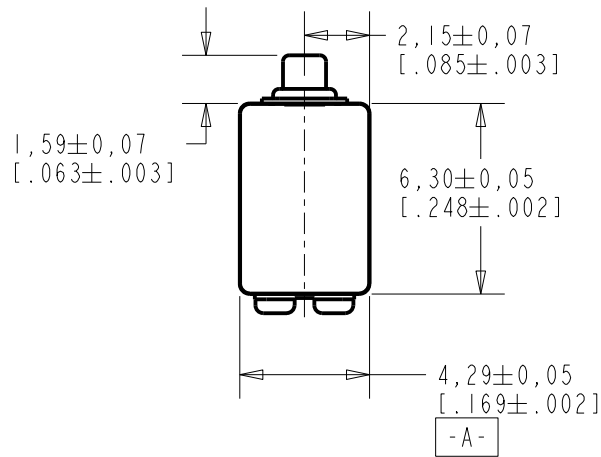


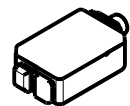
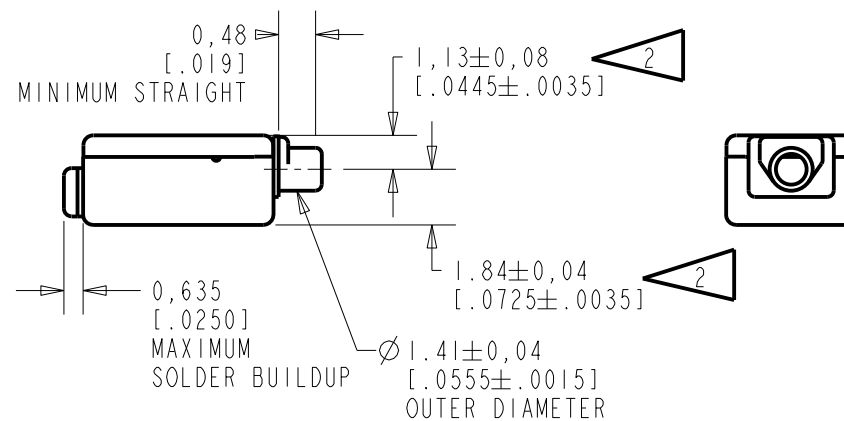
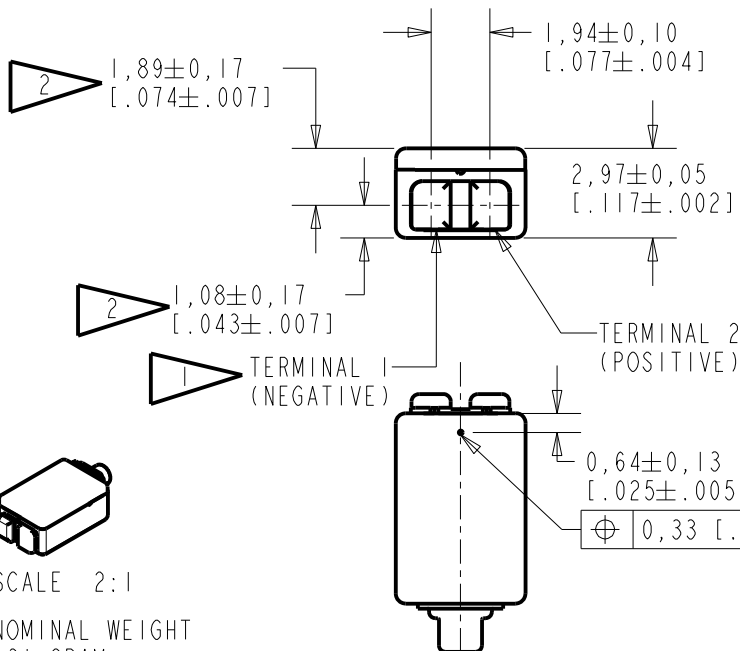
ED-31305-163

SHT 1.1



NOTE:

- 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 IT IS IMPORTANT TO KEEP HOLE CLEAN AND CLEAR AT ALL TIMES. CLOGGING THE HOLE WILL CAUSE PERFORMANCE CHANGES.



SCALE 2:1

NOMINAL WEIGHT
.31 GRAM

DIMENSIONS IN MILLIMETERS [INCHES]

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
			Active	A
A	C10112227P	3-22-11		

SCALE: 4:1		DR. BY DATE
DO NOT SCALE DRAWING		KL 3-22-11
		CK. BY DATE
TITLE: RECEIVER		GJP 3-24-11
		ED-31305-163
OUTLINE DRAWING		APP. BY DATE
		GJP 3-24-11

KNOWLES ELECTRONICS
ITASCA, ILLINOIS U.S.A.

