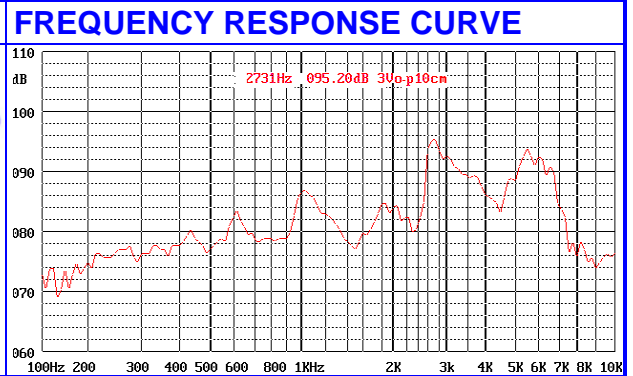
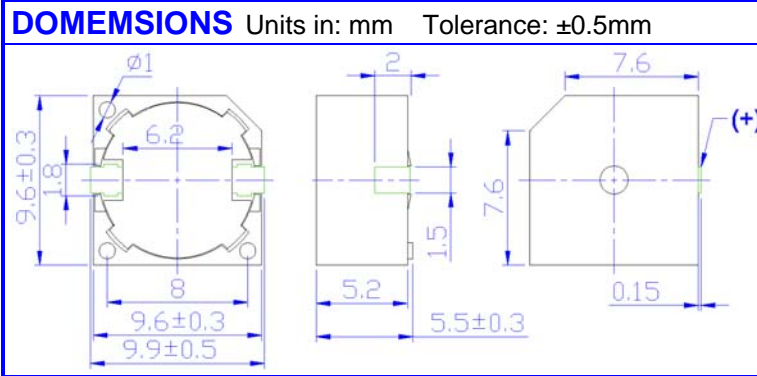


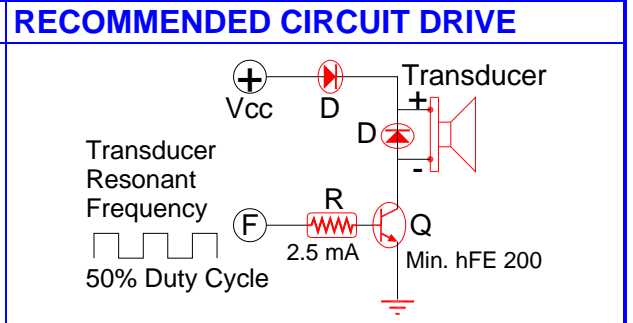


PRODUCT INFORMATION

PART #:	CEET096N055-17-154-27MR					Revision: 0-2013
	SMD Electro-Magnetic Transducer					
DESCRIPTION	Challenge Electronics Electro-Magnetic Transducer; 9.6 mm Long; N style case (Square, Top Sound Port); 5.5 mm High, 17±2 Ohms Coil Impedance; 1.5-4 Vop Operating Voltage; Minimum Sound Pressure level 90 dB(A) at Nominal Voltage 10 cm; 2,731 Hz. at Resonant Frequency Rated Voltage; SMD Termination; RoHS Lead Free Compliant			FEATURES		
				<ul style="list-style-type: none"> • RoHS, Lead Free Compliant • ISO 9001 & TS16949 Certified 		
SPECIFICATIONS						
Resonant Frequency (Ro)	2,731 Hz.		Coil Impedance	17 ± 2 Ohms		
Operating Voltage	1.5 – 4.0 Vop		Nominal Rated Voltage	3 Vop		
Sound Pressure Level	Minimum 90 dB(A) at: Nominal rated Voltage, 10 cm, Resonant Frequency, 50% Duty Cycle					
Operating Current	80 mA , at: Nominal rated Voltage, Resonant Frequency, 50% Duty Cycle					
Operating Temperature	-30°C to +85°C		Storage Temperature	-40°C to +90°C		
Material	Housing	Plastic, LCP Vectra E130i, Black			Sound Port	Top
	Diaphragm	Ni Alloy Disc N50			Encapsulation	Epoxy Potting
	Termination	SMD, 2 soldering pads, Gold plated Brass				
Physical Dimensions	Length or Diameter (L/D)	9.6 mm	Width (W)	9.6 mm	Height (H)	5.5 mm
Approximate Weight	1 grams	Removable Washing Label	No	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	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 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 (9 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 ±3 dB, 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					

