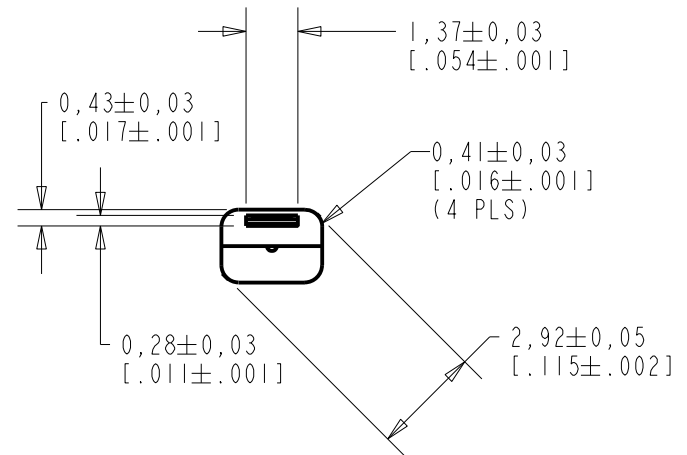
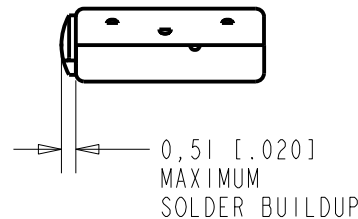
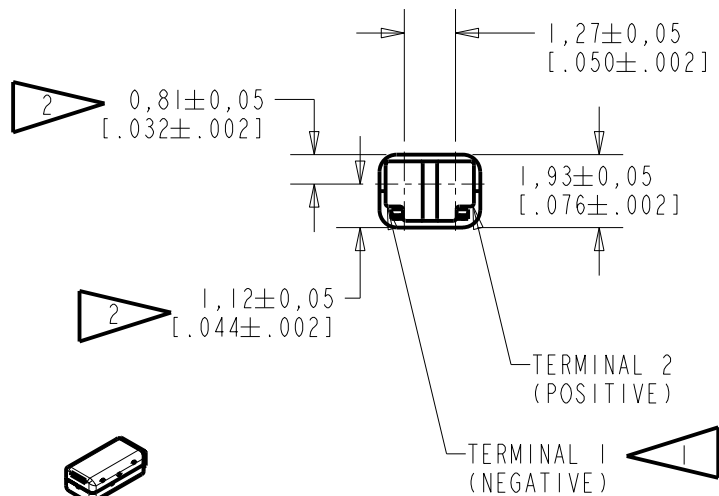
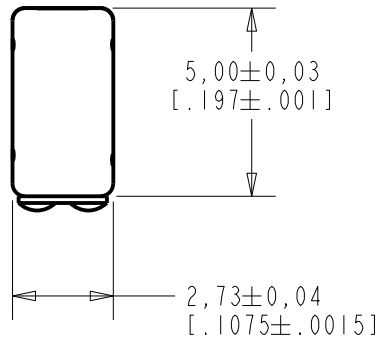


**WBFK-30019-000**

**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.



SCALE 2:1  
NOMINAL WEIGHT  
.11 GRAMS

DIMENSIONS IN MILLIMETERS [INCHES]

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
G	C10111950	12-20-10	<b>Active</b>	<b>G</b>

