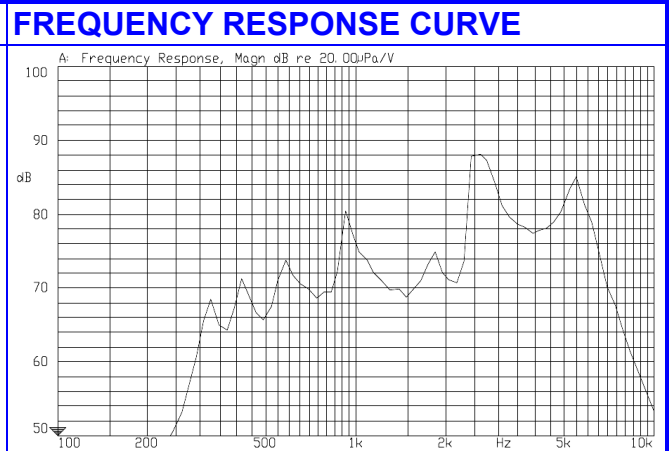
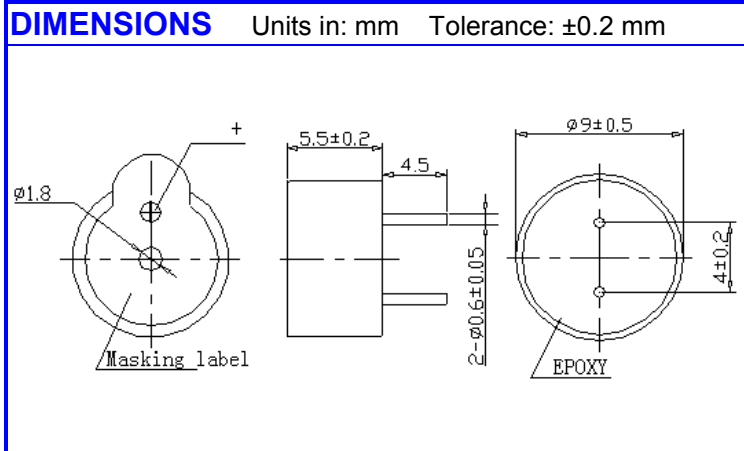


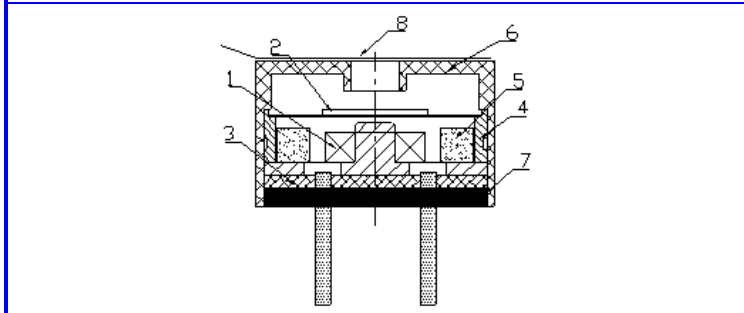


## PRODUCT INFORMATION

<b>PART #:</b>	<b>CEET090A055-40-27P4LR</b>				<b>Revision: 2-2015</b>
	<b>Electromagnetic Sound Transducer</b>				
<b>DESCRIPTION</b>			<b>FEATURES</b>		
Challenge Electronics Electromagnetic Transducer; 9 mm Length; A style case (Round, Top Port); 5.5 mm High; 40 ohm coil impedance, 1 to 5.0 Vo-p Operating Voltage; 2,731 Hz. Resonant Frequency; minimum Sound output of 85 dB(A) min at 10 cm at Rated Voltage; Pin Termination 4 mm spacing, Washing Label, RoHS, Lead Free and REACH Compliance			<ul style="list-style-type: none"> <li>• RoHS, Lead Free Compliant</li> <li>• REACH Compliant</li> <li>• ISO 9001 Certified</li> </ul>		
<b>SPECIFICATIONS</b>					
Operating Voltage	4-6 Vo-p	Nominal Rated Voltage	5.0 Vo-p	Resonant Frequency	2,731 Hz.
Sound Pressure Level	85 dB(A) min, at: 10 cm, Resonant Frequency, Nominal rated Voltage, Square Wave 50% Duty Cycle				
Operating Current	60 mA, max at: Resonant Frequency, Nominal rated Voltage, Square Wave				
Operating Temperature	-30°C to +85°C	Storage Temperature	-40°C to + 85°C	Coil Resistance	40 ± 4 Ohms
Material	Housing	PBT		Sound Port Direction	Top
	Diaphragm	Iron		Encapsulation	Epoxy
	Termination	PCB Pin, Pin = 4.5 x 0.6 mm, Spacing = 4 mm			
Physical Dimensions	Diameter (D)	9 mm ± 0.5 mm	Width (W)	Height (H)	5.5 mm ± 0.2 mm
Approximate Weight	1.0 grams	Removable Washing Label	Yes	Compliance	RoHS, Lead Free and REACH
Packaging					
<b>RELIABILITY</b>					
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	140 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 (9 times total) *				
* Reliability Test Performance	Parts should conform to original performance within ±3dB, after 3 hours of recovery period				
Operation Life Test	Continuous	Two hundred fifty (250) 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 Maximum Rated Voltage			
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				

