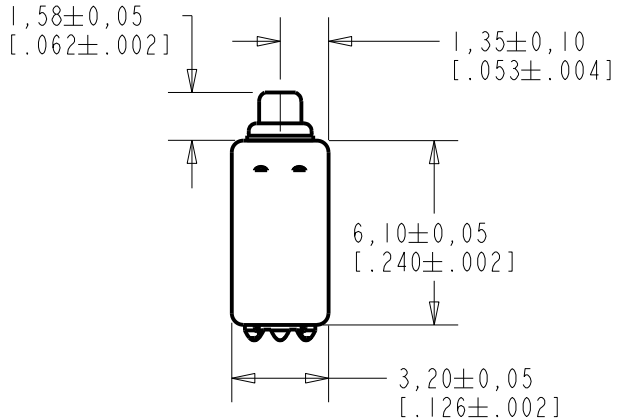
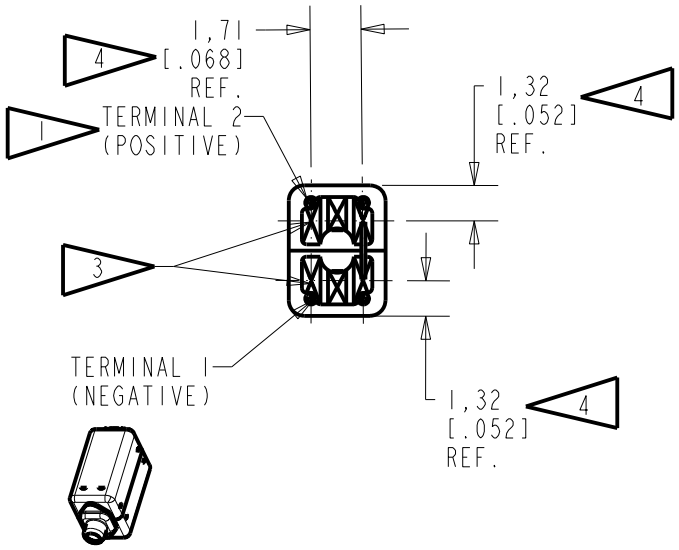
CR-31570-000
SHT 1.1

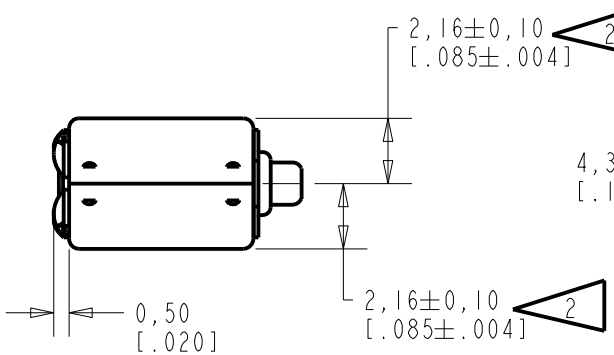


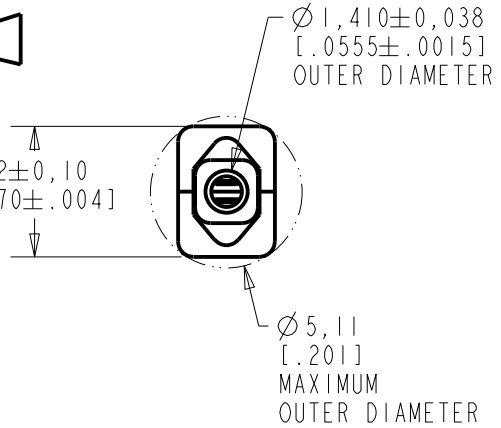
NOTES:

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 SURFACE FOR CUSTOMER CONVENIENCE. ONLY APPLICABLE FROM ONE SURFACE, NOT TO BE USED TOGETHER.
3. TERMINAL ELECTRICALLY CONNECTED TO CASE.
4. DIMENSION TO APPROXIMATE CENTER OF TERMINAL PAD.



SCALE 2:1
NOMINAL WEIGHT
0.25 GRAMS





DIMENSIONS IN MILLIMETERS [INCHES]

Revision	C.O. #	Implementation Date
C	C10114797	6-10-13
B	C10113003	11-11-11
A	C10112601	7-27-11

RELEASE LEVEL: Active

REVISION: C

KNOWLES ELECTRONICS
ITASCA, ILLINOIS U.S.A.

