

SHT I.I

OUTLINE DRAWING

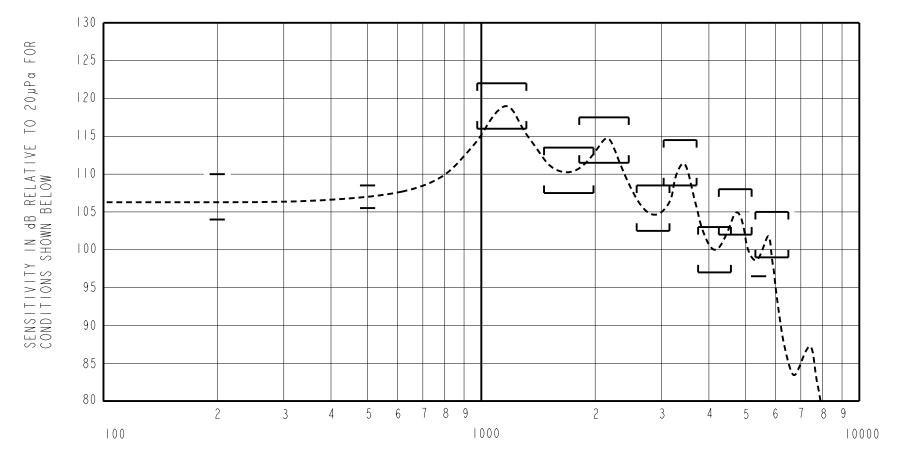
8-28-06

TEC-30033-000

THIS UNIT IS A BALANCED ARMATURE RECEIVER INTENDED FOR USE IN BTE HEARING AIDS, AND IS 1/2 THE SIZE OF AN EF RECEIVER.

SHEET 2.1

## CONSTANT VOLTAGE DRIVE CONDITIONS



### FREQUENCY IN HERTZ

#### **ACOUSTICAL**

SENSITIVITY DEVICE WILL PRODUCE THE SPL LISTED BELOW UNDER TEST CONDITIONS DESCRIBED IN TABLE 3. NOMINAL SENSITIVITY AT 1000 Hz IS dB RELATIVE TO 20μPα. ALL OTHER VALUES IN dB RELATIVE TO THE SENSITIVITY AT 500 Hz.

10 20 pt a. 1122 011	TEN THEOLO IN	WB MEEMITIE TO	THE CENTOTITIES AT C
FREQUENCY (Hz)	MINIMUM	NOMINAL	MAXIMUM
200	- 3 . 0	0.0	+ 3 . 0
500	-1.5	107.0	+1.5
975-1315	+9.0	+12.0	+   5.0
1465-1980	+0.5	+ 3 . 5	+6.5
1815-2455	+4.5	+7.5	+   0 . 5
2575-3145	-4.5	-1.5	+1.5
3035-3710	+1.5	+4.5	+7.5
3745-4575	-10.0	-7.0	- 4 . 0
4250-5190	-5.0	-2.0	+   . 0
5412	-10.5		
5310-6490	-8.0	-5.0	-2.0

TABLE I

TOTAL HARMONIC DISTORTION

DEVICE WILL NOT EXCEED TOTAL HARMONIC DISTORTION LEVELS LISTED BELOW.

FREQUENCY (Hz)	AC DRIVE (V rms)	DC BIAS (mA)	LIMIT (%)
382	0.109	0	5
573	0.109	0	5
573	0.218	0	10

TABLE 2

#### **ELECTRICAL**

DC RESISTANCE	22 OHMS ± 10%
IMPEDANCE @ 500 Hz	31 OHMS $\pm$ 15%
INDUCTANCE @ 500 Hz	7.2 mH $\pm$ 15%
CAPACITANCE @ 10 MHz	9.0 pF ± 20%

TABLE 4

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

MECHANICAL

PORT LOCATION: 12C 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

# TEST CONDITIONS

NOMINAL SOURCE VOLTAGE	0.109 V rms, TO DELIVER 0.35 mVA AT 500 Hz		
SOURCE IMPEDANCE	<   Ohm		
TUBING	8mm X Imm ID + 28mm X I.5mm ID EAR HOOK SIMULATOR + 25mm X 2mm ID TUBE + 18mm X 3mm ID TUBE		
COUPLER CAVITY	OUPLER CAVITY 2 cm <sup>3</sup> . SIMULATED ANSI S3.7 TYPE HA-3 (IEC 60318-5)		

TABLE 3

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
E	C10116424	11-28-14	l Active	-
D	C10107030	I - 30 - 08		

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

WHEN TEST LIMITS ARE USED TO ESTABLISH INCOMING INSPECTION ACCEPTANCE/REJECTION PR. BY CRITERIA, CORRELATION OF TEST EQUIPMENT WITH KNOWLES IS ALSO REQUIRED FOR ELIMINATION OF EQUIPMENT AND TEST METHOD VARIATION

CRG

RECEIVER

PERFORMANCE SPECIFICATION

LC ALCO DECILIDED FOR	DIV. DI	DATE
S IS ALSO REQUIRED FOR	CRG	8-21-06
	CK. BY	DATE
EC-30033-000	GJP	8-28-06
20 30033 000	APP. BY	DATE
SHT 2.1	GJP	8-28-06

DATE