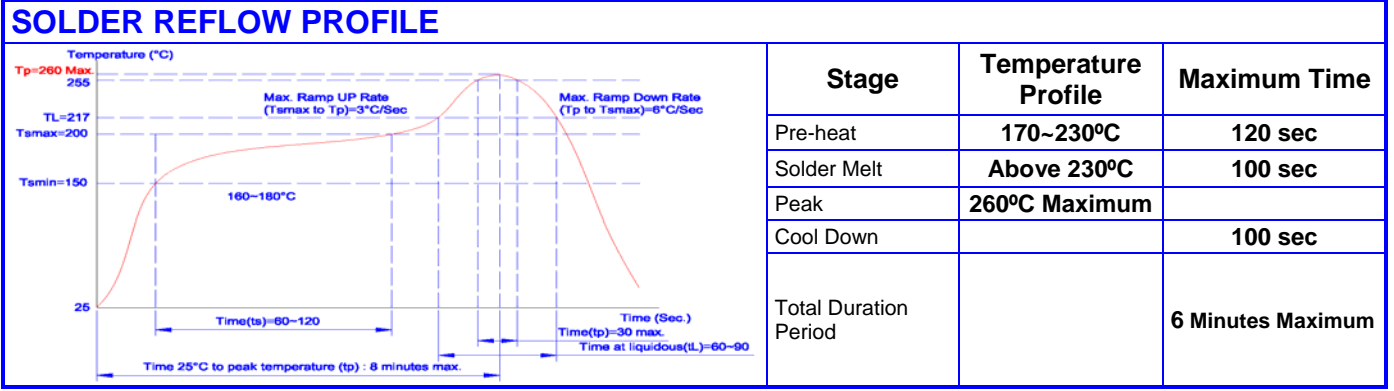


RECOMMENDED LAND PATTERN



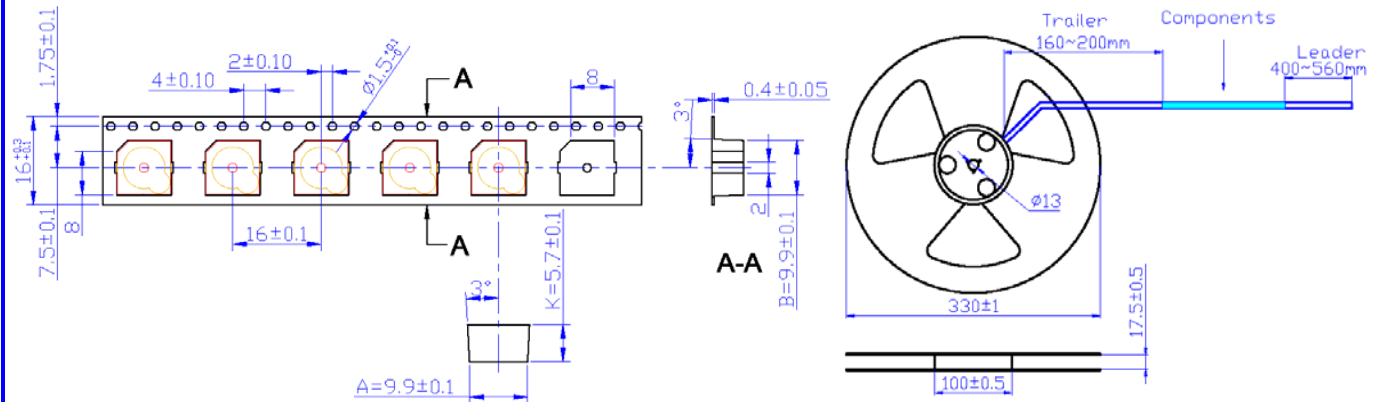
STORAGE

- 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.
- Exposure:** Devices should not be exposed to high humidity high temperature environment. MSL (moisture sensitivity level) Class 2.





TAPE and REEL INFORMATION



NOTE:

1. 110 sprocket holes pitch cumulative tolerance ± 0.20 mm
2. Carrier camber not to exceed 1 mm in 100 mm
3. Ao & Bo measured on a place 0.3 mm above the bottom of the pocket
4. Ko measured from a plane on the inside bottom of pocket to the top surface of the carrier
5. All dimensions meet EIA-481-2-A requirements
6. Material: Black Conductive Polystyrene Alloy
7. Component loaded per 13" reel: **300 parts**

PACKAGING

MARKING

Reel

	Reel Box	Dimensions	D1	cm
	PN		X1	cm
	Quantity		Y1	cm
	Lot and/or Date Code		Z1	cm
	Bundle Number		BUNDLE BOX	
	Shipping Box	Dimensions	X2	cm
	Customer Part Number		Y2	cm
	Other PN (if required)		Z2	cm
	Quantity	Quantity		
	Lot and/or Date Code	SHIPPING BOX		
	PO Number	Dimensions	X3	cm
	Net Weight		Y3	cm
	Gross Weighjt		Z3	cm
	Box Number	Number of Bundles		
	of Number of Boxes	Quantity		
	Made in China	Approximate Gross Weight		