SCALE: 4:1

DO NOT SCALE DRAWING

TITLE: RECEIVER
OUTLINE DRAWING

CR-31570-000
SHT 1.1

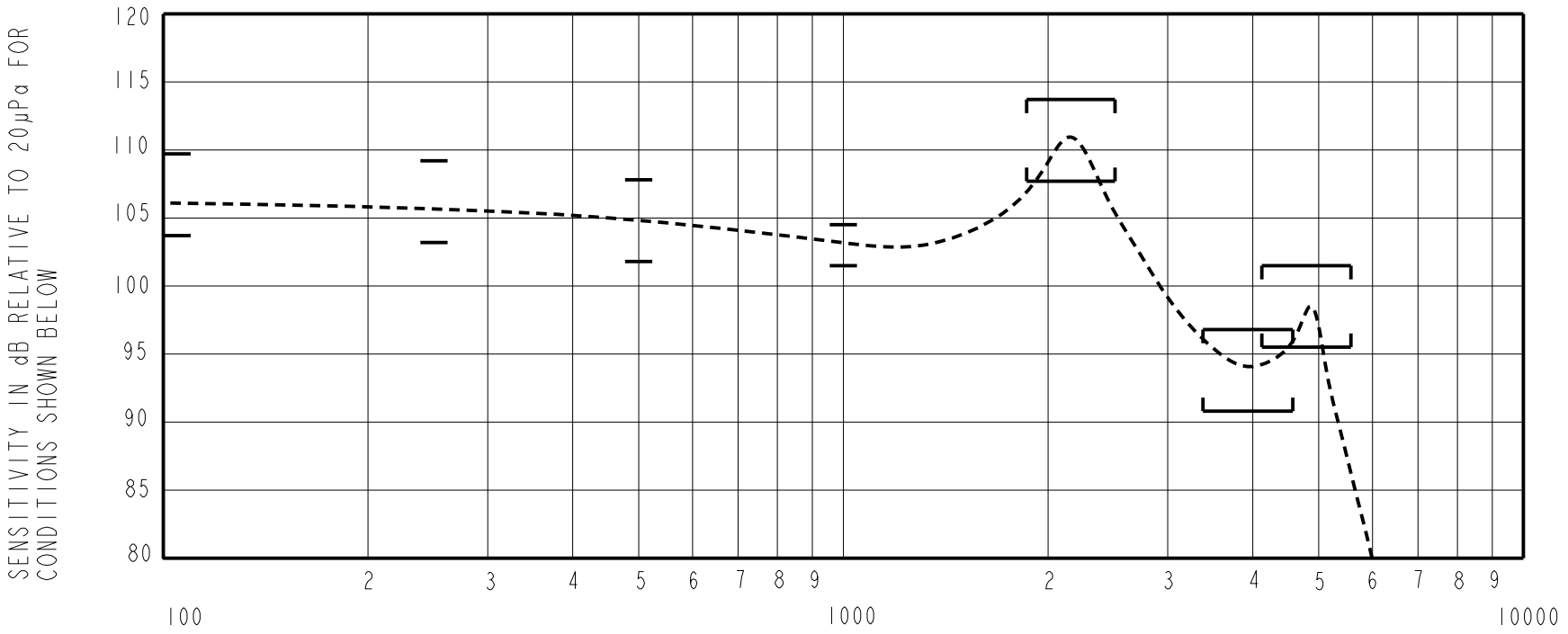
DR. BY	DATE
LSY	7-27-11
CK. BY	DATE
GJP	7-29-11
APP. BY	DATE
GJP	7-29-11

THIS IS A PAIR OF RECEIVERS WITH VERY LOW VIBRATION IN ALL DIRECTIONS, AND A QUADRAPOLE MAGNETIC RADIATION PATTERN.

NO DAMPING

CR-31570-000
SHEET 2.1

CONSTANT VOLTAGE DRIVE CONDITIONS



ACOUSTICAL

SENSITIVITY
DEVICE WILL PRODUCE THE SPL LISTED BELOW UNDER TEST CONDITIONS DESCRIBED IN TABLE 4. NOMINAL SENSITIVITY AT 1kHz IS dB RELATIVE TO 20µPa. ALL OTHER VALUES IN dB RELATIVE TO THE SENSITIVITY AT 1kHz.

LIMIT TYPE	*FREQUENCY (Hz)*	*MINIMUM*	*NOMINAL*	*MAXIMUM*
REL	100	+0.7	+3.7	+6.7
REL	250	+0.2	+3.2	+6.2
REL	500	-1.2	+1.8	+4.8
REF	1000	-1.5	103.0	+1.5
PEAK	1860 - 2510	+4.7	+7.7	+10.7
VALLEY	3380 - 4580	-12.2	-9.2	-6.2
PEAK	4125 - 5580	-7.5	-4.5	-1.5

TABLE 1

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

FREQUENCY (Hz)	*AC DRIVE (Vrms)*	*DC BIAS (V)*	*LIMIT (%)*
728	0.112	0	3
1082	0.112	0	3
728	0.315	0	8
1082	0.315	0	8

TABLE 2

MAXIMUM OUTPUT LEVEL

POWER (mW)	*500 Hz SPL (dB)*	*REQUIRED VOLTAGE (Vrms)*	*Peak SPL (dB)*	*REQUIRED VOLTAGE (Vrms)*
10	118.5	0.728	129.2	1.249

TABLE 3

TEST CONDITIONS

NOMINAL SOURCE VOLTAGE	0.112 Vrms, 0 mA DC BIAS
SOURCE IMPEDANCE	<1 Ohm
TUBING	10 mm [.394"] LONG X 1 mm [.039"] I.D. ("ITE")
COUPLER CAVITY	2 CM^3, SIMULATED ANSI S3.7 TYPE HA-3 (IEC 60318-5)
MAXIMUM DRIVE VOLTAGE	1.55 Vrms

TABLE 4

ELECTRICAL

DC RESISTANCE @ 20°C	40.9 Ohms ± 10%
IMPEDANCE @ 500 Hz	56.7 Ohms ± 15%
IMPEDANCE @ 1 kHz	87.7 Ohms ± 15%
INDUCTANCE @ 500 Hz	10.8 mH TYPICAL
CAPACITANCE @ 10 MHz	2.8 pF TYPICAL

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 AT 500 Hz FROM -17°C TO 63°C

STORAGE: -40°C TO 63°C

SHOCK RESISTANCE: 90% SURVIVAL RATE WITH THD @ 1/3 PEAK FREQUENCY LESS THAN 10%, THD @ 1/2 PEAK FREQUENCY LESS THAN 20% AND LESS THAN 3dB CHANGE IN SENSITIVITY AT 1kHz WHEN SUBJECTED TO 14,100 G.

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
C	C10114797	6-10-13	Active	C
B	C10113003	11-11-11		
A	C10112601	7-27-11		

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

CR-31570-000
SHT 2.1

DR. BY	DATE
LSY	7-27-11
CK. BY	DATE
GJP	7-29-11
APP. BY	DATE
GJP	7-29-11