



# PRODUCT INFORMATION

<b>PART #</b>	<b>CEPX41-150-38B30-1000R</b>	<b>Revision: 0-2016</b>
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## Piezoelectric Ceramic Sound Element

### DESCRIPTION

**Challenge Electronics Piezoelectric X-tal Direct Drive 4,100 Hz. (Fo) Resonant Frequency; 15.0 mm Diameter; 0.38 mm Thick; Brass Diaphragm; 30 V Max; 1000 Ω Max at Resonance; RoHS, Lead Free and REACH Compliant**

### SPECIFICATIONS

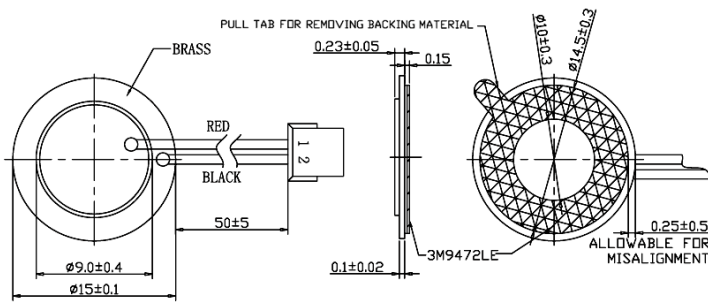
<b>Resonant Frequency (Fo)</b>	<b>4,100 ± 500 Hz.</b>	<b>Maximum Operating Voltage</b>	<b>30 Vp-p</b>	<b>Maximum Resonant Impedance</b>	<b>1000 Ohms</b>	
<b>Assembly Type</b>	<b>Direct Drive (2 Contacts)</b>	<b>Recommended Mounting</b>	<b>Edge Mount for Direct Drive</b>			
<b>Static Capacitance</b>	<b>8,000 ± 30% pF at 1000 Hz.</b>	<b>Operating Temperature</b>	<b>-20°C to +60°C</b>	<b>Storage Temperature</b>	<b>-20°C to +70°C</b>	
<b>Material</b>	<b>Ceramic</b>	<b>Piezoelectric Ceramic Disc, Silver Coated</b>	<b>Diaphragm</b>	<b>Brass</b>		
<b>Termination</b>	<b>Wire UL1571 28# 50±5 mm w/ connector JST-ZHR-2 housing / JST-SZH-002T-P0.5 terminal</b>					
<b>Physical Dimensions</b>	<b>Diaphragm Diameter</b>	<b>15.0 ± 0.1 mm Ø</b>	<b>Ceramic Diameter</b>	<b>9.0 ± 0.4 mm Ø</b>	<b>Assembly Thickness</b>	<b>0.38 ± 0.07 mm</b>
<b>Options</b>						
<b>Approximate Weight</b>	<b>Compliance</b>		<b>RoHS, Lead Free and REACH</b>			

<b>Caution</b>	<ul style="list-style-type: none"> <li>Do not maintain Vdc (Direct Current) on the Piezoelectric Assembly. Constant Voltage may depolarize the Piezoelectric Ceramic Disc</li> <li>Handle with care, Piezoelectric Disc is made of Ceramic material. Any distortion or bending of the part will crack and cause catastrophic damage the Piezoelectric Disc</li> </ul>
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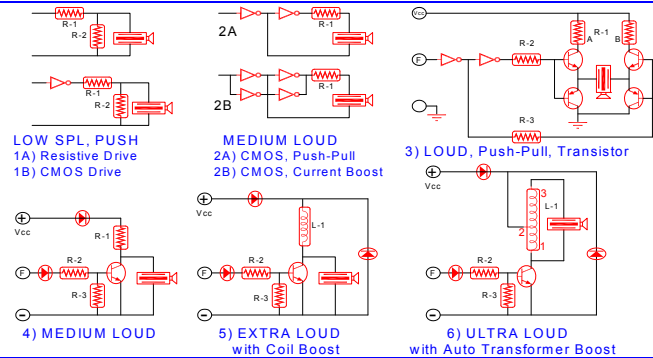
<b>Warranty</b>	For a period of one (1) year from date of shipping with careful handling and under normal operations conditions This warranty does not apply to products damaged through misuse, abuse, improper installation, alteration, rework, or attempt to repair
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### DIMENSIONS

Units in: mm, Tolerance: as specified



### DRIVING CIRCUIT APPLICATIONS



### SUBSTANCE OF VERY HIGH CONCERN (REACH) and RoHS LEAD FREE COMPLIANCE

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

European Union Directive 2011/65/EU (RoHS Directive) of the European Parliament. And of the Council of 8 June 2011 and all subsequent amendments, The ANNEX III of the Directive Applications exempted from the restriction in Article 4(1): 7(c)-I, Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. Piezoelectric devices, or in a glass or ceramic matrix compound Piezoelectric is also known as Lead Zirconate Titanate (PZT) ceramics. Piezoelectric Ceramic disc, (PZT), lead as high covalent compound in the ceramic matrix to achieve good ferroelectric properties in a wide temperature range. The best-known performances can be reached with PZT ceramics, which are a mixture of PbTiO3 and PbZrO3. The lead content, homogeneous material compound is between 58% and 68% by weight depending on the proportion of zirconium (Zr) and titanium (Ti)

### PACKAGING

	Shipping Box MARKING	SHIPPING BOX	
	Part Number	Dimensions	L
Lot and/or Date Code	W		cm
Quantity	H		cm
PO Number	Number of Trays		
Net Weight	Quantity		
Gross Weight	Approximate Weight		Kg.
	Made in China		

Revision	Description	By	Date