

**DTEC-30811-000**

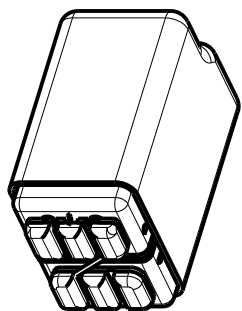
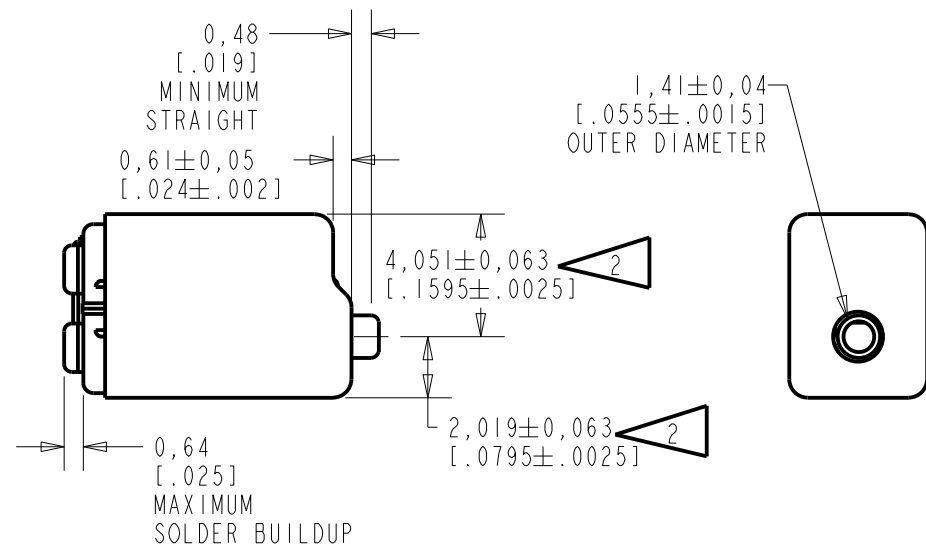
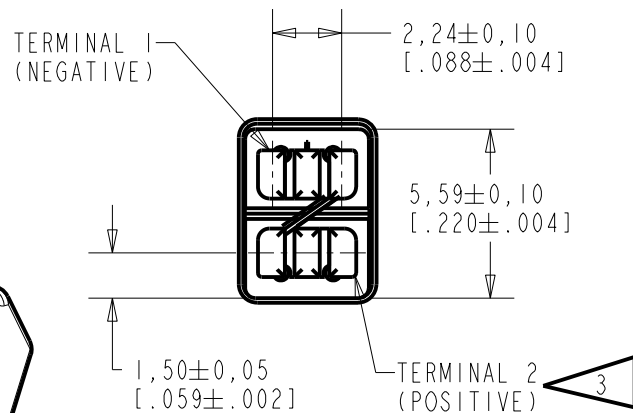
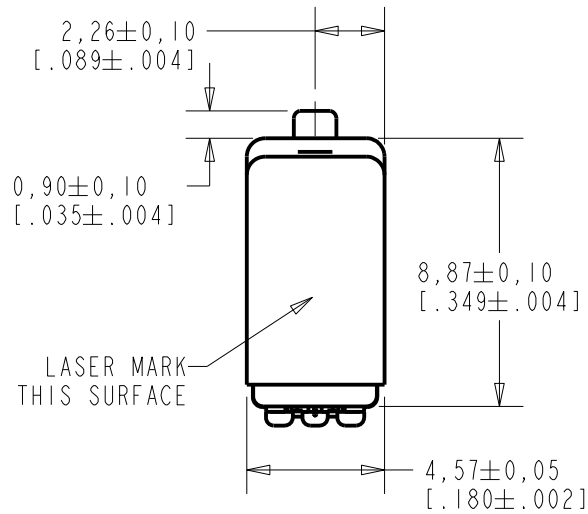
**SHT 1.1**

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. HORIZONTAL LOCATION FOR TERMINAL CENTERED TO  $\pm 0,17$  [0.007].

3. RECEIVERS WIRED IN ELECTRICAL SERIES WHEN CONNECTED TO TERMINAL 1 AND TERMINAL 2.



NOMINAL WEIGHT  
.94 GRAMS

DIMENSIONS IN MILLIMETERS [INCHES]

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
C	C10111230	5-13-10	Active	C
A	C10110694	12-8-09		

SCALE:	<b>4:1</b>	DR. BY	DATE
DO NOT SCALE DRAWING		MMM	12-8-09
TITLE:	<b>RECEIVER</b>	CK. BY	DATE
	OUTLINE DRAWING	GJP	12-14-09
		APP. BY	DATE
		GJP	12-14-09

