



PRODUCT INFORMATION

Part #: **CE-CM230AQ**

Revision: 3-2012



DESCRIPTION		FEATURES			
Challenge Electronics CONTINUOUS Tone, MEDIUM Loud, 2 to 30 Vdc, A style back panel mounted case, Sound Pressure Level of 93 dB(A) at 30 Vdc 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 Certified 			
SPECIFICATIONS					
Operating Mode	Medium Loud, Continuous Tones		Pulse Rate		
Operating Voltage	2 to 30 Vdc		Nominal Operating Voltage		24 Vdc
Operating Frequency	2,900 ± 500 Hz.				
Typical Loudness	At Minimum Voltage	70 ± 5 dB(A), at 2 Vdc, 24 inches (61 cm), 25°C			
	At Maximum Voltage	93 ± 3 dB(A), at 30 Vdc, 24 inches (61 cm), 25°C			
Typical Operating Current	At Minimum Voltage	5 mA at 2 Vdc	At Maximum Voltage	20 mA at 30 Vdc	
Operating Temperature	-30°C to +65°C		Storage Temperature	-40°C to +105°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	Two parts epoxy resign or silicone potting, Black			
	Termination	Two 2 0.25 (6.4 mm) Quick Connect Blades, 0.032Ø (0.8Ømm) wide, Brass, Electro-Tin plated			
Physical Dimensions	Length or Diameter (L/D)	1.4" (35.6 mm) Ø	Width (W)	Height (H)	1.4" (35.7 mm)
Approximate Weight	37 grams	Removable Washing Label	No	Compliance	RoHS
Available Options					
RELIABILITY					
Thermal Operating Temperature Test	240 hours continuous operation at Rated Power, at Maximum Rated Operating Temperature *				
	240 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 *				<p>SINGLE CYCLE</p> <p>Maximum °C</p> <p>25°C</p> <p>Minutes</p> <p>15 30 45 60 90 120 150 180 210</p> <p>Minimum °C</p>
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 ±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 Maximum Rated Voltage and maximum Operating Temperatures			
Warranty	For a period of one (1) year 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				

