



PRODUCT INFORMATION

Part #: **CE-BCX515AVQS**

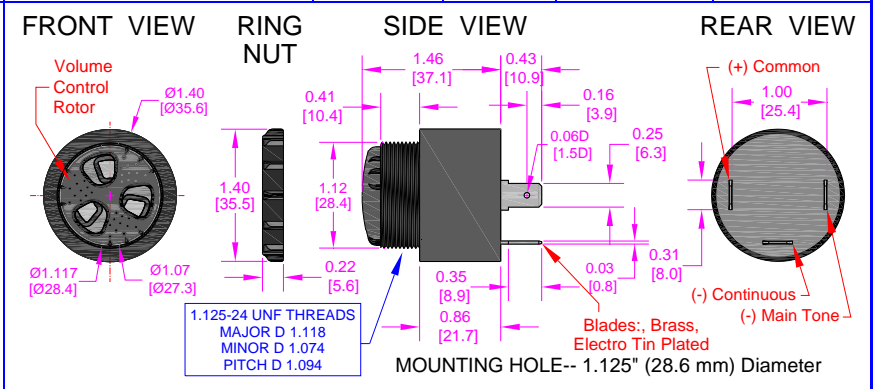
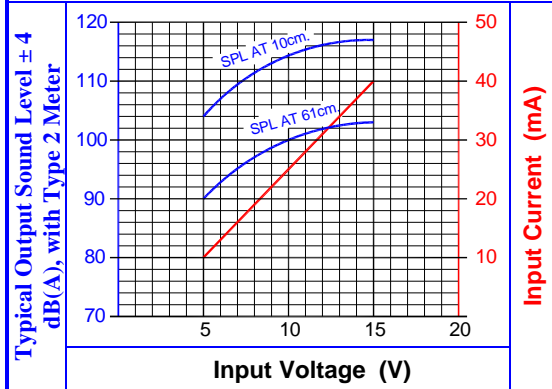
Revision: 4-2015