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

**DTEC-30811-000**

**SHT 1.1**

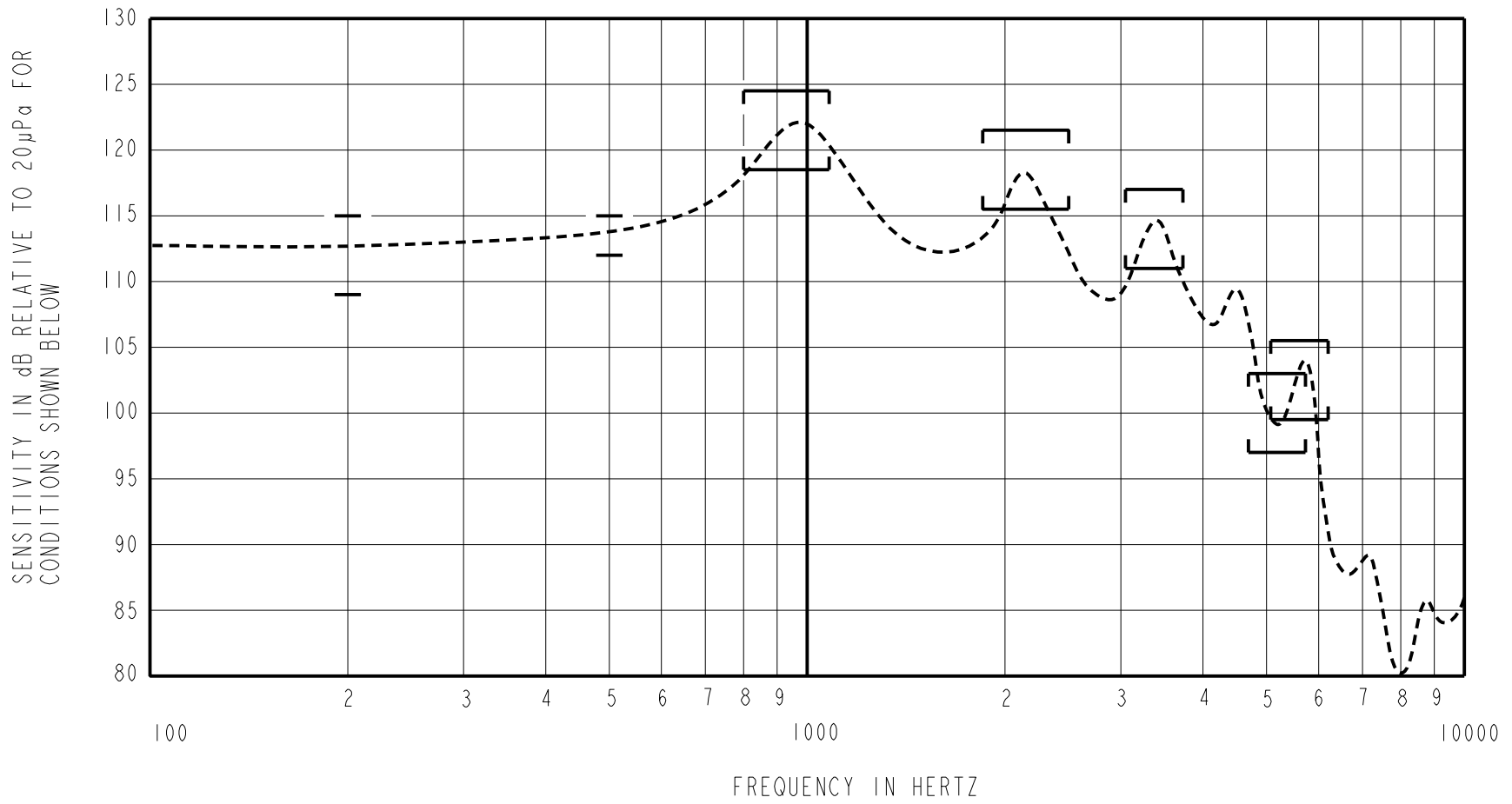
THE DTEC-30811-000 IS A PAIR OF BALANCED ARMATURE RECEIVERS WITH SHIELDING CUP AND EXTENDED TUBE INTENDED FOR USE IN BTE HEARING AIDS.

NO DAMPING

DTEC-30811-000  
SHEET 2.1

NOTE: SPECIFICATIONS FOLLOWED BY AN ASTERISK (\*) ARE 100% TESTED.

CONSTANT VOLTAGE DRIVE CONDITIONS



ACOUSTICAL

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

FREQUENCY (Hz)	MINIMUM	NOMINAL	MAXIMUM
200	-4.5	-1.5	+1.5
500	-1.5	113.5	+1.5
800-1080	+5.0	+8.0	+11.0
1850-2500	+2.0	+5.0	+8.0
3050-3730	-2.5	+0.5	+3.5
4690-5730	-16.5	-13.5	-10.5
5075-6205	-14.0	-11.0	-8.0

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 (%)
315	0.178	0	5
470	0.178	0	5
470	0.356	0	10

TABLE 2

TEST CONDITIONS

NOMINAL SOURCE VOLTAGE	0.178 V rms, TO DELIVER 0.70 mVA AT 500 Hz
SOURCE IMPEDANCE	<1 Ohm
TUBING	8mm X 1mm ID + 28mm X 1.5mm ID EAR HOOK SIMULATOR + 25mm X 2mm ID TUBE + 18mm X 3mm ID TUBE
COUPLER CAVITY	2 cm <sup>3</sup> , SIMULATED ANSI S3.7 TYPE HA-3 (IEC 60318-5)

TABLE 3

ELECTRICAL

DC RESISTANCE	25 OHMS ± 10% *
IMPEDANCE @ 500 Hz	41 OHMS ± 15% *
INDUCTANCE @ 500 Hz	9 mH TYPICAL
CAPACITANCE @ 10 MHz	2 pF TYPICAL

TABLE 4

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

MECHANICAL

PORT LOCATION: 12B

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
C	C10111230	5-13-10	Active	C
A	C10110694	12-8-09		
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			MMM	12-8-09
			DTEC-30811-000	
SHT 2.1			GJP	12-14-09
			GJP	