
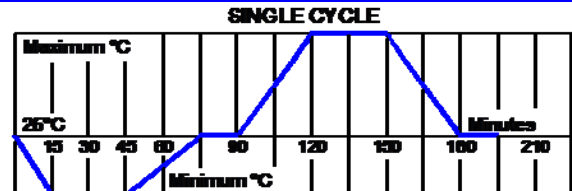


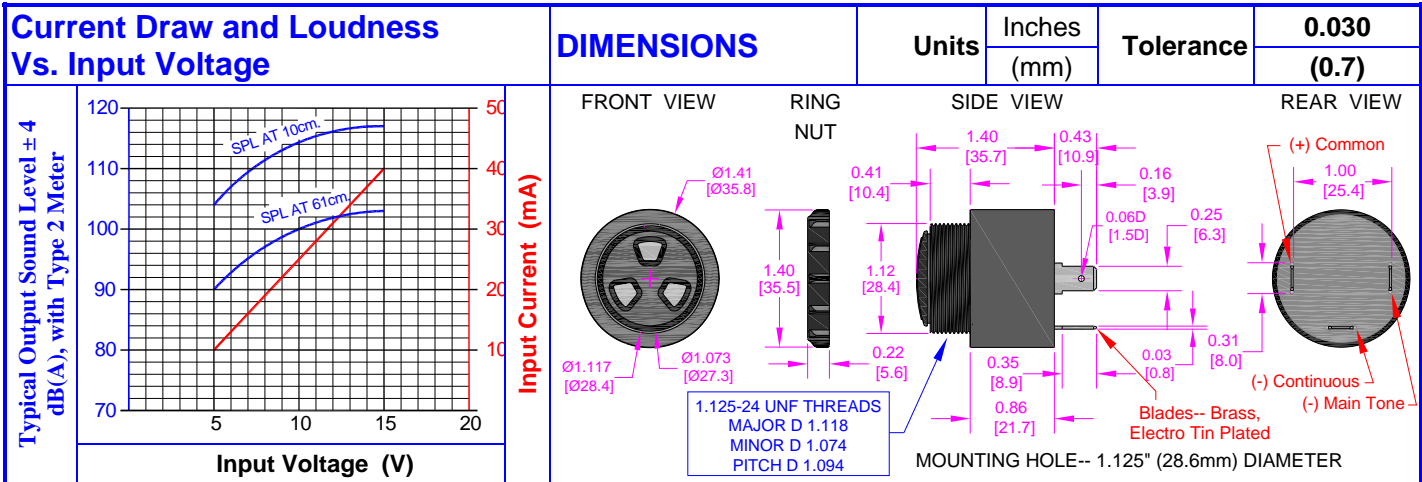


PRODUCT INFORMATION

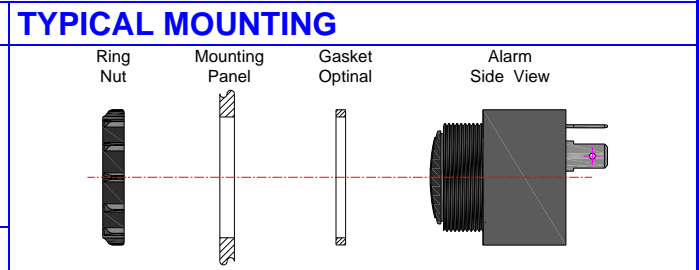
Part #: CE-BCX515AQS

Revision: 4-2015

DESCRIPTION		FEATURES								
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, RoHS Compliant		<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 ± 4 dB(A)	At 15 Vdc	103 ± 3 dB(A)
	SPL is measured at 24" (61 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		
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									
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)					1.41" (35.8 mm) Ø	Width (W)	Height (H)	1.4" (35.7 mm)	
Approximate Weight	35 grams					With Volume Control Rotor	No	Compliance	RoHS	
Available Options	Rotor Volume Control, 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	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 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									
* 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									



ALARM MAKING	
On side Case:	<p>Part Number Sound Type Operating Voltage Range / Date Code Challenge Electronics Made in China</p>
On Back:	<p>Polarity Identification (when Required)</p>



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.

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

(*) 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 a glass or ceramic other than dielectric ceramic in capacitors, e.g. Piezoelectric devices, or in a glass or ceramic matrix compound Piezoelectric is also known as Lead Zirconate Titanate (PZT) ceramics. Piezoelectric Ceramic disc, (PZT), lead as high covalent compound in the ceramic matrix to achieve good ferroelectric properties in a wide temperature range. The best-known performances can be reached with PZT ceramics, which are a mixture of PbTiO3 and PbZrO3. The lead content, homogeneous material compound is between 58% and 68% by weight depending on the proportion of zirconium (Zr) and titanium (Ti).

PACKAGING

	Shipping Box MARKING		TRAY	
	Part Number	Dimensions	L	34.7 cm
Other PN (if required)	W		34.7 cm	
Lot and/or Date Code	H		21.2 cm	
Quantity	Quantity	47		
PO Number	SHIPPING BOX			
Net Weight	Dimensions	L	35 cm	
Gross Weight		W	35 cm	
Box Number of Boxes		H	22.5 cm	
Made in China	Number of Trays	5		
	Quantity	250		
	Approximate Weight	9 Kg.		

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 SubstanceE of Very High Concern & RoHS Compliance, and Extended the waranty period	Ely Zofan	1/14/2015