


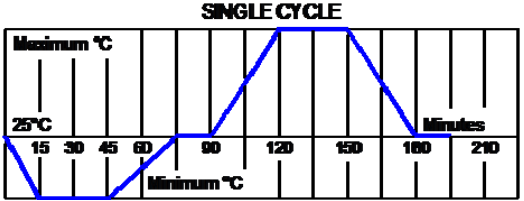


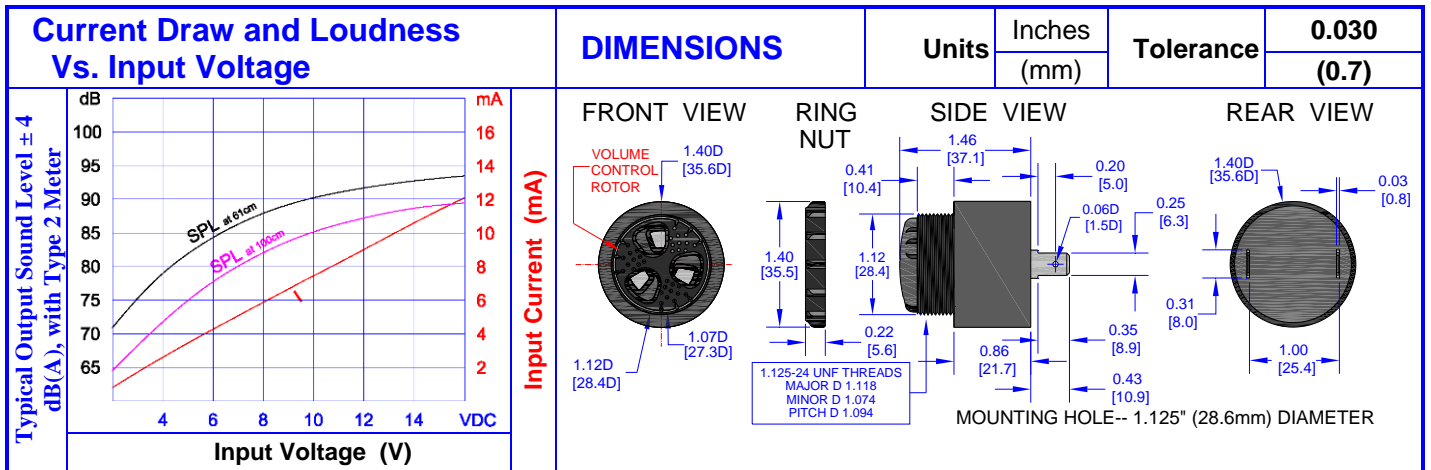
# PRODUCT INFORMATION

Part #: **CE-CM216AVQ**

Revision: 3-2012



DESCRIPTION		FEATURES			
<b>Challenge Electronics CONTINUOUS Tone, MEDIUM Loud, 2 to 16 Vdc, A style back panel mounted case, Sound Pressure Level of 93 dB(A) at 16 Vdc at 61 cm, 2,900 Hz. Output Frequency, Quick Connect Blades termination, Piezoelectric Alarm with a mechanical Volume Control, RoHS Compliant</b>		<ul style="list-style-type: none"> <li>◆ Reliable Solid State Piezoelectric Technology</li> <li>◆ Corrosion resistant Stainless Steel Diaphragm</li> <li>◆ Flame Retardant Plastic</li> <li>◆ Extended storage temperature</li> <li>◆ Hermetically Sealed Alarm</li> <li>◆ Water Proof, NEMA 3R, 4X, or 12 with Gasket (not supplied)</li> <li>◆ RoHS, Lead Free Compliance</li> <li>◆ ISO 9001 Certified</li> </ul>			
<b>SPECIFICATIONS</b>					
<b>Operating Mode</b>	<b>Medium Loud, Continuous Tones</b>				
<b>Operating Voltage</b>	<b>2 to 16 Vdc</b>	<b>Nominal Operating Voltage</b>	<b>12 Vdc</b>		
<b>Operating Frequency</b>	<b>2,900 ± 500 Hz.</b>				
<b>Typical Loudness</b>	<b>At Minimum Voltage</b>	<b>70 ± 5 dB(A), at 2 Vdc, 24 inches (61 cm), 25°C</b>			
	<b>At Maximum Voltage</b>	<b>93 ± 3 dB(A), at 16 Vdc, 24 inches (61 cm), 25°C</b>			
<b>Volume Control</b>	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				
<b>Typical Operating Current</b>	<b>At Minimum Voltage</b>	<b>5 mA at 2 Vdc</b>	<b>At Maximum Voltage</b>	<b>15 mA at 16 Vdc</b>	
<b>Operating Temperature</b>	<b>-30°C to +65°C</b>		<b>Storage Temperature</b>	<b>-40°C to +105°C</b>	
<b>Surge Voltage</b>	<b>20% over maximum Operating Voltage for less than 5 minutes</b>				
<b>Materials</b>	<b>Alarm Case</b>	<b>Plastic, "A" Case, NORYL™, PX9406 or equal, flame retardant UL 94-V0, Black</b>			
	<b>Diaphragm</b>	<b>Stainless Steel 304</b>			
	<b>Encapsulation</b>	<b>Two parts epoxy resin or silicone potting, Black</b>			
	<b>Termination</b>	<b>Two 2 0.25 (6.4 mm) Quick Connect Blades, 0.032Ø (0.8Ømm) wide, Brass, Electro-Tin plated</b>			
<b>Physical Dimensions</b>	<b>Length or Diameter (L / D)</b>	<b>1.4" (35.6 mm) Ø</b>	<b>Width (W)</b>	<b>Height (H)</b>	<b>1.46" (37.1 mm)</b>
<b>Approximate Weight</b>	<b>37 grams</b>	<b>Removable Washing Label</b>	<b>No</b>	<b>Compliance</b>	<b>RoHS</b>
