



PRODUCT INFORMATION

Part #: **CE-C55A**

Revision: 0-2013



DESCRIPTION		FEATURES			
Challenge Electronics CONTINUOUS Tone; EXTRA Loud, 25.1 mm Diameter, 22.2 mm High; 2 to 6 Vdc with a relatively low sound frequency of 3,000 Hz.; M Black style case; Sound Pressure Level of 98 dB(A) at 5 Vdc at 61 cm; PC Pins termination; RoHS Compliant; with Removable Washing Label; Miniature Piezoelectric Alarm		<ul style="list-style-type: none"> ◆ Reliable Solid State Piezoelectric Technology ◆ Corrosion resistant Stainless Steel Diaphragm ◆ Flame Retardant Plastic ◆ Hermetically Sealed Alarm ◆ Water and Dust Proof per IP-68 ◆ RoHS Compliance ◆ ISO 9001 Certified 			
SPECIFICATIONS;					
Operating Mode	Extra Loud, Continuous Tones		Pulse Rate		
Operating Voltage	2.0 to 6.0 Vdc		Nominal Operating Voltage	5.0 Vdc	
Operating Frequency	3,000 ± 500 Hz.				
Typical Loudness	At Minimum Voltage	102 ± 7 dB(A), at 2 Vdc, 3.94 inches (10 cm), 25°C 88 ± 7 dB(A), at 2 Vdc, 24 inches (61 cm), 25°C			
	At Nominal Voltage	112 ± 5 dB(A), at 5 Vdc, 3.94 inches (10 cm), 25°C 98 ± 5 dB(A), at 5 Vdc, 24 inches (61 cm), 25°C			
	At Maximum Voltage	112 ± 5 dB(A), at 6 Vdc, 3.94 inches (10 cm), 25°C 98 ± 5 dB(A), at 6 Vdc, 24 inches (61 cm), 25°C			
Typical Operating Current	10 mA at 2 Vdc		33 mA at 5 Vdc		38 mA at 6 Vdc
Operating Temperature	-30°C to +65°C		Storage Temperature	-40°C to +85°C	
Surge Voltage	20% over maximum Operating Voltage for less than 5 minutes				
Materials	Alarm Case	Plastic, "M" Case, NORYL™, PX9406 or equal, flame retardant UL 94-V0, Black			
	Diaphragm	Stainless Steel 304	Encapsulation Two parts epoxy resin or silicone potting, Black		
	Termination	Two (2) PC pins, 0.032 Ø (0.8 Ø mm) Brass, Electro-Tin Plated. Centered on 0.6 inches (15.2 mm) Diameter pins spacing			
Physical Dimensions	Length or Diameter (L/D)	1.00" (25.4 mm) Ø	Width (W)		Height (H) 0.88" (22.2 mm)
Approximate Weight	18 grams	Removable Washing Label	Yes	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>The graph shows a temperature profile starting at 25°C, dropping to a minimum temperature, staying at that minimum for 90 minutes, and then returning to 25°C over the next 120 minutes. The x-axis is labeled 'Minutes' with markers at 15, 30, 45, 60, 90, 120, 150, 180, and 210. The y-axis is labeled 'Maximum °C' and '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				



Current Draw and Loudness Vs. Input Voltage		DIMENSIONS	Units	Inches (mm)	Tolerance	0.030 (0.7)	
Typical Output Sound Level ± 4 dB(A), with Type 2 Meter 	Input Current (mA)						
		PACKAGING					
ONE TRAY: 		TWO BUNDLE 		MARKING		Tray	
ONE BUNDLE: 		SHIPPING BOX 		Bundle		Dimensions	
				Customer PN Other PN if required Quantity		X1 cm Y1 cm Z1 cm	
				Lot and/or Date Code Bundle Number Shipping Box Customer Part Number Other PN (if required) Quantity		Quantity 30	
				Lot and/or Date Code PO Number Net Weight Gross Weight Box Number of Number of Boxes Country of Origin		BUNDLE Dimensions X2 cm Y2 cm Z2 cm SHIPPING BOX Dimensions X3 50 cm Y3 26 cm Z3 49 cm Number of Bundles 2 Quantity 600 Approximate Weight 8.3 Kg. Made in China	
Revision		Description				By	
						Date	

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