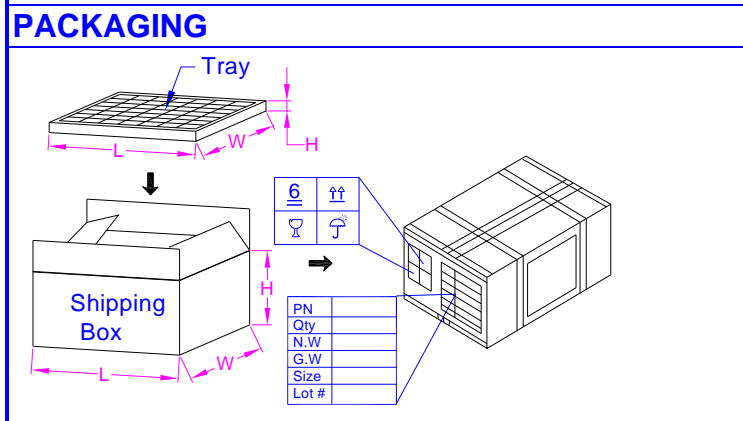
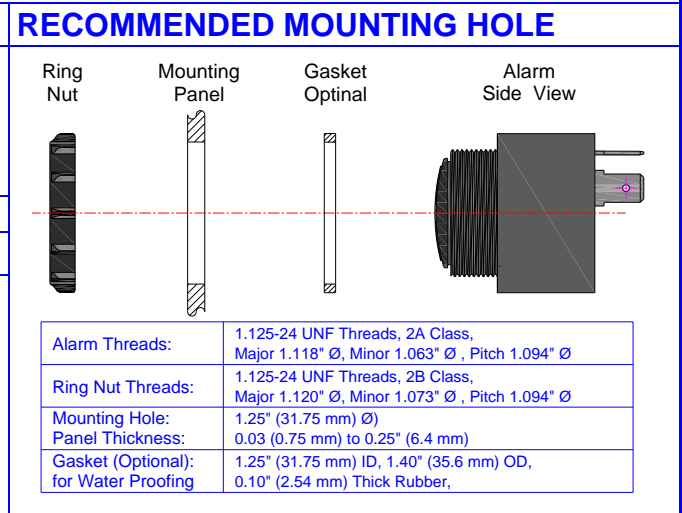
DESCRIPTION		FEATURES	
<p>Challenge Electronics Dual-Function BEEPING or CONTINUOUS Tones, EXTRA Loud, 5 to 15 Vdc, A style case Rear Panel Mounting in 1.125" (28.6 mm) Hole, Sound Pressure Level of 103 dB(A) at 15 Vdc at 61 cm, 2,900 Hz. Output Frequency, three Quick Connect Blades termination, Slow Rate 1 pulse per second, Piezoelectric Alarm with a mechanical Volume Control, RoHS Compliant</p>		<ul style="list-style-type: none"> ◆ Reliable Solid State Piezoelectric Technology ◆ Corrosion resistant Stainless Steel Diaphragm ◆ Flame Retardant Plastic ◆ Extended storage temperature ◆ Hermetically Sealed Alarm ◆ Water Proof, NEMA 3R, 4X, or 12 with Gasket (not supplied) ◆ RoHS, Lead Free Compliance ◆ ISO 9001:2008 & ISO-TS 16949:2009 Certified 	
SPECIFICATIONS			
Operating Mode	Extra Loud, Slow Intermittent or Continuous Tones	Pulse Rate	1 ± 10% Pulse per Second
Operating Voltage	5 to 15 Vdc	Nominal Operating Voltage	12 Vdc
		Operating Frequency	2,900 ± 500 Hz.
Typical Loudness	At 5 Vdc	90 ± 5 dB(A)	At 12 Vdc
			102 ± 3 dB(A)
	At 15 Vdc		103 ± 3 dB(A)
SPL is measured at 30 cm, 25°C, Sound Level meter # 2240, Type 2, Fast Response, A-Weighted			
Typical Operating Current	10 mA at 5 Vdc	35 mA at 12 Vdc	40 mA at 15 Vdc
Volume Control	<p>Maximum Sound Pressure Level can be restricted up to 20 dB from maximum output. (Note, The Volume Control Rotor may reduce maximum loudness) To install, simply, push the ROTOR onto the front of alarm until it snapped in place To attenuate sound, while alarm is turned on, rotate the ROTOR until maximum desired sound is achieved</p>		
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		
Materials	Alarm Case	Plastic, "A" 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, 0.25 (6.4 mm) Quick Disconnect 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)
			1.46" (37.1 mm)
Approximate Weight	41 grams	With Volume Control Rotor	Yes
		Compliance	RoHS
Available Options	Water Proof Gasket, Mounting Bracket, and variety of connectors terminated on the Wire Lead ends		
RELIABILITY			
Thermal Operating Temperature Test	96 hours continuous operation at Rated Power, at Maximum Rated Operating Temperature *		
	96 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	<p>5 cycles of Minimum and Maximum Operating Temperature Each cycle shall be set per diagram below and is 3 hours long *</p>		
Humidity Test	120 Hours at +60°C±2°C, 90-95% RH *		
Salt Spray	Withstand 300 hours of exposure to salt spray per ASTM B117 *		
Water & Dust Exposure	Withstands 50 cm of 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 10 mm 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		
* 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 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	Units	Inches (mm)	Tolerance	0.030 (0.7)
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ALARM MAKING	
On side Case:	Part Number Sound Type Operating Voltage Range / Date Code Challenge Electronics Made in China
On Back:	Polarity (when Required)



Revision	Description	By	Date
1-2007	Updated Specifications	Ely Zofan	1/30/2007
2-2010	Changed formate	Ely Zofan	9/21/2010
3-2012	Modified the Sound Pressure Specifications	Ely Zofan	5/14/2012
4-2015	Added Polarity Protection Specification	Ely Zofan	1/8/2015