<b>Available Options</b>					
<b>RELIABILITY</b>					
<b>Thermal Operating Temperature Test</b>	<b>240 hours</b> continuous operation <b>at Rated Power</b> , at <b>Maximum Rated Operating Temperature</b> *				
	<b>240 hours</b> continuous operation <b>at Rated Power</b> , at <b>Minimum Rated Operating Temperature</b> *				
<b>Thermal Storage Temperature Test</b>	<b>96 hours</b> storage at <b>Maximum Rated Storage Temperatures</b> *				
	<b>96 hours</b> storage at <b>Minimum Rated Storage Temperatures</b> *				
<b>Thermal Shock Test</b>	<b>5 cycles of Minimum and Maximum Operating Temperature</b> Each cycle shall be set per diagram below and is 3 hours long *				
<b>Humidity Test</b>	<b>120 Hours</b> at +60°C±2°C, 90-95% RH *				
<b>Salt Spray</b>	Withstand exposure to salt spray per ASTM B117 for a period of <b>300 hours</b> *				
<b>Water &amp; Dust Exposure</b>	Withstands water submergence and dust exposure per IP-68 *				
<b>Vibration Test</b>	<b>2 Hours</b> at 1.5 mm with 10 to 55 Hz. of vibration frequency to each of 3 perpendicular direction *				
<b>Drop Test</b>	Dropped naturally from 1 meter height onto the surface of 10mm wooden board, 2 directions upper and side of the part are applied *				
<b>Termination Strength</b>	Maximum of 15 pounds (6.8 Kg) load pull test				
<b>* Reliability Test Performance</b> <b>Parts should conform to original performance within ±3dB, after 3 hours of recovery and dry period</b>					
<b>Life Test</b>	<b>Intermittent</b>	<b>1,000 hours</b> of a 1 minute on 4 minutes off cycle at room temperature and <b>Maximum Rated Voltage</b>			
	<b>Continuous</b>	<b>250 hours</b> continuous operation at <b>Maximum Rated Voltage</b> and maximum Operating Temperatures			
<b>Warranty</b>	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				



### PACKAGING

**ONE TRAY:**

**TWO BUNDLE**

**ONE BUNDLE:**

**SHIPPING BOX**

Tray		
Dimensions	X1	34.7 cm
	Y1	34.7 cm
	Z1	21.2 cm
Quantity	<b>42</b>	
SHIPPING BOX		
Dimensions	X2	35 cm
	Y2	35 cm
	Z2	22.5 cm
Part Number		
Customer PN (if required)		
Number of Trays		
Quantity	<b>250</b>	
Lot and/or Date Code		
PO Number		
Net Weight		
Gross Weight		
Box Number		
of Number of Boxes		
Country of Origin	<b>Made in China</b>	

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