

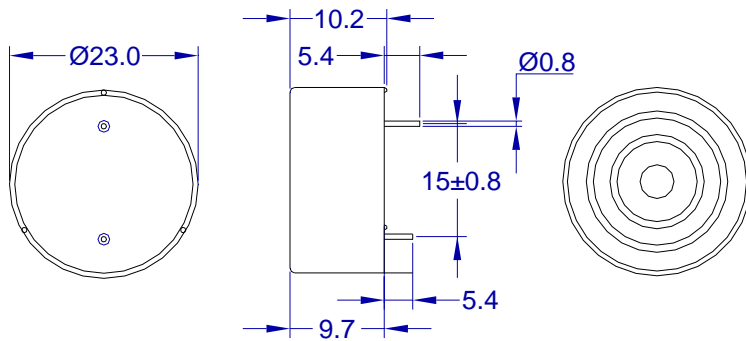


PRODUCT INFORMATION

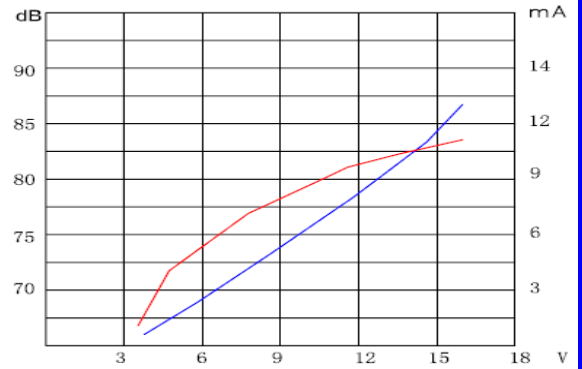
PART #	CE-BT-516-2310-F					Revision: 4-2012
	PIEZOELECTRIC BUZZER					
DESCRIPTION			FEATURES			
Challenge Electronics Piezoelectric Buzzer, 23.0 mm Diameter, B style case, 9.7 mm High, 5-16 Vdc, Fast Intermittent Tone Medium Loud, 3,500 Hz Resonant Frequency, Sound Pressure Level at 83 dB(A) at 61 cm and Nominal Voltage, PC Pins Termination, RoHS Compliant			<ul style="list-style-type: none"> ● RoHS Compliant ● ISO 9001 Certified 			
SPECIFICATIONS						
Alarm Type	Medium Loud, Fast Intermittent Tone			Pulse Rate	3 ± 15 % Pulses per Second	
Operating Voltage	5 - 16 Vdc	Nominal Voltage	12 Vdc	Resonant Frequency	3,500 ± 500 Hz.	
Sound Pressure Level	83 ± 4 dB(A), at: Nominal Voltage, 61 cm, 25°C					
Operating Current	9 mA at Nominal Voltage					
Operating Temperature	-20°C to + 65°C		Storage Temperature	-30 °C to + 80°C		
Material	Housing	Plastic, MMPO or equal or equal, Black		Sound Port Opening	Top	
	Diaphragm	SS 304		Encapsulation	PCB Plate	
	Termination	Two PC Pins, 0.032" (0.8 mm) Diameter, Electro-Tin Plated				
Physical Dimensions	Length/ Diameter (L /D)	23.0 mm Ø	Width (W)	Height (H)	9.7 mm	
Approximate Weight	4 grams	Removable Washing Label	No	Compliance	RoHS	
Options						
RELIABILITY						
Thermal Operating Temperature Test	96 hours continuous operation at Rated Voltage , at Maximum Rated Operating Temperature *					
	96 hours continuous operation at Rated Voltage , 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 and is 3 hours long *					
Humidity Test	120 Hours at +60°C±2°C. 90-95% RH *					
Insulation Test	A minimum of 10 MΩ, measured with 100 Vdc Insulation Resistance Meter, between the Electrical Terminals and the Transducer Case					
Vibration Test	2 Hours of at 1.5 mm with 10 to 55 Hz. vibration frequency to each of 3 perpendicular directions *					
Termination Strength	Maximum of 9.8 N (1.0 Kg) load pull test, applied to each terminal in axial direction for 10 seconds					
Drop Test	Dropped naturally from 750 mm height onto the surface of 40 mm wooden board, 3 axes (X,Y,Z) directions, 3 times (6 times total) *					
Solderability	Terminal leads are immersed in rosin for 5 seconds and then immersed in solder-bath of +270°C for 3±1 seconds					
Soldering Heat Resistance	Terminal leads are immersed, up to 1.5 mm from part case, in rosin for 5 seconds and then immersed in solder-bath of +350±5°C for 3±0.5 seconds or +260±5°C for 10±1 seconds					
* Reliability Test Performance	Parts should conform to original performance within ±3dB, after 3 hours of recovery 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					



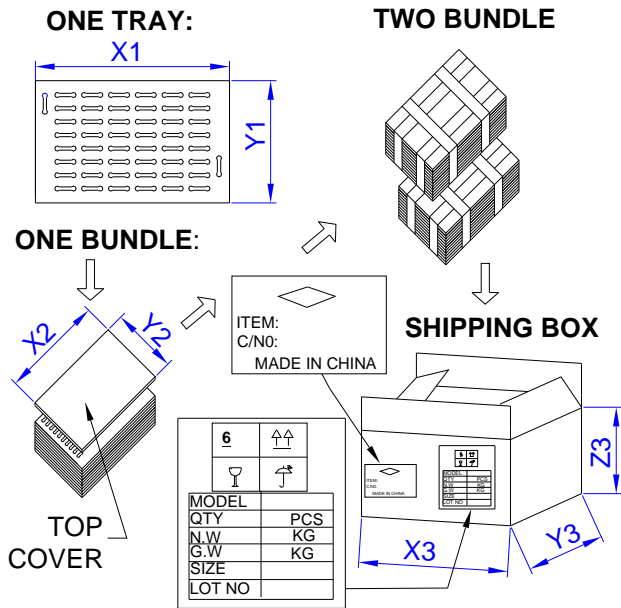
DIMENSIONS Units in: mm Tolerance: ± 0.5 mm



SPL and Current vs. Input Voltage Response



PACKAGING



MARKING		TRAY	
Bundle		X1	cm
Customer PN	Dimensions	Y1	cm
Other PN if required		Z1	cm
Quantity		Quantity	
Lot and/or Date Code	BUNDLE		
Bundle Number		X2	cm
Shipping Box	Dimensions	Y2	cm
Customer Part Number		Z2	cm
Other PN (if required)		Quantity	
Quantity	SHIPPING BOX		
Lot and/or Date Code		X3	cm
PO Number	Dimensions	Y3	cm
Net Weight		Z3	cm
Gross Weight		Number of Bundles	
Box Number	Quantity		
of Number of Boxes	Approximate Weight		
Made in China			