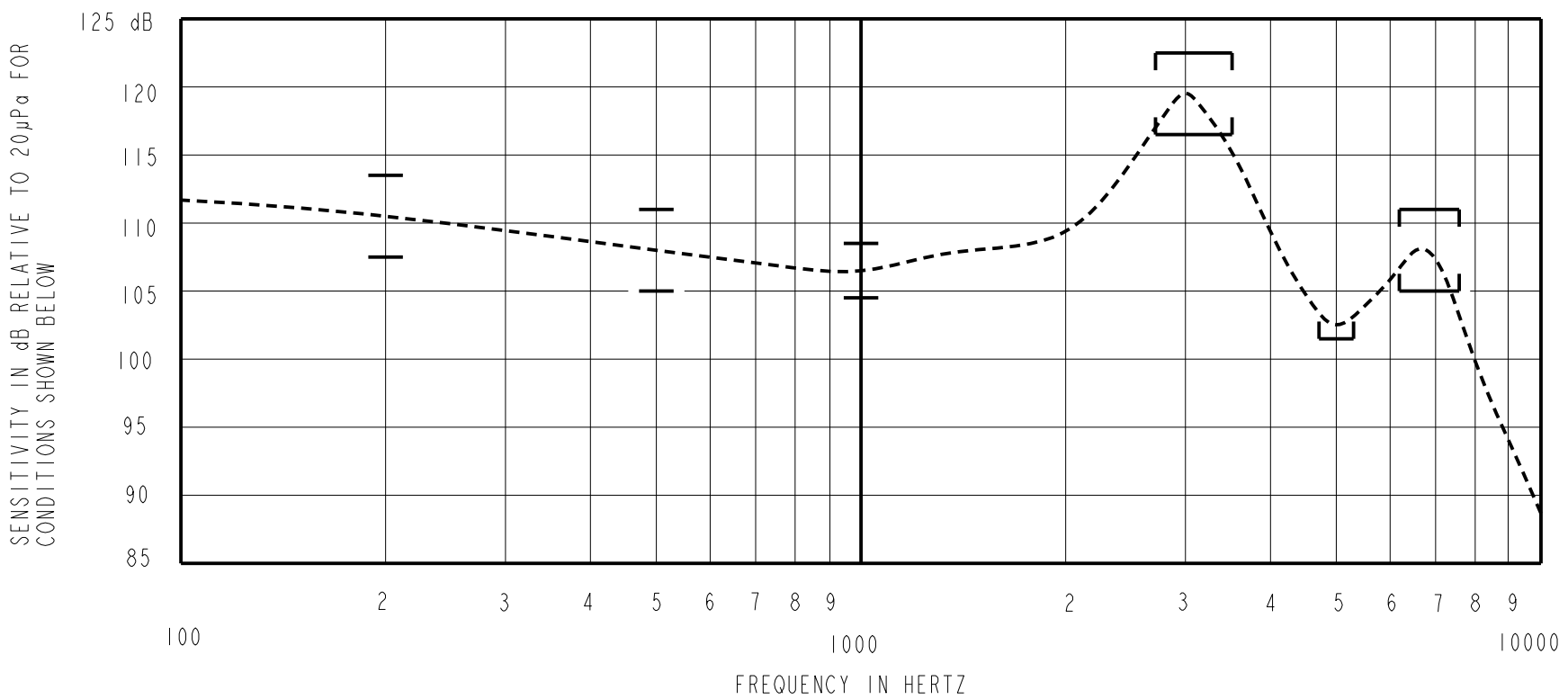
SHT 1.1

DESCRIPTION

THE ED-31305-163 IS A RESISTIVE VENTED RECEIVER WITH CUSTOMIZED TESTING.

NO DAMPING

ED-31305-163
SHEET 2.1



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. TEST DATA MEASURED WITH VENT OPEN.

FREQUENCY (Hz)	MINIMUM	NOMINAL	MAXIMUM
200	+1.0	+4.0	+7.0
500	-1.5	+1.5	+4.5
1000	-2.0	106.5	+2.0
2750-3550	+10.0	+13.0	+16.0
5000	-5.0	---	---
6200-7600	-1.5	+1.5	+4.5

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 (%)
500	0.413	0	10
1000	0.146	0	5
1500	0.146	0	5

TABLE 2

TEST CONDITIONS

NOMINAL SOURCE VOLTAGE	0.146 V rms, 0mA DC BIAS
SOURCE IMPEDANCE	<1 Ohm
TUBING	TUBELESS, KNOWLES TOOL NUMBER T8688
COUPLER CAVITY	IEC 60318-4(IEC 711)

TABLE 3

ELECTRICAL

NOMINAL SOURCE VOLTAGE	0.146 V rms, 0mA DC BIAS
DC RESISTANCE	39.2 OHMS ± 10%
IMPEDANCE @ 500 Hz	58.8 OHMS ± 20%
IMPEDANCE @ 1 kHz	91.8 OHMS ± 20%

TABLE 4

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

PORT LOCATION: 12N

BUZZ TEST

LISTENING TEST CONDUCTED BETWEEN 50Hz TO 5kHz TO DETECT BUZZ.

INPUT VOLTAGE DRIVE SIGNAL	.146V
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TABLE 5

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
			Active	A
A	CI0112227P	3-22-11		
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				
TITLE: RECEIVER			ED-31305-163	DR. BY KL DATE 3-22-11
PERFORMANCE SPECIFICATION			SHT 2.1	CK. BY GJP DATE 3-24-11
				APP. BY GJP DATE 3-24-11

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