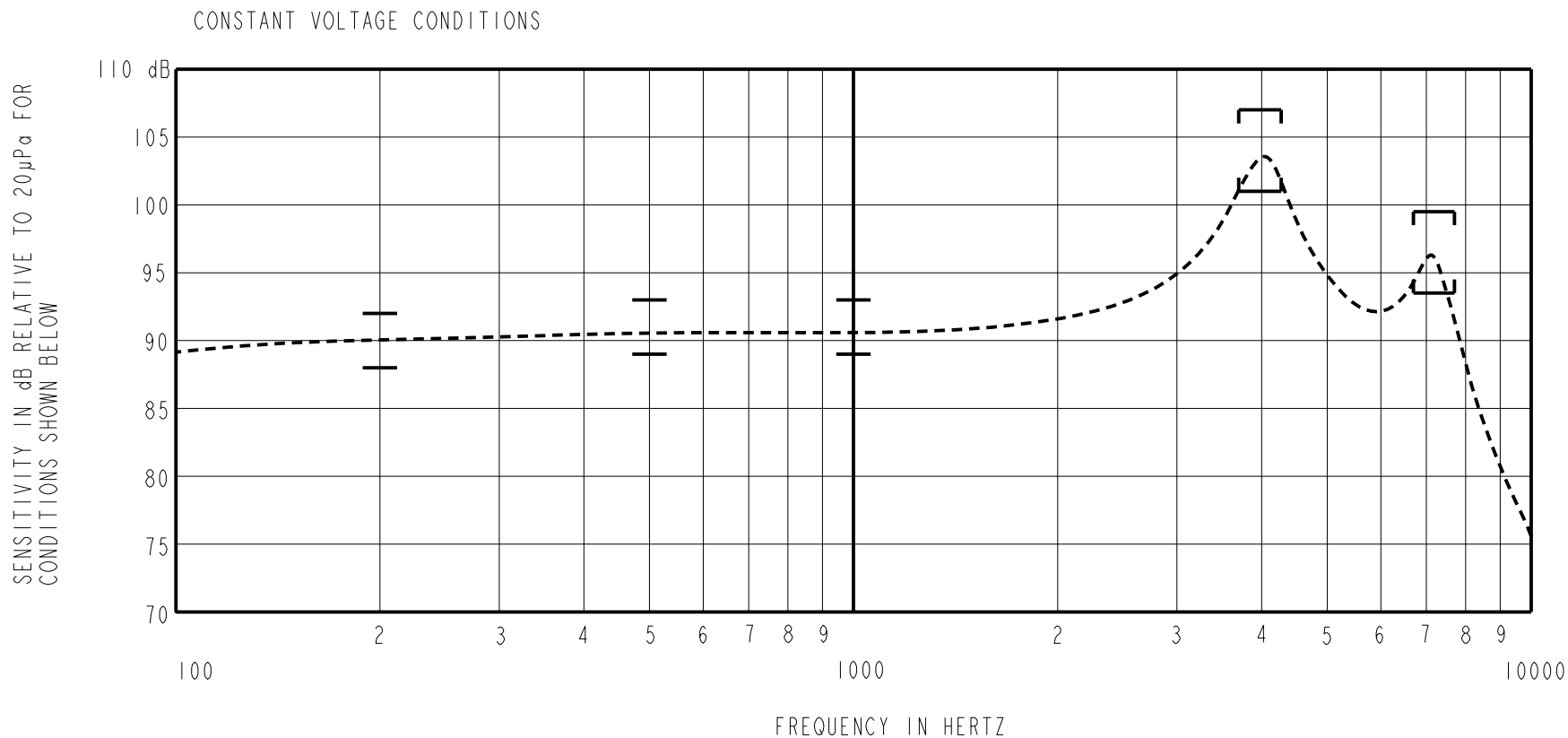
SCALE: 5:1	DR. BY: AB	DATE: 6-7-06
DO NOT SCALE DRAWING	CK. BY: GJP	DATE: 6-8-06
TITLE: RECEIVER	APP. BY: GJP	DATE: 6-8-06
OUTLINE DRAWING	WBFK-30019-000 SHT 1.1	

**KNOWLES ELECTRONICS**  
ITASCA, ILLINOIS U.S.A.

AN UNDAMPED AND TUBELESS MAGNETIC BALANCED ARMATURE RECEIVER  
 INTENDED FOR USE AS THE HIGH FREQUENCY DRIVER IN A HIFI SYSTEM.  
 NOTE: SPECIFICATIONS FOLLOWED BY AN ASTERISK (\*) ARE 100% TESTED.

NO DAMPING

WBFK-30019-000  
 SHEET 2.1



ACOUSTICAL

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

FREQUENCY (Hz)	MINIMUM	NOMINAL	MAXIMUM
200	-3.0	-1.0	+1.0
500	-2.0	0.0	+2.0
1000	-2.0	91.0	+2.0
3700-4300	+10.0	+13.0	+16.0
6700-7700	+2.5	+5.5	+8.5

TABLE 1

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

FREQUENCY (Hz)	AC DRIVE (V rms)	DC BIAS (V)	LIMIT (%)
1280	.094	0	5
1920	.094	0	5
1920	.265	0	10

TABLE 2

TEST CONDITIONS

NOMINAL SOURCE VOLTAGE	.094 V rms, 0 mA DC BIAS
SOURCE IMPEDANCE	<1 Ohm
TUBING	10mm [.394"] LONG, 1mm [.039"] I.D.
COUPLER CAVITY	2 CM <sup>3</sup> , SIMULATED ANSI S3.7 TYPE HA-3 (IEC 60318-5)

TABLE 3

ELECTRICAL

DC RESISTANCE	12.5 Ohms ± 10%*
IMPEDANCE @ 500 Hz	14.5 Ohms ± 15%*
IMPEDANCE @ 1kHz	15.2 Ohms ± 15%*

TABLE 4

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

MECHANICAL

PORT LOCATION: 12N  
 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.

**KNOWLES ELECTRONICS**  
 ITASCA, ILLINOIS U.S.A.

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
G	C10111950	12-20-10	Active	G

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: <b>RECEIVER</b> PERFORMANCE SPECIFICATION		AB	6-7-06
		GJP	6-8-06
WBFK-30019-000 SHT 2.1		APP. BY	DATE
		GJP	6-8-06