
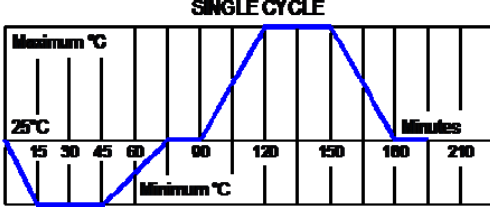




PRODUCT INFORMATION

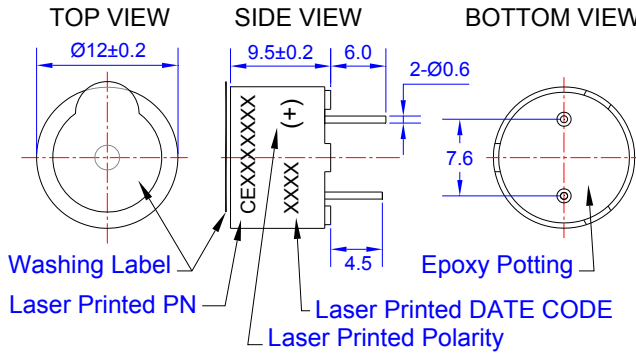
PART #	CEEB12A095-407C23P7.6LR				Revision: 2-2018			
	Electro-Magnetic Buzzer							
DESCRIPTION					FEATURES			
<p>Challenge Electronics Electro-Magnetic Buzzer, 12 mm diameter, A type case (Standoffs and TOP Sound Port), 9.5 mm Height, 4 to 7 Vdc operation, Continuous Tone, 2,300 Hz Resonant Frequency, with a minimum output of 85 dB(A) at, 5 Vdc, 10 cm, PC pins Termination with 7.6mm spacing, Washing Label, RoHS Lead Free compliant</p>					<ul style="list-style-type: none"> ● RoHS, Lead Free Compliant ● ISO 9001 			
SPECIFICATIONS								
Sound Type	Continuous Tone			Sound Pressure Level	85 dB(A), at rated Voltage at 10 cm			
Operating Voltage	4.0 - 7.0 Vdc			Rated Voltage	5.0 Vdc			
Current	30 mA, at Rated Voltage			Resonant Frequency	2,300 ± 300 Hz.			
Operating Temperature	-30°C to + 70°C			Storage Temperature	-40°C to + 85°C			
Termination	Two (2) PC Pins, Tin plated, 0.6 mm Diameter, Positive Pin 6.0 mm Long, Negative Pin 4.5 mm Long							
Material	Case	A type, Plastic, Noryl™						
	Encapsulation	Epoxy Potting						
Sound Port Direction	Top	Case Standoffs from PCB	Yes	Removable Washing Label	Yes			
Physical Dimensions	Length or Diameter (L/D)	12.0 mm ø	Width (W)	Height (H)	9.5 mm	Pins Spacing	7.6 mm	
Approximate Weight	2 grams	Compliance	RoHS, Lead Free					
Options								
RELIABILITY								
Thermal Operating Temperature Test	240 hours continuous operation at Rated Voltage , at Maximum Rated Operating Temperature *							
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Thermal Storage Temperature Test	240 hours storage at Maximum Rated Storage Temperatures *							
	240 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 below and is three (3) hours long *							
Humidity Test	240 Hours at +40°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							
Operation Life Test	Continuous	240 hours of continuous operation, at Rated Voltage, each at Minimum & Maximum Rated Operating Temperatures						
	Intermittent	One thousand (1,000) hours of: 1 minute ON 4 minutes OFF cycle, at Room Temperature, and Rated Voltage						
Warranty	For a period of one (1) year from date of shipping under normal operations conditions							



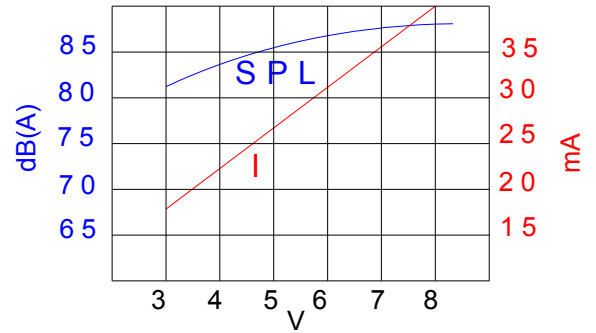


DIMENSIONS

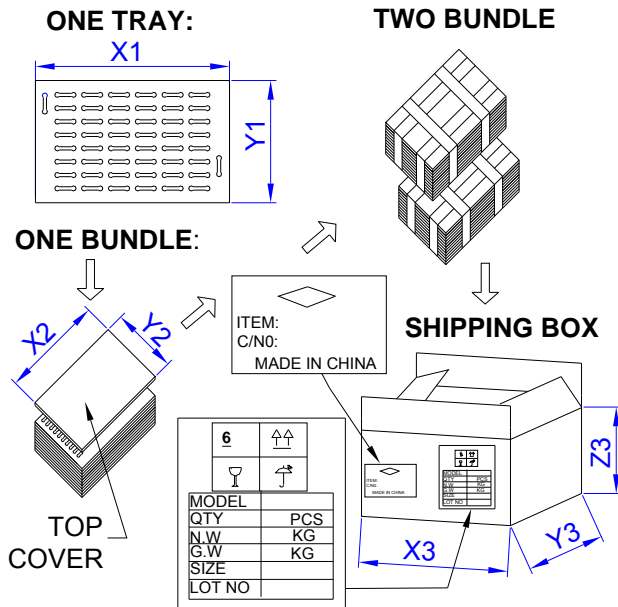
Units in: mm, Tolerance: ± 0.5mm unless specified otherwise.



SPL vs. FREQUENCY RESPONSE



PACKAGING



MARKING		TRAY	
Bundle		X1	24 cm
Customer PN	Dimensions	Y1	16 cm
Other PN if required		Z1	2.8 cm
Quantity	Quantity	100	
Lot and/or Date Code	BUNDLE		
Bundle Number	Dimensions	X2	24 cm
Shipping Box		Y2	16 cm
Customer Part Number		Z2	24 cm
Other PN (if required)	Quantity	1,000	
Quantity	SHIPPING BOX		
Lot and/or Date Code	Dimensions	X3	50.5 cm
PO Number		Y3	42 cm
Net Weight		Z3	28 cm
Gross Weight	Number of Bundles	5	
Box Number	Quantity	5,000	
of Number of Boxes	Approximate Weight		
Made in China			

Revision	Description	By	Date
2-2018	Changed operating and rated voltage from Vpp to Vdc.	JL	4/9/2018