
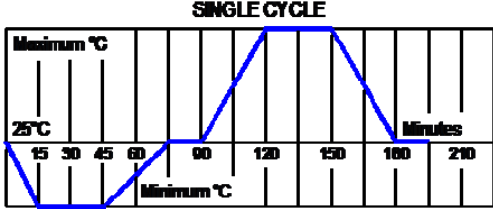




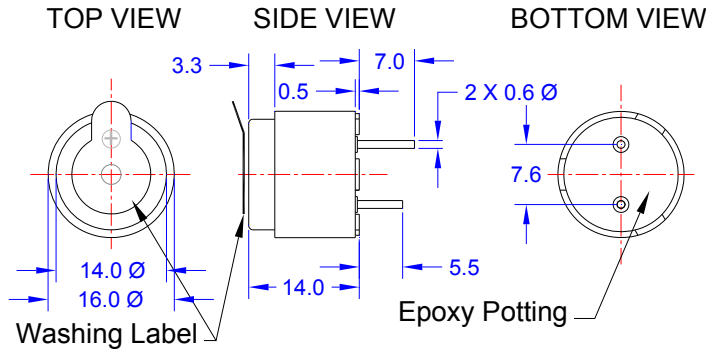
PRODUCT INFORMATION

PART #	CEMB160A140-12C23PLR						Revision: 2-2018	
	Electro-Magnetic Buzzer							
DESCRIPTION				FEATURES				
<p>Challenge Electronics Electro-Magnetic Buzzer, 16 mm diameter, A type case (Standoffs and TOP Sound Port), 14 mm Height, 8 to 15 VDC operation, Continuous Tone, 2,300 Hz Resonant Frequency, with a minimum output of 85 dB(A) at Nominal Vdc, 10 cm, PC pins Termination with 7.6 mm 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	8.0 - 15.0 VDC		Rated Voltage		12.0 VDC			
Current	30 mA, at Rated Voltage		Resonant Frequency		2,300 ± 300 Hz.			
Operating Temperature	-30°C to + 75°C		Storage Temperature		-40°C to + 85°C			
Termination	Two (2) PC Pins, Tin plated, 0.6 mm Diameter, Positive Pin 7.0 mm Long, Negative Pin 5.5 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)		16.0 mm ø	Width (W)	Height (H)	14.0 mm	Pins Spacing	7.6 mm
Approximate Weight	6 grams		Compliance		RoHS, Lead Free			
Options								
RELIABILITY								
Thermal Operating Temperature Test	240 hours continuous operation at Rated Voltage , at Maximum Rated Operating Temperature *							
	240 hours continuous operation at Rated Voltage , at Minimum Rated Operating Temperature *							
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							

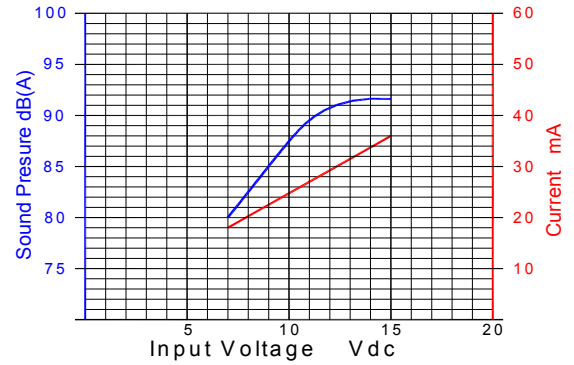


DIMENSIONS

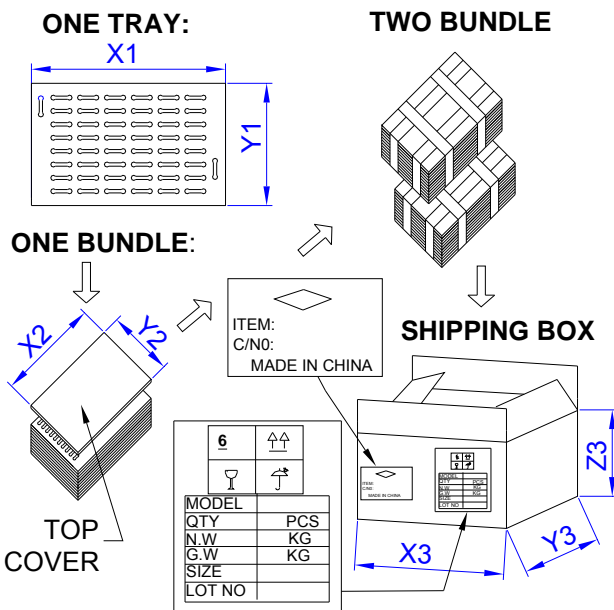
Units in: mm, Tolerance: ± 0.5 mm unless specified otherwise



SPL vs. FREQUENCY RESPONSE



PACKAGING



MARKING		TRAY	
Bundle		X1	cm
Customer PN	Dimensions	Y1	cm
Other PN if required		Z1	cm
Quantity	Quantity	50	
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 Weighjt	Number of Bundles		
Box Number	Quantity	2,000	
of Number of Boxes	Approximate Weight		
Made in China			

Revision	Description	By	Date
2-2018	Corrected Operating Voltage Range from 8.0 – 15.0 Vpp to 8.0 – 15.0 VDC and Rated Voltage from 12.0 Vpp to 12.0 VDC.	JL	2018-09-11