



PRODUCT INFORMATION

PART #	CEPB418160-320B28W140R					Revision: 1-2016
	PIEZOELECTRIC BUZZER					
DESCRIPTION	Challenge Electronics Piezoelectric Buzzer, 41.8 mm Diameter, I style case (Round w/Flange mount), 16.0 mm High, 3-20 Vdc, B (Intermittent Tone Fast Pulse / Medium Loud), 2,800 Hz Resonant Frequency, Sound Pressure Level at 85 dB(A) at 30 cm and Nominal Voltage, Wire Termination w/140 mm length. RoHS / REACH Compliant				FEATURES <ul style="list-style-type: none"> ● RoHS Compliant ● REACH Compliant ● ISO 9001 Certified 	
SPECIFICATIONS						
Alarm Type	Medium Loud, Fast Pulse		Pulse Rate at 5V	5.5 ± 20% Hz.	Pulse Rate at 15V	3.5 ± 20% Hz.
Operating Voltage	3 – 20 Vdc	Nominal Voltage	5 Vdc		Resonant Frequency	2,800 ± 500 Hz.
Sound Pressure Level	85 dB(A), at: Nominal Voltage, 30 cm					
Operating Current	10 mA at Nominal Voltage					
Operating Temperature	-20°C to + 60°C			Storage Temperature	-30 °C to + 70°C	
Material	Housing	Plastic, ABS or equal or equal, Black			Sound Port Opening	Top
	Diaphragm	Brass			Encapsulation	Back cover
	Termination	Wire leads, 28AWG, UL 1007 , 5.51' (140mm) Long, Striped 0.196" (5.0mm). Color Coded: Red = Positive, Black = Negative				
Physical Dimensions	Diameter (D)	41.8 mm ø		Height (H)	16.0 mm	
Approximate Weight	15.0 grams	Removable Washing Label	No	Compliance	RoHS, Lead Free and REACH	
Options	90pcs per box, 900pcs per carton.					
RELIABILITY Parts should conform to original performance within ±5dB, after 3 hours of recovery period.						
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	120 Hours at +60°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 0.75 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 (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					
* Reliability Test Performance Parts should conform to original performance within ±3dB, 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					



<p>DIMENSIONS Units in: mm Tolerance: ± 0.5 mm</p>	<p>SPL and Current vs. Input Voltage Response</p> <table border="1"> <caption>Graph Data Points (Approximate)</caption> <thead> <tr> <th>Input Voltage (V)</th> <th>SPL (dB)/30cm</th> <th>Current (mA)</th> </tr> </thead> <tbody> <tr><td>3</td><td>84</td><td>1.5</td></tr> <tr><td>6</td><td>87</td><td>2.5</td></tr> <tr><td>9</td><td>89</td><td>3.5</td></tr> <tr><td>12</td><td>90</td><td>4.0</td></tr> <tr><td>15</td><td>91</td><td>4.2</td></tr> <tr><td>18</td><td>91.5</td><td>4.4</td></tr> <tr><td>21</td><td>92</td><td>4.5</td></tr> </tbody> </table>	Input Voltage (V)	SPL (dB)/30cm	Current (mA)	3	84	1.5	6	87	2.5	9	89	3.5	12	90	4.0	15	91	4.2	18	91.5	4.4	21	92	4.5
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SUBSTANCE OF VERY HIGH CONCERN (SVHC) 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	TRAY		
	Bundle	Dimensions	X1	cm
	Customer PN		Y1	cm
	Other PN if required		Z1	cm
	Quantity	Quantity	90	
	Lot and/or Date Code	BUNDLE		
	Bundle Number	Dimensions	X2	cm
	Shipping Box		Y2	cm
	Customer Part Number		Z2	cm
	Other PN (if required)	Quantity		
	Quantity	SHIPPING BOX		
	Lot and/or Date Code	Dimensions	X3	47.5cm
	PO Number		Y3	30.5cm
	Net Weight		Z3	30.5cm
Gross Weight	Number of Bundles			
Box Number	Quantity	900		
of Number of Boxes	Approximate Weight	14.5kgs		
Made in China				

Revision	Description	By	Date
1-2016	Updated Pulse Rate at 5 V and added Pulse Rate at 15 V	Sargent	2/10/2016