



PRODUCT INFORMATION

	PN	CEC-713X-1	Revision: 8-2013
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Marine Application Piezoelectric Alarm

DESCRIPTION	FEATURES
<p>Challenge Electronics Custom Piezoelectric Alarm, Continuous Tone, Extra Loud; B Style case; 2 to 15 Vdc; 2,900 Hz. Output sound frequency; Minimum 100 dB(A) at 61 cm 13.8 Vdc; Terminated with two 18 (16X30) AWG GPT Wires, 981mm long, color coded; the alarm includes a solid state electronic circuit for galvanic corrosion protection and a shunt for preventing false sounds Ring Nut not included.</p>	<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

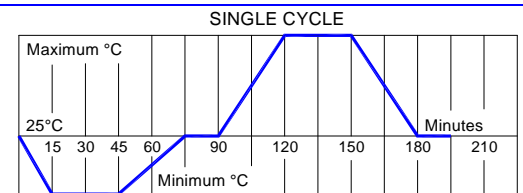


SPECIFICATIONS

Operating Mode	Extra Loud, Continuous Tones	Operating Voltage	2 to 15 Vdc	Nominal Operating Voltage	13.8 Vdc
Operating Frequency	2,900 ± 500 Hz.	Operating Temperature	-30°C to +65°C	Storage Temperature	-40°C to +100°C
Sound Pressure Level	At Minimum Voltage	82 ± 5dB(A), at 2 Vdc, at 24 inches (61cm), at 25°C			
	At Maximum Voltage	103 ± 3 dB(A) at: 15 Vdc, 24 inches (61 cm), 25°C			
Maximum Current	At Minimum Voltage	10 mA	At Maximum Voltage	60 mA	
Surge Voltage	10% over maximum Operating Voltage for less than 1 minutes				
Falls Alarm	A 550 Ohms shunt is added in the Continuous Mode to prevent falls sound from alarm due to current leakage				
Corrosion Prevention	Galvanic Corrosion	The diaphragm is insulated to prevent dc current flow between the diaphragm and the negative or positive inputs			
Materials	Alarm Case	Plastic, "B" Case, NORYL™, PX9406 or equal, flame retardant UL 94-V0, Black			
	Diaphragm	Stainless Steel 304			
	Encapsulation	Two parts epoxy resin and/or silicone potting, Black			
	Termination	Wire leads; 18 (16X30) AWG, GPT, SAE TYPE 1 Automotive, 38.6" (981mm) Long, Striped 0.157" (4.0mm), Color Coded: PURPLE with TAN Stripe = Positive, TAN with BLACK Stripe = Negative			
Physical Dimensions	Length or Diameter (L/D)	1.40" (35.7 mm) Ø	Width (W)	Height (H)	1.41" (35.8 mm)
Approximate Weight	51 grams	Compliance	RoHS		

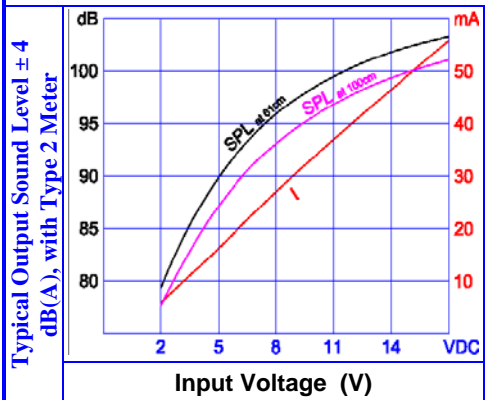
RELIABILITY

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	<p>5 cycles of Minimum and Maximum Operating Temperature Each cycle shall be set per diagram below and is 3 hours long *</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 1,000 hours *
Environmental Exposure	Dust, water, salt, dust-control agents, moisture-control agents, detergents, degreasers, diesel fuel, hydraulic fluid 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 ± 3 dB
Life Test	Intermittent 1,000 hours of a 1 minute on 4 minutes off cycle at room temperature and Nominal Rated Voltage
	Continuous 250 hours continuous operation at room temperature and Nominal Rated Voltage
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

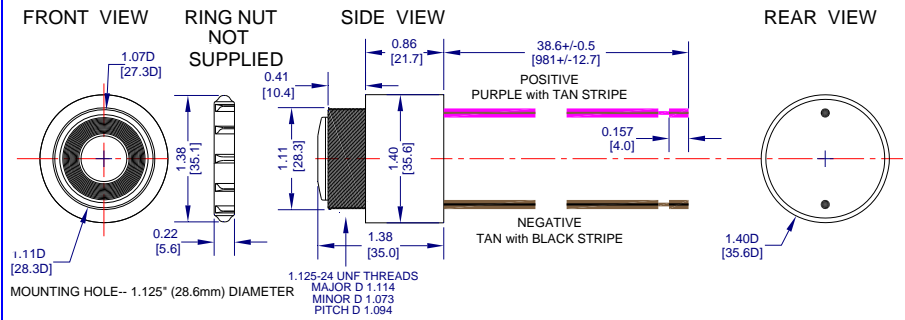




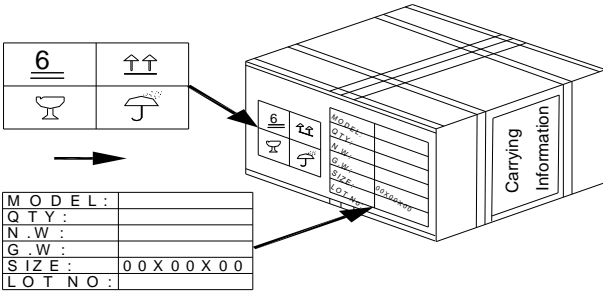
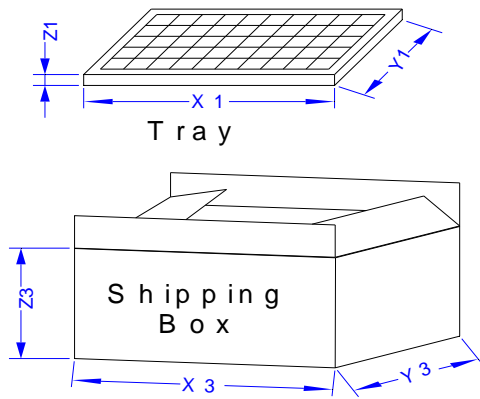
SPL and CURRENT Vs. INPUT VOLTAGE



DIMENSIONS Units in: Inches / (mm), Tolerance: ± 0.03 / (± 0.7)



PACKAGING



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

Revision	Description	By	Date
8-2013	Modified Specifications Format	ESA	4/30/2013

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