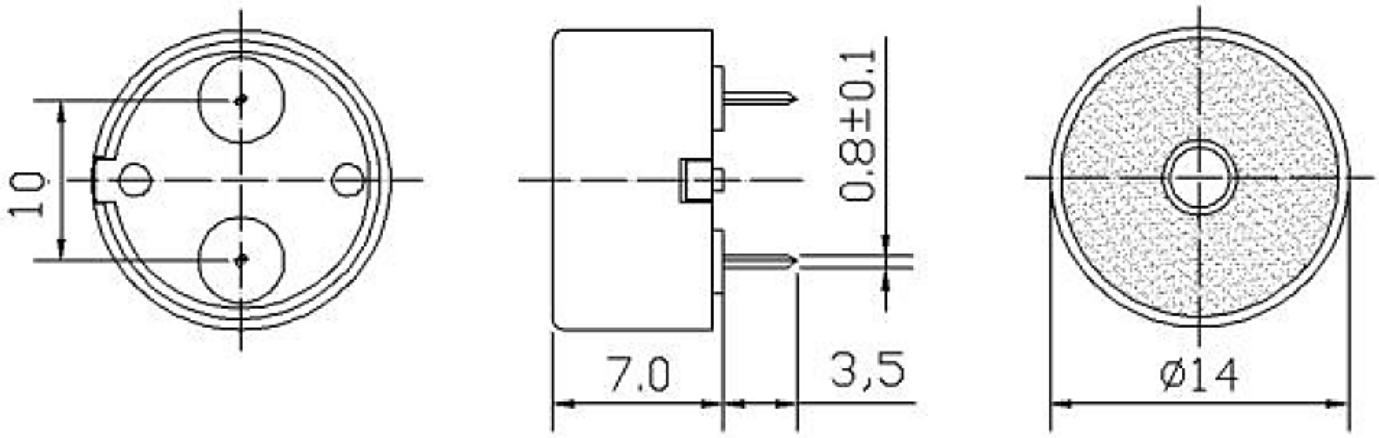
PIEZO TRANSDUCER

RDT-4.000-1407-XE-NS1

Electrical Specifications

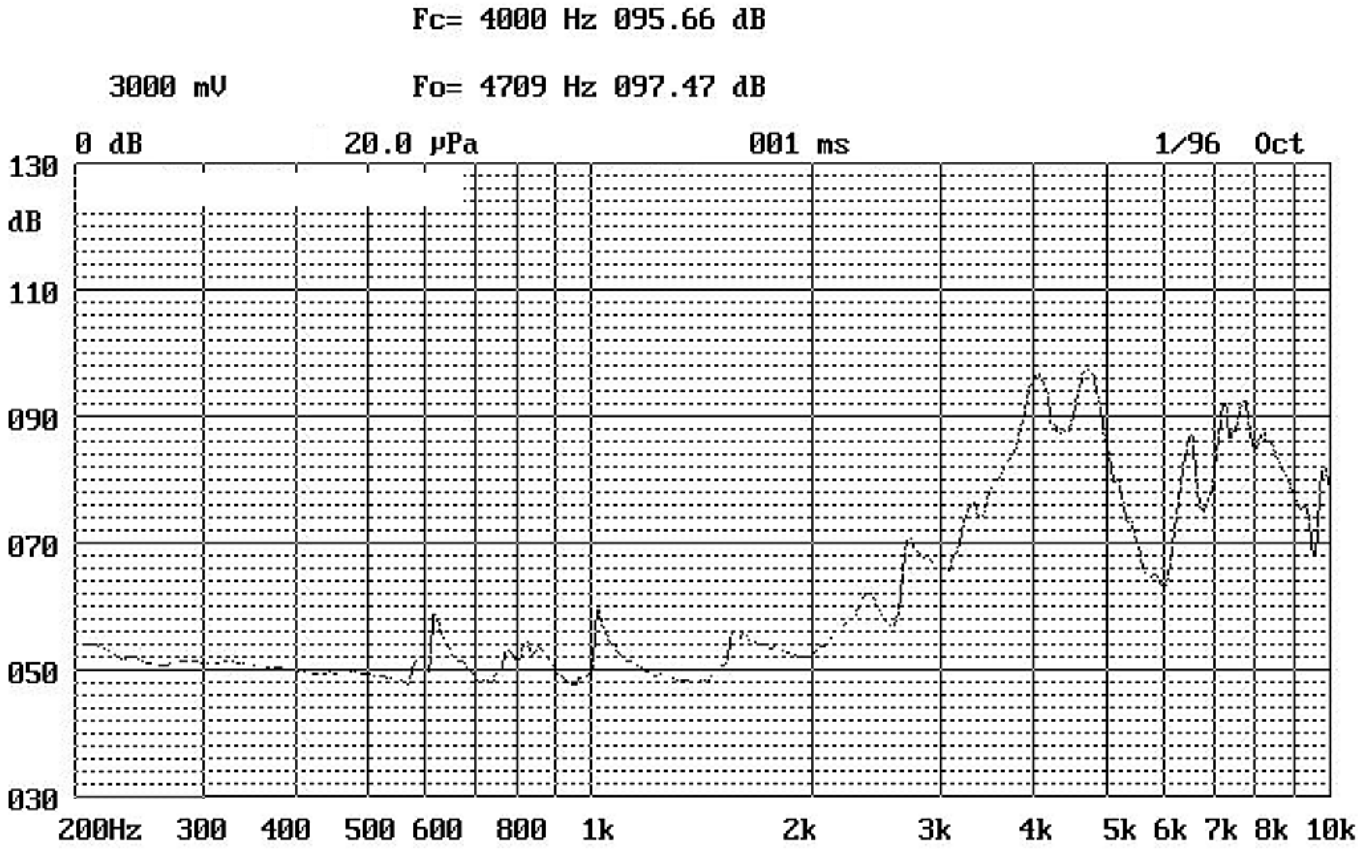
PARAMETERS		VALUE	UNIT
Resonance Frequency		4000±500	Hz
Input Voltage, max	Sine Wave	30	Vp-p
Current, max	@ 12.0 Vp-p	8	mA
Free Capacitance	@ 100Hz	12 ±30%	nF
Sound Pressure, min	@ 4.0kHz, (12.0Vp-p, 10cm) Square Wave	85	dB
Operating Temperature Range		-20 ~ +80	˚C
Storage Temperature Range		-30 ~ +80	˚C
Plate Material		Brass	-
Case Material		PBT	-
Pin Material		Phosphor Bronze	-

