

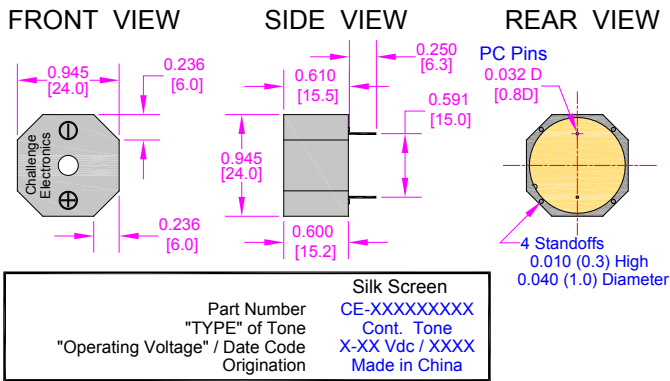


# PRODUCT INFORMATION

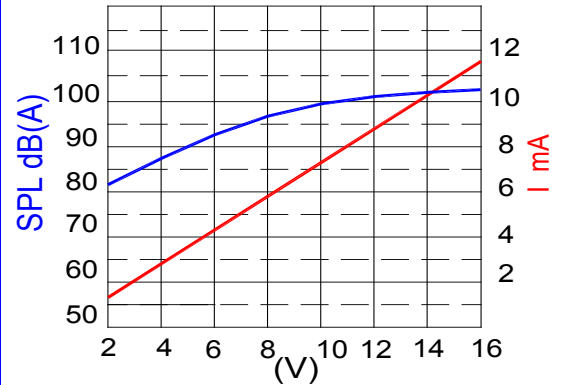
<b>PART #:</b>	<b>CE-CX216Z24P15</b>								<b>Revision: 2-2014</b>		
	<b>PIEZOELECTRIC BUZZER</b>										
<b>DESCRIPTION</b>											
<p><b>Challenge Electronics Piezoelectric Buzzer; 24.0 mm Sides; B style case (Octagon with Standoffs and Top Sound Port); 15.5 mm High; 2-16 Vdc; Continuous Tone Loud; 3,100 Hz. Resonant Frequency; Sound Pressure Level 100±4 dB at 16 V at 30 cm; PC Pins 15 mm apart Termination; RoHS Compliant</b></p>											
<b>SPECIFICATIONS</b>											
<b>Alarm Type</b>		<b>Loud, Continuous Tone</b>				<b>Pulse Rate</b>					
<b>Operating Voltage</b>		<b>2 – 16 Vdc</b>		<b>Nominal Voltage 12 Vdc</b>		<b>Resonant Frequency</b>		<b>3,100 ± 500 Hz.</b>			
<b>Minimum Sound Pressure Level</b>		<b>At 2 Vdc 79±5 dB(A)</b>		<b>At 12 Vdc 98±4 dB(A)</b>		<b>At 16 Vdc 100±4 dB(A)</b>					
<b>SPL is measured at 30 cm, 25°C, Sound Level meter # 2240, Type 2, Fast Response, A-Weighted</b>											
<b>Operating Current</b>		<b>2 mA at 2 Vdc</b>			<b>9 mA at 12 Vdc</b>			<b>14 mA at 16 Vdc</b>			
<b>Operating Temperature</b>		<b>-40°C to +85°C</b>		<b>Storage Temperature</b>		<b>- 40°C to +85°C</b>					
<b>Material</b>	<b>Alarm Case</b>	<b>Plastic, NORYL™ or equal or equal, Gray</b>					<b>Sound Port</b>		<b>Top</b>		
	<b>Diaphragm</b>	<b>Brass</b>									
	<b>Encapsulation</b>	<b>PCB cover</b>									
	<b>Termination</b>	<b>Two PC Pins, 0.032" (0.8 mm) Diameter, Copper, Electro-Tin Plated</b>									
<b>Physical Dimensions</b>		<b>Octagon</b>	<b>Length</b>	<b>24.0 mm</b>	<b>Width (W)</b>	<b>24.0 mm</b>	<b>Height (H)</b>	<b>15.5 mm</b>	<b>Pin Spacing</b>	<b>15.0 mm</b>	
<b>Approximate Weight</b>		<b>6 grams</b>		<b>Removable Washing Label</b>		<b>No</b>		<b>Compliance</b>		<b>RoHS, Lead Free</b>	
<b>Available Options</b>											
<b>RELIABILITY</b>											
<b>Thermal Operating Temperature Test</b>		<b>96 hours</b> continuous operation <b>at Rated Voltage</b> , at <b>Maximum Rated Operating Temperature</b> * <b>96 hours</b> continuous operation <b>at Rated Voltage</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>		5 cycles of <b>Minimum and Maximum Operating Temperature</b> Each cycle shall be set per diagram and is 3 hours long *									
<b>Humidity Test</b>		<b>120 Hours</b> at +60°C±2°C. 90-95% RH *									
<b>Vibration Test</b>		<b>2 Hours</b> of at 1.5 mm with 10 to 55 Hz. vibration frequency to each of 3 perpendicular directions *									
<b>Termination Strength</b>		Maximum of 9.8 N (1.0 Kg) load pull test, applied to each terminal in axial direction for 10 seconds									
<b>Drop Test</b>		Dropped naturally from 750 mm height onto the surface of 40 mm wooden board, 3 axes (X,Y,Z) directions, 3 times each (9 times total) *									
<b>Solderability</b>		Terminal leads are immersed in rosin for 5 seconds and then immersed in solder-bath of +270°C for 3±1 seconds									
<b>* Reliability Test Performance</b>		<b>Parts should conform to original performance within ±3dB, after 3 hours of recovery 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 and maximum Operating Temperatures</b>									
<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									



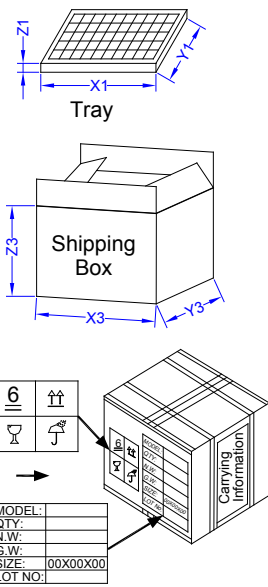
**DIMENSIONS** Units in: mm Tolerance: ± 0.5 mm



**SPL and Current vs. Input Voltage Response**



**PACKAGING**



MARKING		TRAY	
<b>Bundle</b>		<b>X1</b>	<b>44 cm</b>
Part Number	Dimensions	<b>Y1</b>	<b>21.5 cm</b>
Other PN if required		<b>Z1</b>	<b>4.5 cm</b>
Quantity		Quantity	
Lot and/or Date Code	<b>BUNDLE</b>		
Bundle Number		<b>X2</b>	<b>44 cm</b>
<b>Shipping Box</b>	Dimensions	<b>Y2</b>	<b>21.5 cm</b>
Part Number		<b>Z2</b>	<b>25 cm</b>
Other PN (if required)		Quantity	
Quantity	<b>SHIPPING BOX</b>		
Lot and/or Date Code		<b>X3</b>	<b>65.5 cm</b>
PO Number	Dimensions	<b>Y3</b>	<b>44.5 cm</b>
Net Weight		<b>Z3</b>	<b>26 cm</b>
Gross Weight		Number of Bundles	
Box Number of Boxes	Quantity		<b>1,200</b>
<b>Made in China</b>	Approximate Weight		

Revision	Description	By	Date
1-2014	Corrected Dimensions Drawing	Ely Zofan	4/24/2014
2-2014	Updated Product Photo	W. Sargent	4/29/2014