

HODTEC-31515-000

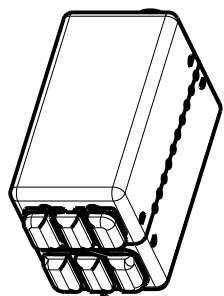
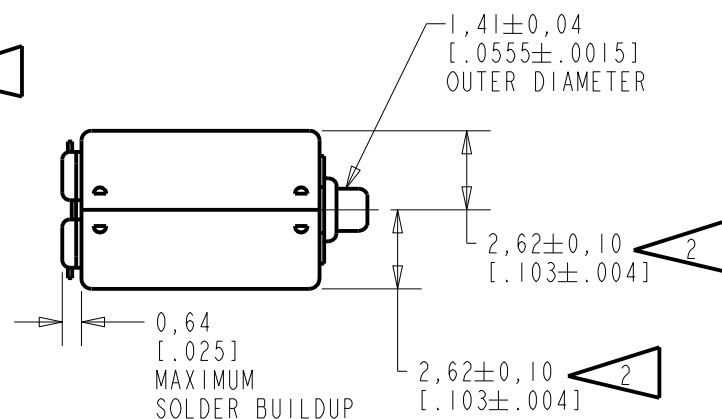
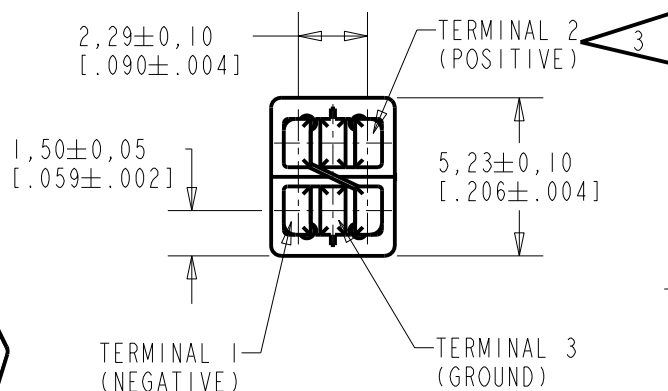
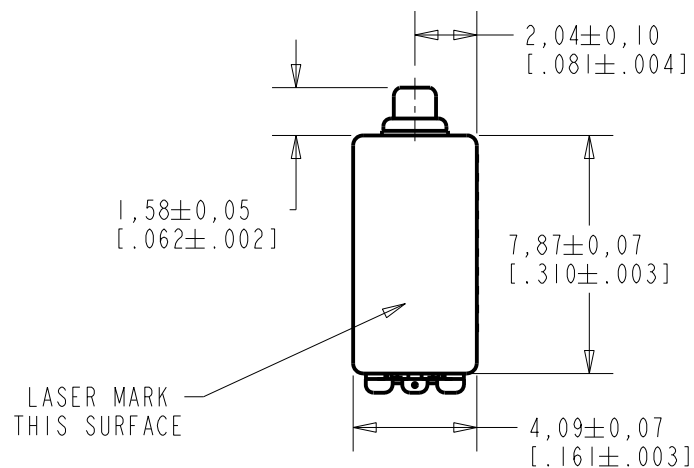
SHT 1.1

NOTES:

1. A POSITIVE GOING VOLTAGE AT TERMINAL 2, RELATIVE TO TERMINAL 1, CAUSES A DECREASE IN PRESSURE AT THE SOUND OUTLET.

2 LOCATED FROM TWO SURFACES FOR CUSTOMER CONVENIENCE. ONLY APPLICABLE FROM ONE SURFACE, NOT TO BE USED TOGETHER. HORIZONTAL LOCATION FOR TERMINAL CENTERED TO $\pm 0,17$ [.007].

3 RECEIVERS WIRED IN ELECTRICAL SERIES WHEN CONNECTED TO TERMINAL 1 AND TERMINAL 2.



NOMINAL WEIGHT
.71 GRAMS

DIMENSIONS IN MILLIMETERS [INCHES]

KNOWLES ELECTRONICS
ITASCA, ILLINOIS U.S.A.

