



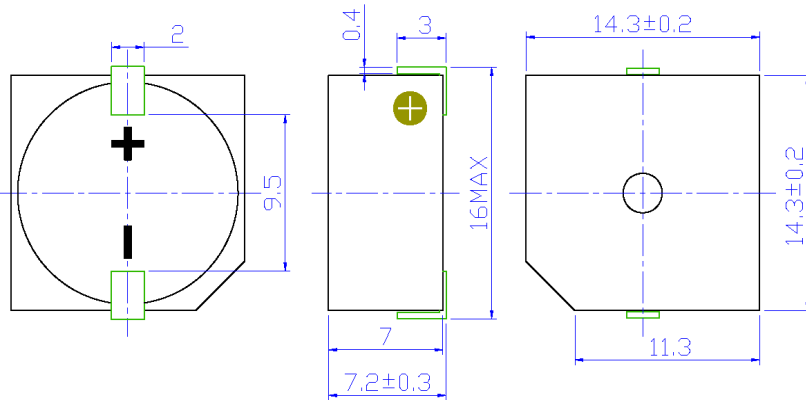
PRODUCT INFORMATION

PART #	CEPB143N072-316C40MR					Revision: 3-2014
RoHS COMPLIANCE	SMD PIEZOELECTRIC BUZZER					
DESCRIPTION:			FEATURES:			
<p>Challenge Electronics Piezoelectric Buzzer, 14.3 mm diameter, N type case (Square with Standoffs, Cutout Corner, and TOP Sound Port), 7.2 mm Height, 3 to 16 Vdc operation, Continuous Tone, 4,000 Hz Resonant Frequency, with a minimum output of 90 dB(A) at, 12 Vdc, 10 cm, M SMD Termination, RoHS compliant</p>			<ul style="list-style-type: none"> ◆ Extended Operating Temperature ◆ Flame Retardant Plastic ◆ Lead Free Reflowing Solderable ◆ ISO 9001 & TS16949 Certified ◆ RoHS compliant 			
SPECIFICATIONS						
Sound Type	Continuous Tone		Operating Voltage	3.0 - 16.0 Vdc	Nominal Rated Voltage	12.0 Vdc
Sound Pressure Level	90 dB(A), at Nominal Rated Voltage, 10 cm					
Operating Current	8 mA, at Nominal rated Voltage					
Resonant Frequency	4,000 ± 500 Hz.	Operating Temperature	-30°C to + 85°C	Storage Temperature	-40°C to + 90°C	
Material	Housing	N type, Plastic, LCP Vectra E130i, UL 94-V0 (UL #:E106764)			Sound Port Direction	Top
	Diaphragm	Ni Alloy Disc N42			Encapsulation	Epoxy Potting
	Termination	Two (2) soldering pads, Brass Nickel (Sn) plated				
Physical Dimensions	Length or Diameter (L/D)	14.3 mm Ø	Width (W)	14.3 mm	Height (H)	7.2 mm
Approximate Weight	1.6 grams	Removable Washing Label	No	Compliance	RoHS	
Options						
RELIABILITY						
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	<p>5 cycles of Minimum and Maximum Operating Temperature Each cycle shall be set per diagram below and is three (3) hours long *</p>					
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 ±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 This warranty does not apply to products damaged through misuse, abuse, improper installation, alteration, rework, or attempt to repair					

