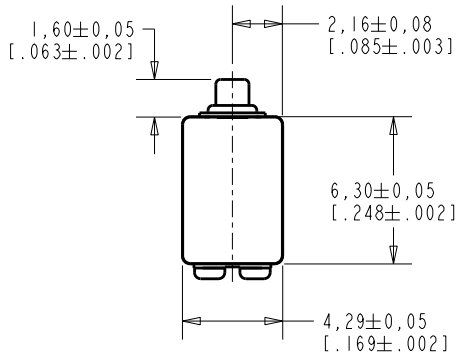
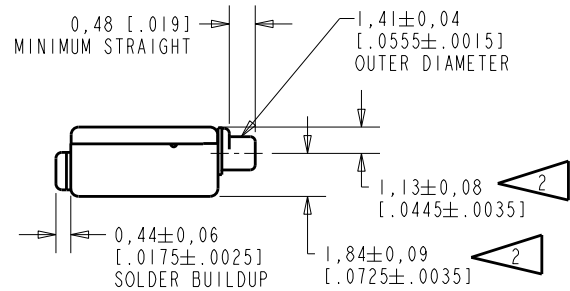
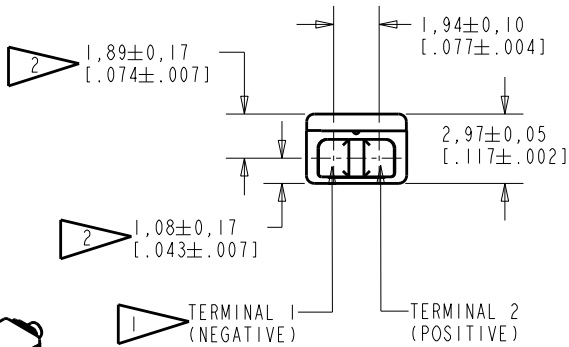


ED-30103-000
SHT 1.1



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 ±0,17 [.007].



SCALE 2:1

NOMINAL WEIGHT
.31 GRAM

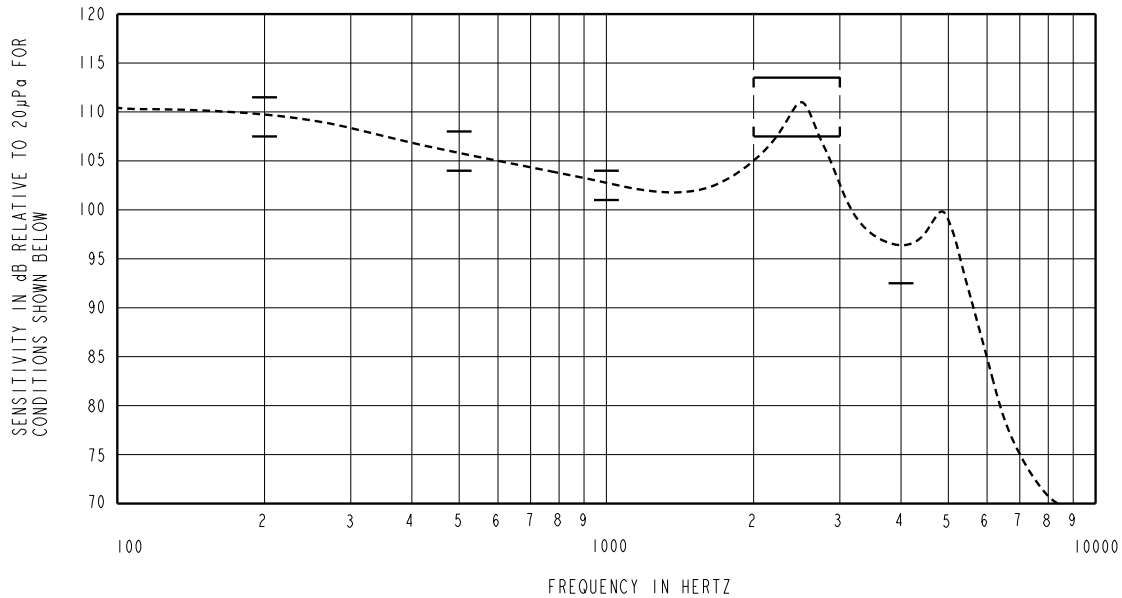
DIMENSIONS IN MILLIMETERS [INCHES]

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
			Active	D
D	C10108272	10-16-08		
SCALE: 4:1			DR. BY	DATE
DO NOT SCALE DRAWING			MMM	4-12-07
TITLE: RECEIVER			ED-30103-000	CK. BY
OUTLINE DRAWING			SHT 1.1	GJP
			APP. BY	DATE
			GJP	4-12-07

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HE111AS12E.FRM Rev: B

CONSTANT VOLTAGE DRIVE CONDITIONS



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	+5.0	+7.0	+9.0
500	+1.5	+3.5	+5.5
1000	-1.5	102.5	+1.5
2000 - 3000	+5.0	+8.0	+11.0
4000	-10.0	---	---

PORT LOCATION: 12C

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	0.252	0	10
830	0.089	0	5
1250	0.089	0	5

TABLE 2

TEST CONDITIONS

NOMINAL SOURCE VOLTAGE	0.089 V rms, 0mA DC BIAS
SOURCE IMPEDANCE	<1 Ohm
TUBING	10mm [.394"] LONG, 1mm [.039"] I.D.
COUPLER CAVITY	2 CM ³ , SIMULATED ANSI S3.7 TYPE HA-3 (IEC 126)

TABLE 3

ELECTRICAL

DC RESISTANCE	9.5 OHMS ± 10%
IMPEDANCE @ 500 Hz	19 OHMS ± 15%
IMPEDANCE @ 1 kHz	33 OHMS ± 15%

TABLE 4

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

TEMPERATURE: OPERATING RANGE FROM -17°C TO 63°C (SENSITIVITY WILL NOT VARY BY MORE THAN ±1/3 dB WITHIN RANGE)
 SENSITIVITY AT 0°C IS 2dB LOWER THAN THE SENSITIVITY AT ROOM TEMPERATURE.
 STORAGE RANGE FROM -40°C TO 63°C.

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
D	C10108272	10-16-08	Active	D

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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	DATE	
TITLE: RECEIVER PERFORMANCE SPECIFICATION		MM	4-12-07	
		ED-30103-000	GJP	4-12-07
		SHT 2.1	GJP	4-12-07