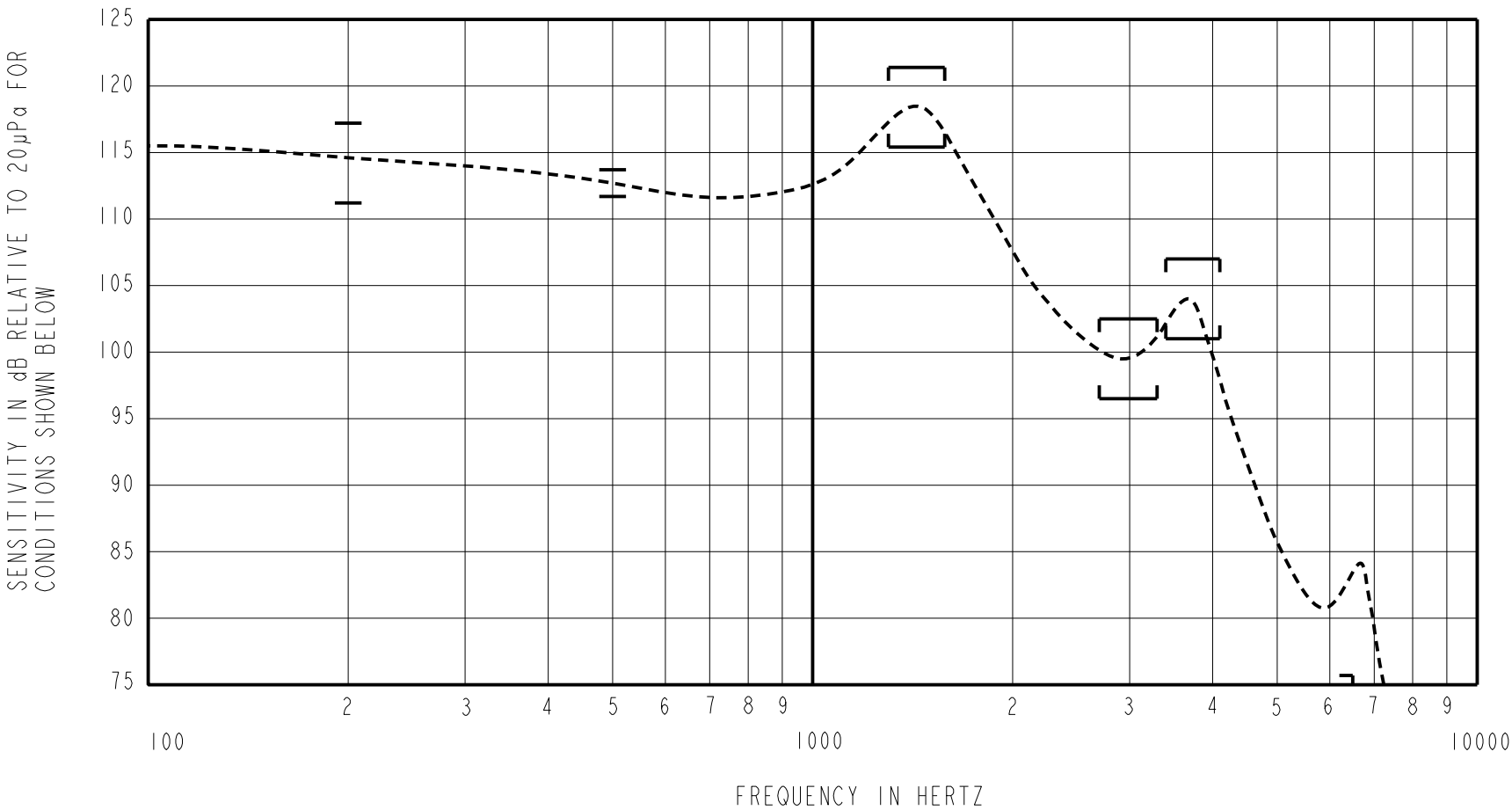
Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
			Active	A
A	CI0115283P	7-29-11		
SCALE: 4:1			DR. BY	DATE
DO NOT SCALE DRAWING			LSY	7-29-11
TITLE: RECEIVER			CK. BY	DATE
OUTLINE DRAWING			GJP	8-1-11
HODTEC-31515-000			APP. BY	DATE
SHT 1.1			GJP	8-1-11

