Tel: 1-800-722-8197 1-631-595-2217

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## PRODUCT INFORMATION

PART#

CEET120B085-42-205-20P6.5R

COMPLIANCE

# **Electro-Magnetic Sound Transducer**

## **DESCRIPTION** FEATURES

Challenge Electronics Electro-Magnetic Transducer, 12 mm diameter, B type case (Standoffs and TOP Sound Port), 8.5 mm Height, 42 Ohms coil resistance, 2 to 5 Vpp operation 2,048 Hz Resonant Frequency, with a minimum output of 88 dB(A) at,10cm. PC pins Termination with 6.5mm spacing, RoHS Lead Free compliant

RoHS, Lead Free Compliant





**Revision: 1-2011** 

## **SPECIFICATIONS**

Resonant Frequency	2,04	18 ± 21 Hz.	Soun	d Pressure Leve	88 dB(A), at rated Voltage at 10	cm		
Operating Voltage	2.0	) - 5.0 Vpp		Rated Voltage	3.5 Vpp			
Coil Impedance	42	± 6 Ohms	Current	at Rated Voltage	30 mA			
<b>Operating Temperature</b>	-20°C to + 70°C		Sto	rage Temperatur	-30°C to + 80°C			
Termination	Two (2) PC Pins	, Tin plated, 0.6 mm D	iameter, 5.0 mı	n Long				
Material	Case B type, Plastic, Noryl ™							
Materiai	Encapsulation	PCB						
Cound Dout Divertion	Ton	Cago Stan	doffe from DCD	Voc	Domovoblo Washing Lobel No.			

Sound Port Direction	Тор	Case Standoff	fs from PCB	Yes	Removable Washing Label		No	
<b>Physical Dimensions</b>	Length or Diameter (L /D)	12.0 mm Ø	Width (W)		Height (H)	8.5 mm	Pins Spacing	6.5 mm
Approximate Weight	2 grams	Compliance	RoHS, Lead Free					
Ontions								

#### RFI IARII ITY

**Operation Life Test** 

Warranty

Intermittent

RELIABILITY							
Th T	240 hours continuous operation at Rated Voltage, at Maximum Rated Operating Temperature *						
Thermal Operating Temperature Test	240 hours continuous operation at Rated Voltage, at Minimum Rated Operating Temperature *						
Th 1 C4 T T	After parts are subjected to 240 hours storage at Maximum Rated Storage Temperatures *						
Thermal Storage Temperature Test	After parts are subjected to 240 hours storage at Minimum Rated Storage Temperatures *						
	SINGLE CYCLE						
Thermal Shock Test	After parts are subjected to five (5) cycles of Minimum and Maximum Operating Temperature. Each cycle shell be set per diagram below and is three (3) hours long *						
<b>Humidity Test</b>	After parts are subjected to 240 Hours at +40°C±2°C. 90-95% RH *						
Insulation Test	A minimum of 10 M $\Omega$ , measured with 100 Vdc Insulation Resistance Meter, between the Electrical Terminals and the Transducer Case						
Vibration Test	After parts are subjected to 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						
<b>Drop Test</b>	After parts are subjected to 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.						
Continuous	240 hours of continuous operation, at Rated Voltage, each at Minimum & Maximum Rated Operating Temperatures						

For a period of one (1) year from date of shipping under normal operations conditions

One thousand (1,000) hours of: 1 minute ON 4 minutes OFF cycle, at Room Temperature, and Rated

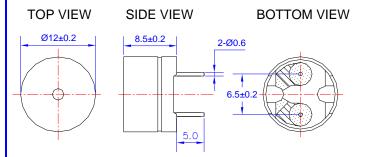
Tel: 1-800-722-8197 1-631-595-2217

Fax: 1-631-667-5484

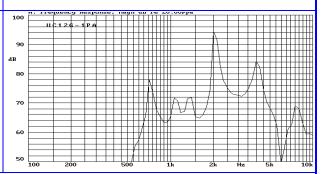
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### **DIMENSIONS**

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

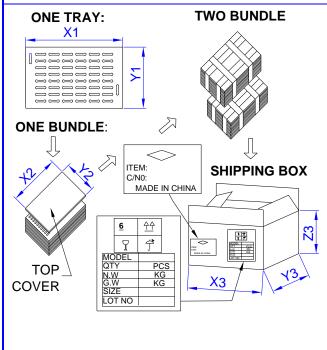


## **SPL vs. FREQUENCY RESPONSE**



TDAV

## **PACKAGING**



MARKING	TRAY					
Bundle	Dimensions	<b>X</b> 1	24 cm			
Customer PN	Dimensions	Y1	16 cm			
Other PN if required	Quantity	100				
Quantity	BUNDLE					
Lot and/or Date Code	Dimensions	X2	25 cm			
Bundle Number	Dimensions	Y2	17 cm			
Shipping Box	ping Box Quantity		1,000			
Customer Part Number	SHIPPI	зох				
Other PN (if required)		Х3	50.5 cm			
Quantity	Dimensions	<b>Y3</b>	42 cm			
Lot and/or Date Code		<b>Z</b> 3	28 cm			
PO Number	Number of Bundles		5			
Net Weight	Quantity	5,000				
Gross Weighjt	Approximate We	pproximate Weight				
Box Number						
of Number of Boxes						
Made in China						