



PRODUCT INFORMATION

Part Number	CEPT300B075-130-28P15R				Revision	6-2015				
	Piezoelectric Transducer									
DESCRIPTION				FEATURES						
Challenge Electronics Piezoelectric Transducer, 30.0 mm diameter, B Style case (Round with standoffs, Top Sound Port), 7.5 mm high, PCB Mounted, 1 to 30 Vpp, 2,800 Hz. Resonant Frequency, Minimum 90 dB(A) at 10 cm 10 Vpp, Resonant Frequency, 2 PC Pins 15 mm apart termination, RoHS Compliant				<ul style="list-style-type: none"> ◆ RoHS Compliance ◆ ISO 9001 Certified 						
SPECIFICATIONS										
Operating Voltage	1 to 30 Vpp	Nominal Operating Voltage	10 Vpp	Resonant Frequency (Fo)	2,800 ± 500 Hz.					
Sound Pressure Level	Minimum 90 dB(A) , at: 10 cm, Rated Voltage, Resonant Frequency, Square Wave, 50% Duty Cycle									
Maximum Current	3 mA , at: Rated Voltage, Resonant Frequency, Square Wave, 50% Duty Cycle									
Capacitance	18,000 ± 30% pF , at 120 Hz.	Operating Temperature	-20°C to +60°C	Storage Temperature	-30°C to +70°C					
Materials	Alarm Case	Plastic, "B" Case, ABS (Hand Solder Only)			Sound Port Direction	Top				
	Diaphragm	Brass		Encapsulation	PCB or Plastic cover					
	Termination	Two (2) PC Pins, 1.0 mm Ø, 6.0 mm Long, Copper, Electro-Tin plated								
Physical Dimensions	Length or Diameter (L/D)	30.0 mm Ø	Width (W)	Height (H)	7.5 mm	PC Pins Spacing	15.24 mm			
Approximate Weight	2 grams	Removable Washing Label	No	Compliance	RoHS					
Options										
RELIABILITY										
Thermal Operating Temperature Test	96 hours continuous operation at Rated Power, at Maximum Rated Operating Temperature *									
	96 hours continuous operation at Rated Power, at Minimum Rated Operating Temperature *									
Thermal Storage Temperature Test	240 hours storage at Maximum Rated Storage Temperatures *									
	240 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 *									
Vibration Test	2 Hours at 1.5 mm with 10 to 55 Hz. of vibration frequency to each of 3 perpendicular direction *									
Drop Test	Dropped naturally from 700 mm height onto the surface of 10 mm wooden board, 2 directions— upper and side of the part are applied *									
Termination Strength	Maximum of 9.8 N load pull test, applied to each terminal in axial direction for 10 second									
* Reliability Test Performance	After 3 hours cooling time, Parts should conform within ± 3 dB(A) to original performance									
Life Test	Intermittent	1,000 hours of a 1 minute on 4 minutes off cycle at room temperature and Nominal Rated Voltage								
	Continuous	250 hours continuous operation at room temperature and Nominal 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									
FREQUENCY RESPONSE CURVE				DIMENSIONS		Units	Inches (mm)	Tolerance	0.02 (0.5)	

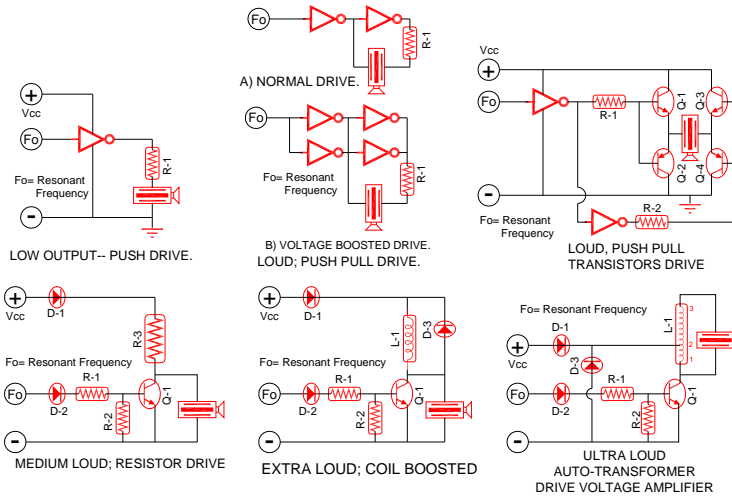
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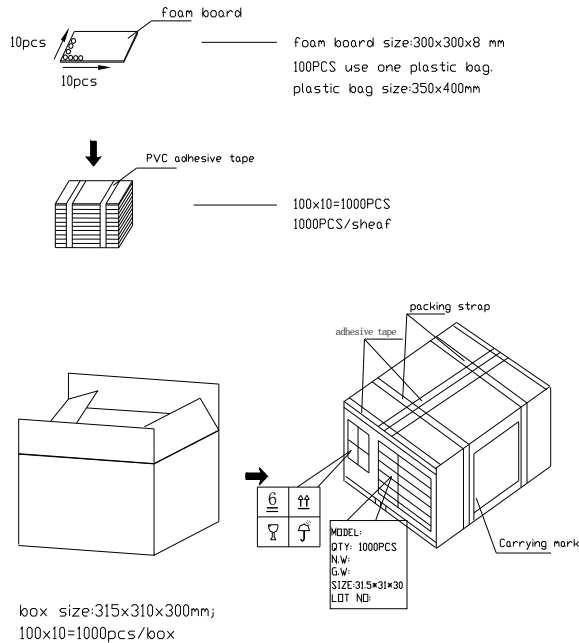
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DRIVING CIRCUIT APPLICATIONS



PACKAGING



MARKING		TRAY	
Bundle		X1	30 cm
Customer PN	Dimensions	Y1	30 cm
Other PN if required		Z1	0.8 cm
Quantity	Quantity	100	
Lot and/or Date Code	BUNDLE		
Bundle Number		X2	cm
Shipping Box	Dimensions	Y2	cm
Customer Part Number		Z2	cm
Other PN (if required)	Quantity	100	
Quantity	SHIPPING BOX		
Lot and/or Date Code		X3	31.5 cm
PO Number	Dimensions	Y3	31 cm
Net Weight		Z3	30 cm
Gross Weight	Number of Bundles		
Box Number	Quantity	1,000	
of Number of Boxes	Approximate Weight		
Made in China			

Revision	Description	By	Date
4-2015	Updated Capacitance measurement frequency from 100 to 120 Hz. Revised mechanical tolerance from 0.7 to 0.5 mm.	W.Sargent	2015-SEP-14
5-2015	Updated mechanical drawing. Revised height from 7.5 to 7.0 mm.	W.Sargent	2015-SEP-21
6-2015	Updated mechanical drawing. Revised height from 7.0 to 7.5 mm.	W.Sargent	2015-OCT-22