



PRODUCT INFORMATION



PN

CE-C81WIT

Revision: 2-2014

Marine Application Piezoelectric Alarm

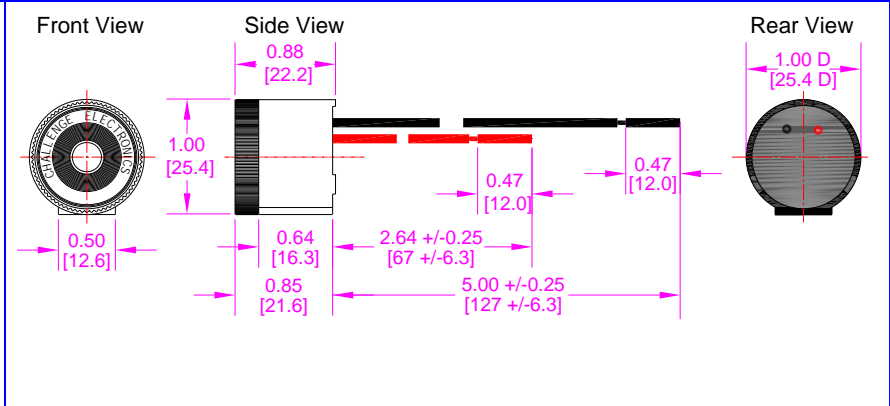
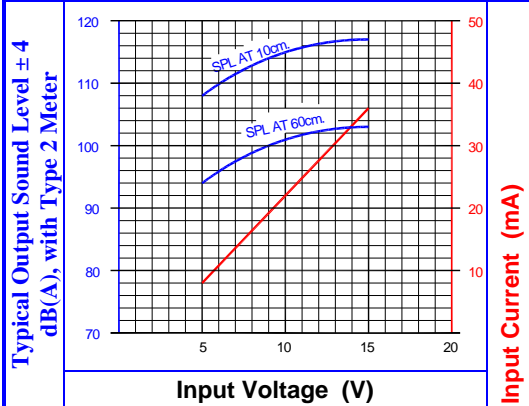


DESCRIPTION		FEATURES	
<p>Challenge Electronics CONTINUOUS Tone, EXTRA Loud, 5 to 15 Vdc with a relatively low sound frequency of 2,900 Hz., M style case, Mounted with either double sided tape or cable Tie-Rap, Sound Pressure Level of 103 dB(A) at 15 Vdc at 61 cm, Wire leads color coded, 18 AWG, 5.0" long termination, Insulated Diaphragm solid state electronic circuit for Galvanic Corrosion Protection, TRANSORB for spike protection, Miniature Piezoelectric Alarm</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 ◆ RoHS, Lead Free Compliance ◆ ISO 9001:2008; ISO-TS 16949:2009 Certified 	
SPECIFICATIONS			
Operating Mode	Extra Loud, Continuous Tones	Operating Voltage	5 to 15 Vdc
Operating Frequency	2,900 ± 250 Hz.	Nominal Operating Voltage	13.8 Vdc
Sound Pressure Level	At Minimum Voltage	Operating Temperature	-30°C to +65°C
	At Maximum Voltage	Storage Temperature	-40°C to +105°C
Maximum Current	At Minimum Voltage	92 ± 5 dB(A), at: 5 Vdc, 24 inches (61cm), 25°C	
Surge Voltage	At Maximum Voltage	103 ± 3 dB(A) at: 15 Vdc, 24 inches (61 cm), 25°C	
Spike Protection	10 mA	10% over maximum Operating Voltage for less than 1 minutes	
Corrosion Prevention	40 mA	Must withstand 1,000 V 600 W, spike. Per EN 50081-1, EN 50082-1, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EVN 50204, and SAE 1171	
Materials	Galvanic Corrosion	The diaphragm is insulated to prevent dc current flow between the diaphragm and the negative or positive inputs	
	Alarm Case	Plastic, "M" 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	Two (2) Wires Leads, 18 AWG (7X32), GXL Automotive, Copper, XPLE insulated, Negative- 5.0" (127 mm) Positive 2.64" (67 mm) long. Struck 0.47" (12 mm), Color coded: Red Positive and Black Negative		
Physical Dimensions	Length or Diameter (L/D)	1.00" (25.4 mm) ø	Width (W)
Approximate Weight	18 grams	Compliance	RoHS
RELIABILITY			
Thermal Operating Temperature Test	96 hours continuous operation at Rated Power, at Maximum Rated Operating Temperature *		
Thermal Storage Temperature Test	96 hours continuous operation at Rated Power, at Minimum Rated Operating Temperature *		
Thermal Shock Test	96 hours storage at Maximum Rated Storage Temperatures *		
	96 hours storage at Minimum Rated Storage Temperatures *		
Humidity Test	5 cycles of Minimum and Maximum Operating Temperature		
Salt Spray	Each cycle shall be set per diagram below and is 3 hours long *		
Environmental Exposure			
Vibration Test	120 Hours at +60°C ± 2°C. 90-95 % RH *		
Drop Test	Withstand exposure to salt spray per ASTM B117 for a period of 1,000 hours *		
Termination Strength	Dust, water, salt, dust-control agents, moisture-control agents, detergents, degreasers, diesel fuel, hydraulic fluid per IP-68 *		
* Reliability Test Performance	2 Hours at 1.5 mm with 10 to 55 Hz. of vibration frequency to each of 3 perpendicular direction *		
Life 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 *		
Warranty	Maximum of 15 pounds (6.8 Kg) load pull test		
Intermittent	Parts should conform to original performance within ± 3 dB		
Continuous	1,000 hours of a 1 minute on 4 minutes off cycle at room temperature and Nominal Rated Voltage		
	250 hours continuous operation at room temperature and Nominal Rated Voltage		
	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		

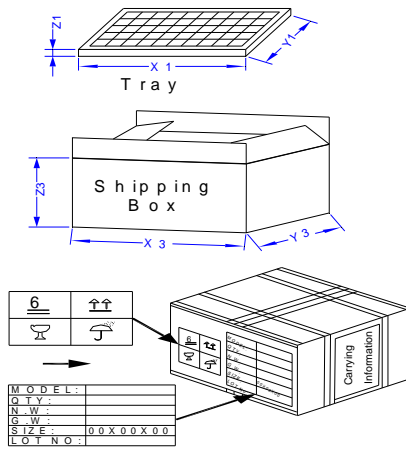


SPL and CURRENT Vs. INPUT VOLTAGE

DIMENSIONS Units in: Inches / (mm), Tolerance: $\pm 0.03 / (\pm 0.7)$



PACKAGING



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

Revision	Description	By	Date
1-2013	Modified Specifications Format	ESZ	4/30/2013
2-2014	Corrected Drawing and wire length	ESZ	2/10/2014