2015
Made in China	Quantity	250		
	Approximate Weight	Kg.		