



PRODUCT INFORMATION

Part #: **CE-CM201AQ**

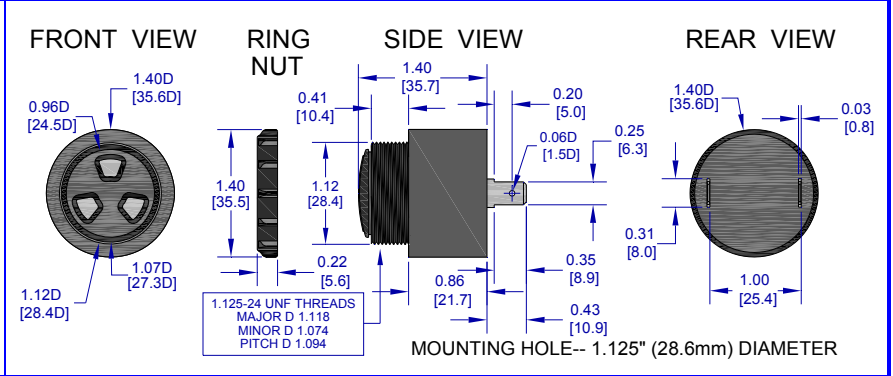
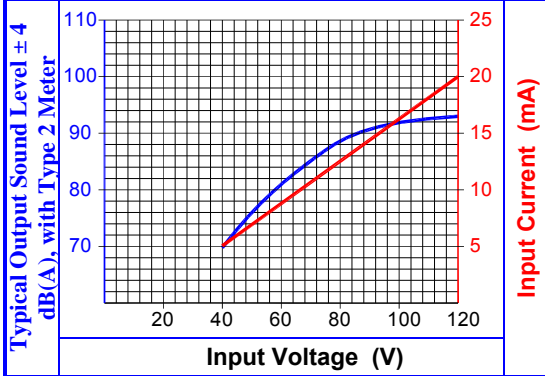
Revision: 4-2015



DESCRIPTION		FEATURES	
Challenge Electronics CONTINUOUS Tone, MEDIUM Loud; 40 to 120 Vac; A style Rear Panel Mount case; Sound Pressure Level of 93 dB(A) at 117 Vac at 61 cm; 2,900 Hz. Output Frequency; Quick Connect Blades termination; 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	Medium Loud, Continuous Tone		Pulse Rate
Operating Voltage	40 to 120 Vac	Nominal Operating Voltage	117 Vac
		Operating Frequency	2,900 ± 500 Hz.
Typical Loudness	At 40 Vac	70 ± 5 dB(A)	At 117 Vac
			93 ± 4 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 40 Vac		40 mA at 120 Vac
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	Two 2 0.25 (6.4 mm) Quick Connect Blades, 0.032Ø (0.8Ømm) wide, Brass, Electro-Tin plated	
Physical Dimensions	Diameter	1.41" (35.8 mm) Ø	Width
			Height
			1.46" (37.1 mm)
Panel Mounting	From the Rear with Plastic Ring Nut	Mounting Hole	1.125" (28.6mm) Ø
		Max. Panel Thickness	0.25" (6.3mm)
Approximate Weight	35 grams	Rotor Volume Control	Yes
		Compliance	RoHS
Available Options	Mechanical Volume, 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 Voltage, at Maximum Rated Operating Temperature *		
	96 hours continuous operation at Rated Voltage, 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 exposure to salt spray per ASTM B117 for a period of 300 hours *		
Water & Dust Exposure	Withstands 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 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		
* Reliability Test Performance	Parts should conform to original performance within ±3 dB, 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	Tolerance	0.030 (0.7)
			(mm)		



ALARM MAKING		TYPICAL MOUNTING			
On side Case:	Part Number Sound Type Operating Voltage Range / Date Code Challenge Electronics Made in China	Ring Nut	Mounting Panel	Gasket Optinal	Alarm Side View
On Back:	Polarity Identification (when Required)				

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

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.	

Shipping Box Information List:

- PN
- Qty
- N.W
- G.W
- Size
- Lot #

Revision	Description	By	Date
3-2013	Changed SPL and Frequency Response	Ely Zofan	8/1/2013
4-2015	Added SubstanceE of Very High Concern & RoHS Compliance, and Extended the waranty period	Ely Zofan	2/25/2015