



PRODUCT INFORMATION

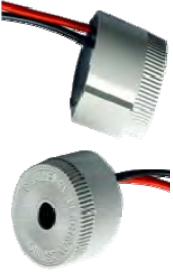
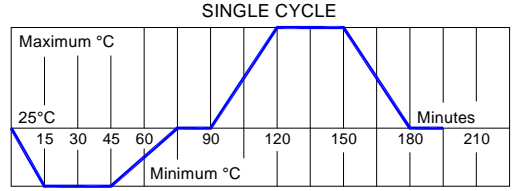


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Revision: 2-2014

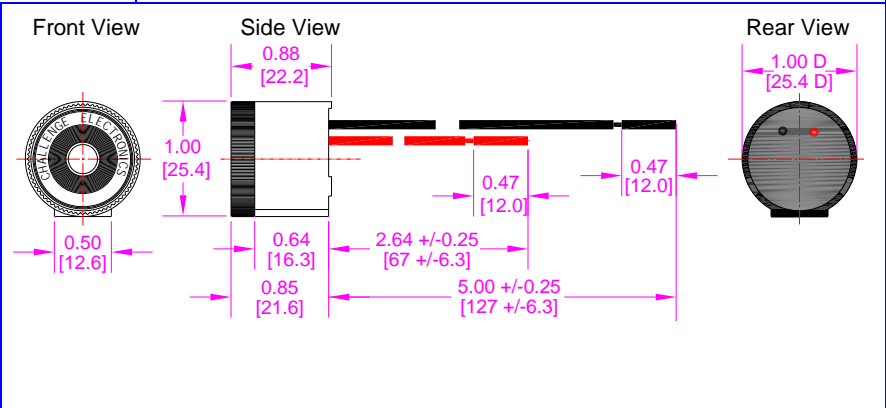
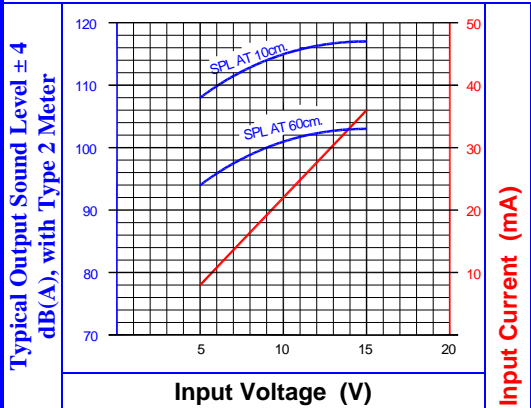
Marine Application Piezoelectric Alarm

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, solid state electronic circuit for Galvanic Corrosion Protection the alarm includes Insulated Diaphragm (a solid state electronic circuit for galvanic corrosion protection) and a Shunt Resistor for preventing false sounds</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 	
<p>SPECIFICATIONS</p>			
Operating Mode	Extra Loud, Continuous Tones	Operating Voltage	5 to 15 Vdc
Operating Frequency	2,900 ± 250 Hz.	Operating Temperature	-30°C to +65°C
Sound Pressure Level	At Minimum Voltage	92 ± 5 dB(A), at: 5 Vdc, 24 inches (61cm), 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
			40 mA
Surge Voltage	10% over maximum Operating Voltage for less than 1 minutes		
Falls Alarm	A 1,000 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, "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)
			Height (H)
Approximate Weight	18 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</p> <p>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		

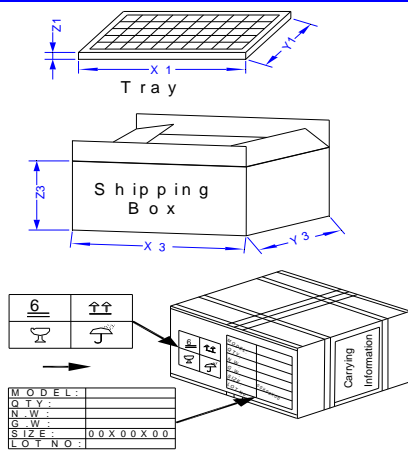
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SPL and CURRENT Vs. INPUT VOLTAGE **DIMENSIONS** Units in: Inches / (mm), Tolerance: ± 0.03 / (± 0.7)



PACKAGING



Shipping Box Marking	Tray		
	Dimensions	X1	cm
Part Number	Y1	cm	
Customer PN (if required)	Z1	cm	
Lot and/or Date Code	SHIPPING BOX		
PO Number	Dimensions	X2	cm
Box Number of Boxes	Y2	cm	
Net Weight	Z2	cm	
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