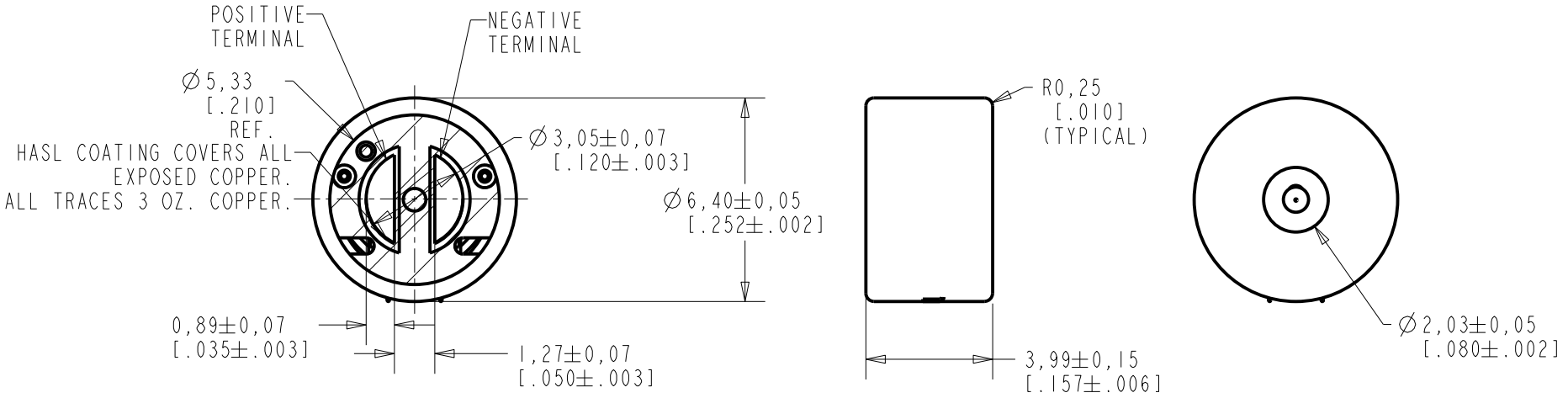
SR6438NWS-000
SHT 1.1

NOTES:

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





SCALE 2:1

NOMINAL WEIGHT
0.25 GRAMS

DIMENSIONS IN MILLIMETERS [INCHES]

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
			Active	J
J	C10116253	9-25-14		

KNOWLES ELECTRONICS
ITASCA, ILLINOIS U.S.A.