THE HODTEC-31515-000 IS A PAIR OF BALANCED ARMATURE RECEIVERS INTENDED FOR USE IN HIGH POWER HEARING AIDS. IT HAS A MEDIUM DCR TO IMPEDANCE RATIO AND IS A SIMILAR SIZE TO AN EF RECEIVER.

NO DAMPING

HODTEC-31515-000
SHEET 2.1

CONSTANT VOLTAGE DRIVE CONDITIONS



ACOUSTICAL

SENSITIVITY
DEVICE WILL PRODUCE THE SPL LISTED BELOW UNDER TEST CONDITIONS DESCRIBED IN TABLE 3. NOMINAL SENSITIVITY AT 500 Hz IS dB RELATIVE TO 20µPa. ALL OTHER VALUES IN dB RELATIVE TO THE SENSITIVITY AT 500 Hz.

FREQUENCY (Hz)	MINIMUM	NOMINAL	MAXIMUM
200	-1.5	+1.5	+4.5
500	-1.0	112.7	+1.0
1300-1580	+2.7	+5.7	+8.7
2700-3300	-16.2	-13.2	-10.2
3400-4100	-11.7	-8.7	-5.7
6500	-37.0	---	---

TABLE 1

TOTAL HARMONIC DISTORTION
DEVICE WILL NOT EXCEED TOTAL HARMONIC DISTORTION LEVELS LISTED BELOW.

FREQUENCY (Hz)	AC DRIVE (V rms)	DC BIAS (mA)	LIMIT (%)
1/3 PEAK	0.148	0	3
1/2 PEAK	0.148	0	3
1/3 PEAK	0.417	0	8
1/2 PEAK	0.417	0	8

TABLE 2

TEST CONDITIONS

NOMINAL SOURCE VOLTAGE	0.148 V rms, 0 mA DC BIAS
SOURCE IMPEDANCE	<1 Ohm
TUBING	10mm [.394"] LONG X 1mm [.039"] ID ("ITE")
COUPLER CAVITY	2 cm ³ , SIMULATED ANSI S3.7 TYPE HA-3 (IEC 60318-5)

TABLE 3

ELECTRICAL

DC RESISTANCE	27.2 OHMS ± 10%
IMPEDANCE @ 500 Hz	41.0 OHMS ± 15%
IMPEDANCE @ 1kHz	81.3 OHMS ± 15%
INDUCTANCE @ 500 Hz	28 mH TYP
CAPACITANCE @ 10 MHz	5.2 pF TYP

TABLE 4

ISOLATION: CASE WILL BE ELECTRICALLY ISOLATED FROM THE COIL CIRCUIT.

MECHANICAL

PORT LOCATION: 12S

SOLDER TYPE: SAC305

TEMPERATURE

OPERATING: SENSITIVITY WILL NOT VARY MORE THAN
+1/-3 dB FROM -17°C TO 63°C

STORAGE: -40°C TO 63°C

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Revision	C.O. #	Implementation Date	RELEASE LEVEL		REVISION
			Active		A
A	C10115283P	7-29-11			
WHEN TEST LIMITS ARE USED TO ESTABLISH INCOMING INSPECTION ACCEPTANCE/REJECTION CRITERIA, CORRELATION OF TEST EQUIPMENT WITH KNOWLES IS ALSO REQUIRED FOR ELIMINATION OF EQUIPMENT AND TEST METHOD VARIATION			DR. BY LSY	DATE 7-29-11	
TITLE: RECEIVER PERFORMANCE SPECIFICATION			CK. BY	DATE	
			GJP	8-1-11	
			APP. BY	DATE	
			GJP	8-1-11	
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			SHT 2.1		