

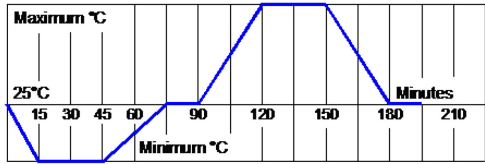




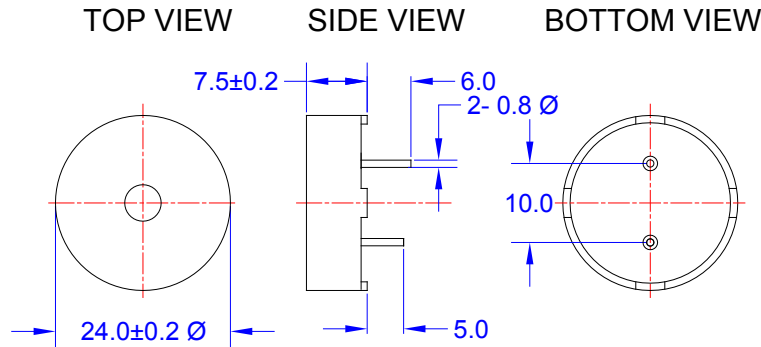
PRODUCT INFORMATION

PART #	CEPT240B075-130-40PR						Revision: 3-2013	
	Piezoelectric Sound Transducer							
DESCRIPTION				FEATURES				
Challenge Electronics Piezoelectric Transducer, 24.0 mm Diameter, B style case (Round, TOP Sound Port), 7.5 mm High, 1 to 30 Vpp operation, 4,000 Resonant Frequency Hz., Typical output of 90 dB(A) at 10 cm rated Voltage, PC Pins 10 mm Apart Termination, RoHS Compliant				<ul style="list-style-type: none"> • RoHS • ISO 9001 				
SPECIFICATIONS								
Operating Voltage	1 - 30 Vpp		Rated Voltage	10 Vpp	Resonant Frequency	4,000 ± 500 Hz.		
Sound Pressure Level	90 dB(A), at: Rated Voltage, Resonant Frequency, Square Wave, 50% Duty Cycle 10 cm							
Operating Current	5 mA, at: Rated Voltage, Resonant Frequency, Square Wave, 50% Duty Cycle							
Operating Temperature	-30°C to + 85°C		Storage Temperature	-40°C to +95°C		Capacitance	21,000 ± 30% pFD	
Material	Case	Plastic, Noryl, Black						
	Diaphragm	Brass		Termination	Two PC Pins Brass, Nickel Plated, 0.7 mm Ø			
	Encapsulation	Epoxy Potting						
Physical Dimensions	Length or Diameter (L/D)	24.0 mm Ø	Width (W)	mm	Height (H)	7.5 mm	PC Pins Spacing	10.0 mm
Approximate Weight	3 grams	Removable Washing Label	No	Compliance	RoHS			
Options								
RELIABILITY								
Thermal Operating Temperature Test	240 hours continuous operation at Rated Power, at Maximum Rated Operating Temperature *							
	240 hours continuous operation at Rated Power, at Minimum Rated Operating Temperature *							
Thermal Storage Temperature Test	240 hours at Maximum Rated Storage Temperatures *							
	240 hours 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	96 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	15 minutes 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 1 meter 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 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	Intermittent	One thousand (1,000) hours of: 1 minute ON 4 minutes OFF cycle, at Room Temperature, and Rated Voltage						
	Continuous	Two hundred fifty (250) hours of continuous operation, at Rated Voltage, each at Minimum & Maximum Rated Operating Temperatures						
Warranty	For a period of one (1) year from date of shipping under normal operations conditions							

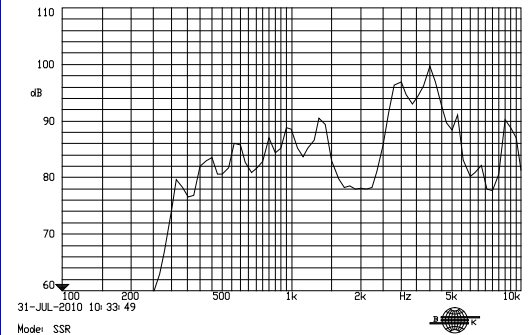


DIMENSIONS

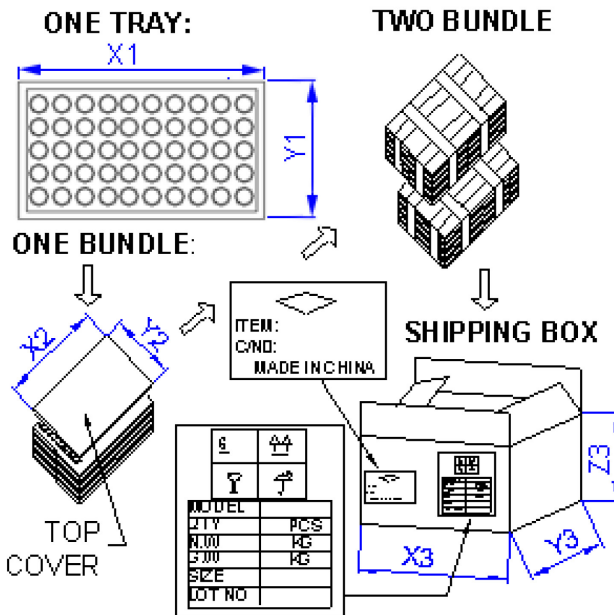
Units in: mm, Tolerance: ± 0.5mm unless specified otherwise.



SPL vs. FREQUENCY RESPONSE



PACKAGING



MARKING		TRAY	
Bundle		X1	505
Customer PN	Dimensions	Y1	400
Other PN if required		Z1	9
Quantity		Quantity	50
Lot and/or Date Code	BUNDLE		
Bundle Number	Dimensions	X2	505
Shipping Box		Y2	400
Customer Part Number		Z2	180
Other PN (if required)	Quantity	1000	
Quantity	SHIPPING BOX		
Lot and/or Date Code	Dimensions	X3	505 cm
PO Number		Y3	400 cm
Net Weight		Z3	360 cm
Gross Weight	Number of Bundles	2	
Box Number	Quantity	2000	
of Number of Boxes	Approximate Weight		
Made in China			

Revision	Description	By	Date
3-2013	Added product photo. Added frequency response chart. Revised packaging information	Walter Sargent	10/28/2013