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## **PRODUCT INFORMATION**

CEPB418I160-324A28WR



PART#

## Piezoelectric Buzzer

#### **DESCRIPTION** FEATURES

Challenge Electronics Piezoelectric Buzzer, 41.8 mm diameter, I type case (Flange Mounting and TOP Sound Port), 16.0 mm Height, 3 to 24 Vdc operation, Slow Intermittent Tone, 2,800 Hz Resonant Frequency, with a minimum output of 90 dB(A) at Rated Voltage and 30 cm, Wire Leads 50 mm Long Termination, RoHS Lead Free compliant

- RoHS, Lead Free Compliant
- ISO 9001



**Revision: 1-2011** 

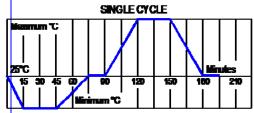
### **SPECIFICATIONS**

Sound Type		Slow Intermittent Tone			O	<b>Operating Volta</b>	ge	3.0 - 24 Vd	Rate	ed Voltage	12	2.0 Vpp	
Resonant Frequency		2,800 ± 300	Hz. Pulse	e Rate 1 ± 50% per \$		6 per Second	Ma	aximum Cur	um Current 9		9 mA, at Rated Voltag		
Sound Pressure Level		90 dB(A), at: rated Voltage, 30 cm											
Operating Temperature		-20°C to + 60°C				Storage Temperature			-30	-30°C to + 70°C			
Termination		Wire Leads, 24 AWG, UL 1007, 5.51" (50 mm) Long, Stripped 0.196" (5.0 mm) Color Coded: RED = Positive; BLACK = Negative											
Material	Case	I type, Plastic, ABS or equal					Diaphragm Brass						
	Encapsulation	Back Cover											
<b>Sound Port Direction</b>		Тор	Mounting	Flange Mount with 2 Scre			ws	<b>Mounting Hole Spacing</b>		50.0 mm			
Physical Dimensions		Length or Diameter (L /D)		41.8 mr	n Ø	Height (H)	16.0 mm						
Approximate Weight		15 grams		Remova	Removable Washing Label		١	o Compliance		e RoHS, Lead Free			
Options							·		•				

#### **RELIABILITY**

	<b>Thermal Operating Temperature</b>	240 hours continuous operation at Rated Voltage, at Maximum Rated Operating Temperature *
Test	Test	240 hours continuous operation at Rated Voltage, at Minimum Rated Operating Temperature *
Thermal	Thermal Storage Temperature Test	240 hours storage at Maximum Rated Storage Temperatures *
	Thermal Storage Temperature Test	240 hours storage at Minimum Rated Storage Temperatures *

# Thermal Shock Test 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>		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		2 Hours of at 1.5 mm with 10 to 55 Hz. vibration frequency to each of 3 perpendicular directions *					
<b>Termination Strength</b>	ı	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 Resist	ance	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 Operatir Temperatures					
_	Intermittent	One thousand (1,000) hours of: 1 minute ON 4 minutes C	<b>PFF</b> cycle, at Room Temperature, and Rated Voltage				
Warranty		For a period of one (1) year from date of shipping under normal operations conditions					
	•	·	·				

**COVER** 

LOT NO

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#### **DIMENSIONS** SPL vs. FREQUENCY RESPONSE Units in: mm, Tolerance: ± 0.5mm unless specified otherwise. (dB) (mA) Ø3.5 110 10 S.P.I 100 8 90 6 8 20 140± 5 80 4 70 2 60 16 <sup>18</sup> (V) 12 15 9 **PACKAGING MARKING TRAY ONE TRAY: TWO BUNDLE** X1 **Bundle X1** 20.5 cm **Customer PN Y1** 15 cm **Dimensions** Other PN if required **Z**1 8 cm Quantity 90 Quantity Lot and/or Date Code **BUNDLE ONE BUNDLE: Bundle Number X2** ITEM: **Y2 Shipping Box Dimensions SHIPPING BOX** C/No: MADE IN CHINA **Customer Part Number Z**2 Other PN (if required) Quantity <u> 24</u> Quantity **SHIPPING BOX** 7 Ť Lot and/or Date Code Х3 50.5 cm TOP N.W G.W SIZE

**Y3** 

**Z**3

32 cm

30.5 cm

10 900

**Dimensions** 

Quantity

Number of Bundles

Approximate Weight

PO Number

Net Weight

Gross Weighjt

Made in China

of Number of Boxes

**Box Number**