Dimension

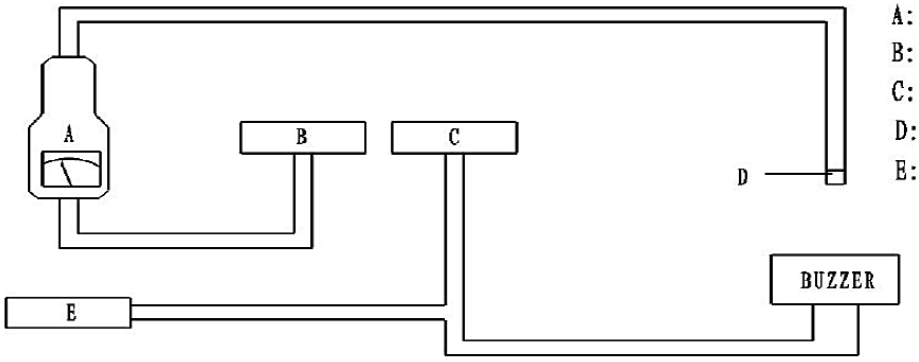


Unit: mm Tolerance ±0.3mm

Frequency Characteristics

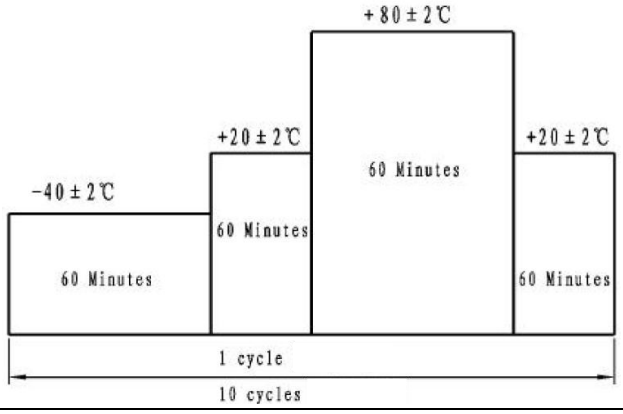


Electrical And Acoustical Measuring Condition



A: Sound Pressure Level Meter
B: Frequency Counter
C: RC oscillator
D: Sound Pressure Level For Focus
E: Multimeter (Amphere Meter)

Reliability Test

ITEM	TEST CONDITION AND REQUIREMENT
High Temperature Test (Storage)	After being placed in a chamber with 80±2ºC for 240 hours and then being placed in normal condition for 4 hours. Buzzer shall be measured. SPL after test: ±10dB
Low Temperature Test (Storage)	After being Placed in a chamber with -40±2ºC for 240 hours and then being placed in normal condition for 4 hours. Buzzer shall be measured. SPL after test: ±10dB
Humidity Test	After being Placed in a chamber with 90-95% R.H. at 40±2ºC for 240 hours and then being placed in normal condition for 4 hours. Buzzer shall be measured. SPL after test: ±10dB
Temperature Cycle Test	Make the test for 5 cycles without applying power as fig the expose to the room temperature for 4 hours. 
Vibration Test	Buzzer shall be measured after applying vibration of amplitude of 1.5mm with 10 to 55Hz band of vibration frequency to each of 3 perpendicular directions for 2 hours. SPL after test: ±10dB
Drop Test	Drop a product naturally from height of 1000mm onto the surface of 100mm thick wooden board. Two directions: This is upper and side of the product are to be applied for this drop test respectively once. SPL after test: ±10dB
Soldering Heat Resistance	Lead terminals are immersed up to 1.5mm from buzzer's body in solder bath of 260°C for 10 seconds, and then buzzer shall be measured after being placed in natural condition for 4 hours. SPL after test: ±10dB
Solderability Test	Lead terminals are immersed in rosin for 5 seconds and then immersed in solder bath of 250°C for 3 seconds 95% min lead terminal shall be wet with solder (except the edge of the terminal)
Terminal Strength Pulling Test	The force of 9.8N(1.0kg) is applied to each terminal in axial direction for 10 seconds. No visible damage and cutting off.

- **APPROVAL**

DRAWN BY	EV, April 2, 2026
APPROVED BY	AR, April 2, 2026
REVISION	A, Initial Release

Raltron Electronics / RAMI Technology USA, LLC, including its affiliates, employees, agents and other persons acting on its behalf (collectively Raltron/RAMI Tech), disclaim any and all liability for any errors or inaccuracies contained in this data sheet. While Raltron/RAMI Tech has made every reasonable effort ensure the accuracy of all product information, specifications and data contained herein, Raltron/RAMI Tech does not guarantee that the information is accurate, reliable or current. The product information is provided only for reference purposes only and is subject to change, correction or revision, at any time without notice. Raltron/RAMI Tech does not assume any liability arising out of an application or use of any product described herein and disclaims any warranties expressed or implied. The user of products in such applications shall assume all risks of such use and will agree to hold Raltron/RAMI Tech, harmless against all damages.

Copyright © 2026, Raltron Electronics / RAMI Technology USA, LLC. All rights reserved. No part of this document may be reproduced in any form without the prior written permission of Raltron Electronics / RAMI Technology USA, LLC.