SCALE: 5:1

DO NOT SCALE DRAWING

TITLE: RECEIVER
OUTLINE DRAWING

SR6438NWS-000
SHT 1.1

DR. BY	DATE
MMM	7-5-07
CK. BY	DATE
GJP	7-12-07
APP. BY	DATE
GJP	7-12-07

KE11IASIZE.FRM Rev: B

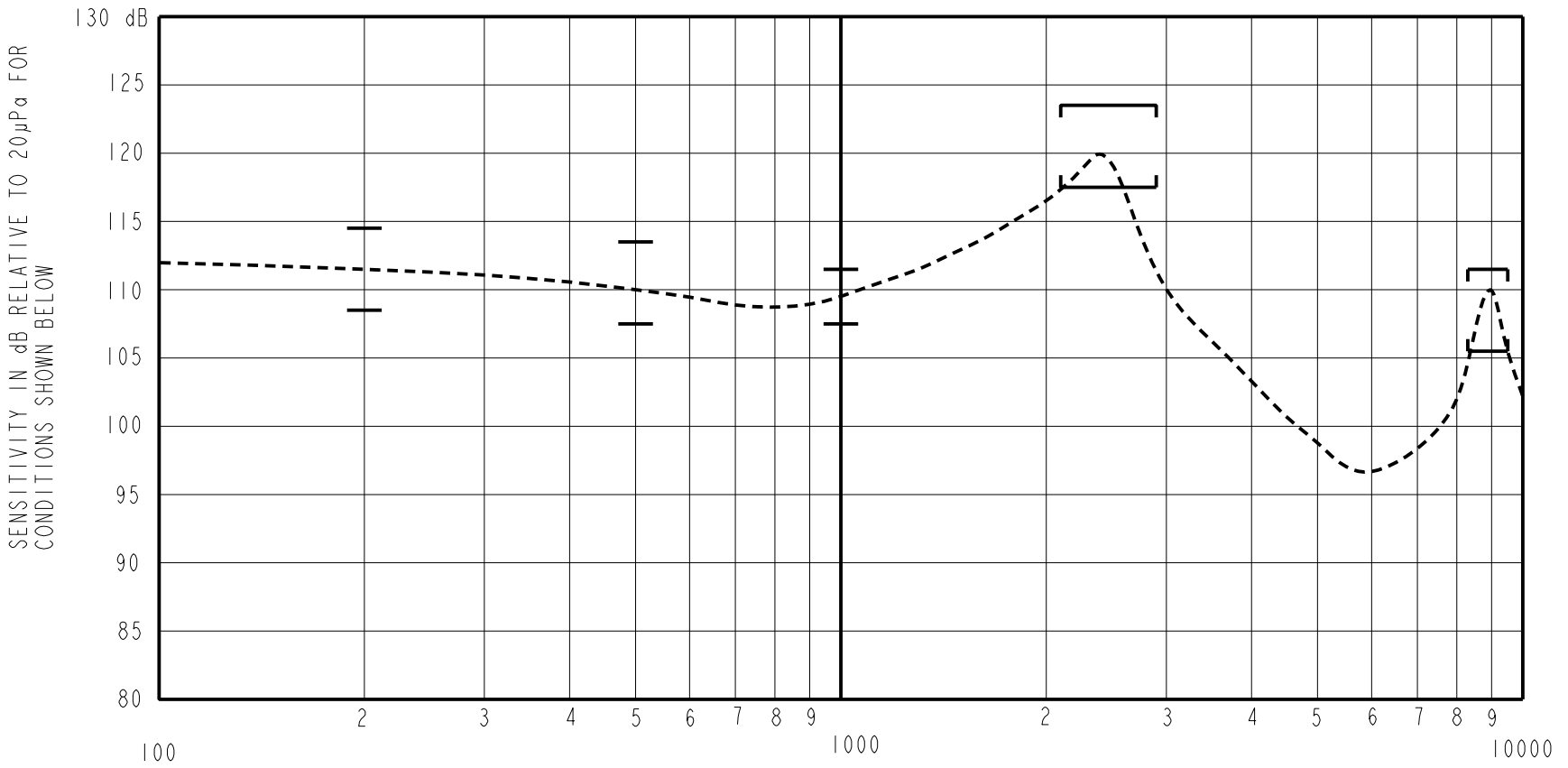
THE SIRENS SR6438NWS-000 IS A MAGNETIC BALANCED ARMATURE RECEIVER OPTIMIZED FOR USE IN EARPHONES.

NO DAMPING

SR6438NWS-000

SHEET 2.1

NOTE: SPECIFICATIONS FOLLOWED BY AN ASTERISK (*) ARE 100 % TESTED



ACOUSTICAL

SENSITIVITY
DEVICE WILL PRODUCE THE SPL LISTED BELOW UNDER TEST CONDITIONS DESCRIBED IN TABLE 3.
NOMINAL SENSITIVITY AT 1kHz IS dB RELATIVE TO 20µPa. ALL OTHER VALUES IN dB RELATIVE TO THE SENSITIVITY AT 1kHz.

FREQUENCY (Hz)	*MINIMUM*	*NOMINAL*	*MAXIMUM*
200	-1.0	+2.0	+5.0
500	-2.0	+1.0	+4.0
1000	-2.0	109.5	+2.0
2100-2900 PEAK	+8.0	+11.0	+14.0
8200-9400 PEAK	0.0	+3.0	+6.0

TABLE 1

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

FREQUENCY (Hz)	*AC DRIVE (V rms)*	*DC BIAS (V)*	*MAX (%)*
843	0.1	0	5
1264	0.1	0	5
843	0.3	0	10
1264	0.3	0	10

TABLE 2

MECHANICAL CHARACTERISTICS

SOLDER TYPE: SAC305 (LEAD FREE)
SOLDERING TEMPERATURE: 400°C FOR 2 SECONDS MAX.
STORAGE TEMPERATURE: -40°C TO 63°C
OPERATING TEMPERATURE: 0°C TO 63°C

AT EXTREME ENDS OF THE OPERATING TEMPERATURE THE SENSITIVITY WILL NOT VARY MORE THAN ±3 dB FROM ROOM TEMPERATURE

TEST CONDITIONS

NOMINAL SOURCE VOLTAGE	0.1 V rms, 0 mA DC BIAS
SOURCE IMPEDANCE	<1 Ohm
TUBING	7mm [.236"] LONG, 2.2mm [.039"] I.D.
COUPLER CAVITY	IEC 60318-4 ("711") COUPLER

TABLE 3

ELECTRICAL

DC RESISTANCE	25.0 Ohms ± 10%
IMPEDANCE @ 500 Hz	36.5 Ohms ± 15%
IMPEDANCE @ 1 KHz	55.5 Ohms ± 15%

TABLE 4

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

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
			Active	J
J	C10116253	9-25-14		

KNOWLES ELECTRONICS
ITASCA, ILLINOIS U.S.A.

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

TITLE: RECEIVER
PERFORMANCE SPECIFICATION

SR6438NWS-000
SHT 2.1

DR. BY	DATE
MMM	7-5-07
CK. BY	DATE
GJP	7-12-07
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GJP	7-12-07