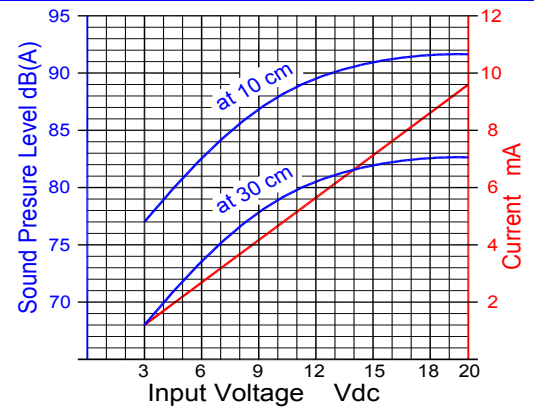


DIMENSIONS

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



SPL & CURRENT RESPONSE

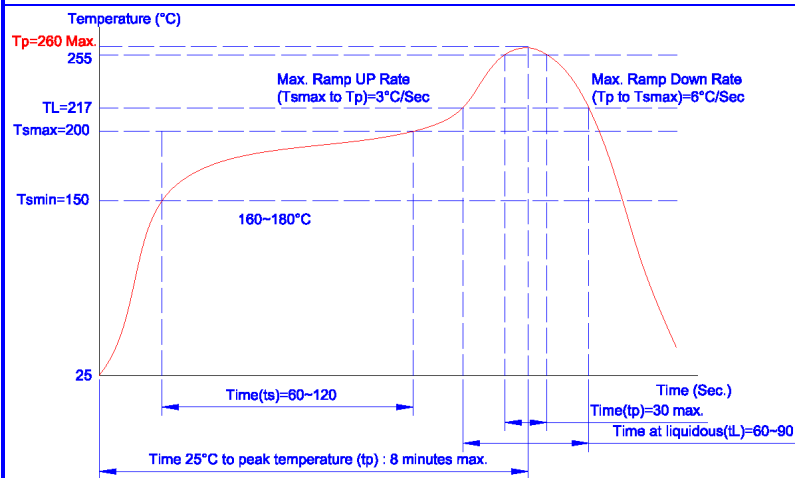


RECOMMENDED LAND PATTERN

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

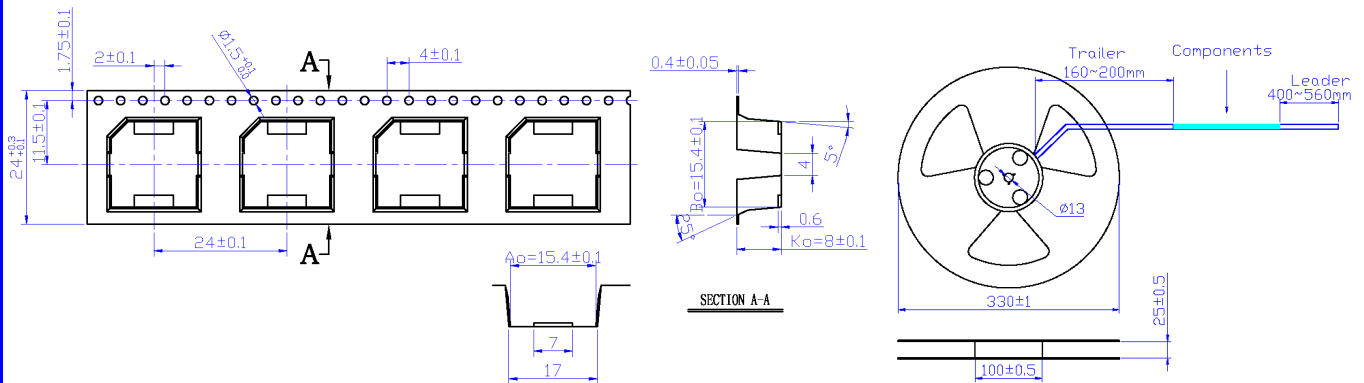
Solder Reflow Profile:



Stage	Temperature Profile	Maximum Time
Pre-heat	170~230°C	120 sec
Solder Melt	Above 230°C	100 sec
Peak	260°C Maximum	
Cool Down		100 sec
Total Duration Period		6 Minutes Maximum



TAPE and REEL INFORMATION



1. 10 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. Component loaded 350 partsper 13" Reel

PACKAGING	MARKING		Reel	
		Bundle		X1
	Part Number	Dimensions	Y1	cm
	Quantity		Z1	cm
	Lot and/or Date Code		Quantity	350
	Bundle Number	Box		
	Shipping Box		X2	cm
	Part Number	Dimensions	Y2	cm
	Customer PN (if required)		Z2	cm
	Quantity		Quantity	
	Lot and/or Date Code	SHIPPING BOX		
	PO Number	Dimensions	X3	cm
	Net Weight		Y3	cm
	Gross Weight		Z3	cm
	Box Number of Boxes	Number of Bundles		
	Made in China	Quantity		
		Approximate Weight		
Revision	Description		By:	Date
1-2013	Updated the Specifications		Ely Zofan	6/19/2013
2-2013	Replaced product photo		W. Sargent	6/19/2013
3-2014	Corrected product description		W. Sargent	10/29/2014