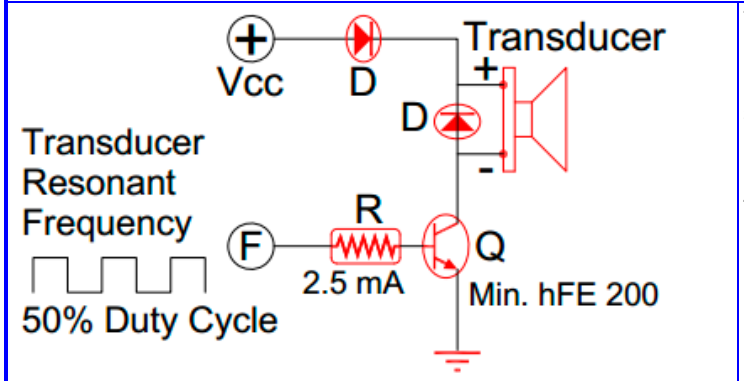


**CONSTRUCTION**



8	Masking Label	1	Paper(Green)
7	Potting		Epoxy
6	Housing	1	PBT
5	Core	1	Ferrite
4	Brass ring	1	Copper
3	PCB	1	Epoxy
2	Diaphragm	1	Iron
1	Coil Part	1	Copper And Iron
Number	Part Name	Q'TY	Material

**RECOMMENDED CIRCUIT DRIVE**



**STORAGE**

The diodes are recommended to protect the power supply from noise interference produced by the transducer coil.

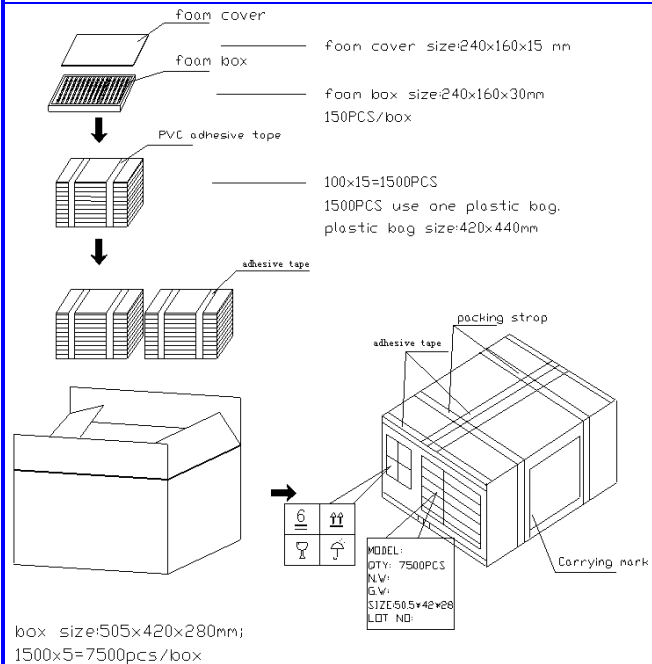
1. Shelf life: Twelve (12) months when devices are to be stored in factory supplied unopened ESD moisture sensitive bag under maximum environmental conditions of 30°C, 70% R.H.
2. Exposure: Devices should not be exposed to high humidity high temperature environment. MSL (moisture sensitivity level) Class 2



**SUBSTANCE OF VERY HIGH CONCERN**

This product does NOT contain any of the REACH Substances of Very High Concern (SVHC), and is in compliance with European Union REACH Regulation No.1907/2006 regarding chemical substances which must be registered or disclosed.

**PACKAGING**



MARKING		Box	
Box	Dimensions	X	24 cm
Part Number		Y	16 cm
Quantity		Z	3 cm
		Quantity	150
Lot and/or Date Code		Bundle	
		X	cm
Shipping Box	Dimensions	Y	cm
Part Number		Z	cm
Customer PN (if required)		Quantity	1500
Quantity		Shipping Box	
Lot and/or Date Code		X	50.5 cm
PO Number	Dimensions	Y	40 cm
Net Weight		Z	28 cm
Gross Weight		Number of Bundles	
Box Number of Boxes		Quantity	7500
		Approximate Weight	Kg
Made in		China	

Revision	Description	By:	Date:
1-2015	Added photo. Raised operating temp to 85°C	w. sargent	1/22/2015
2-2015	Updated photo.	w. sargent	2/16/2015