

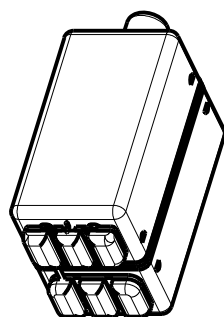
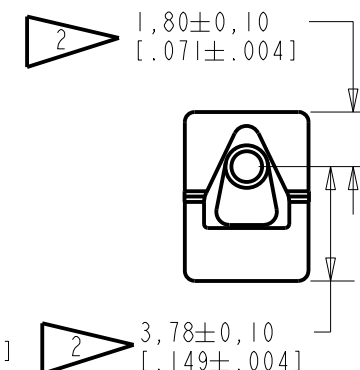
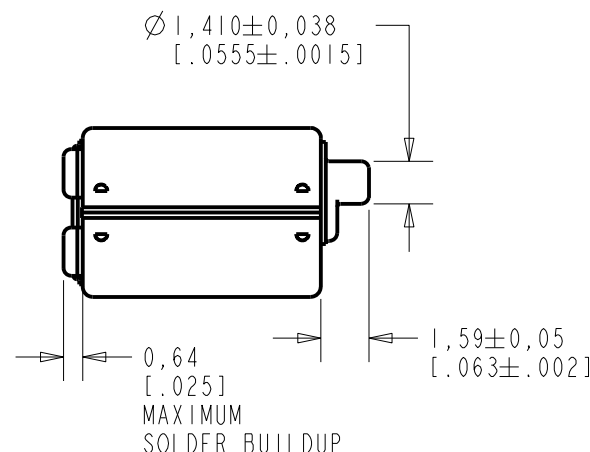
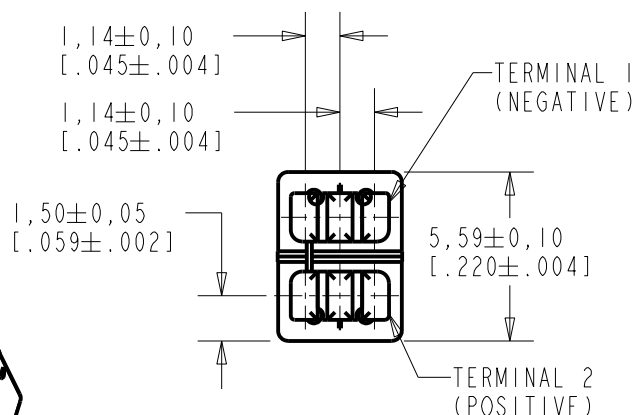
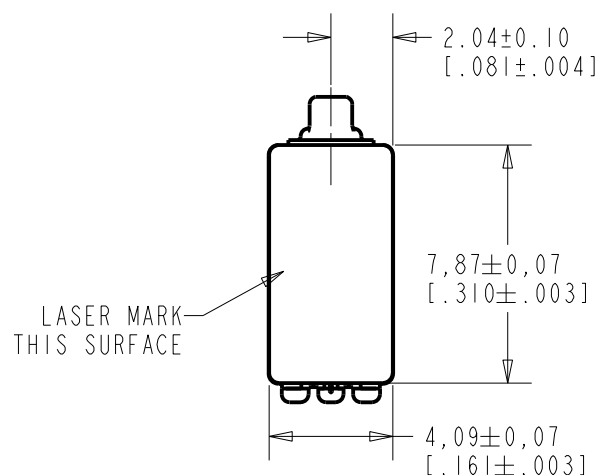
**DTEC-31116-000**

**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  $\pm 0,17$  [.007].



NOMINAL WEIGHT  
.71 GRAMS

DIMENSIONS IN MILLIMETERS [INCHES]

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

Revision	C.O. #	Implementation Date	RELEASE LEVEL		REVISION
			Active		A
A	C10111188	4-6-10			
SCALE:			4:1	DR. BY	DATE
				SDZ	4-6-10
DO NOT SCALE DRAWING				CK. BY	DATE
TITLE:			RECEIVER	GJP	4-6-10
			DTEC-31116-000	APP. BY	DATE
			OUTLINE DRAWING	GJP	4-6-10
			SHT 1.1		

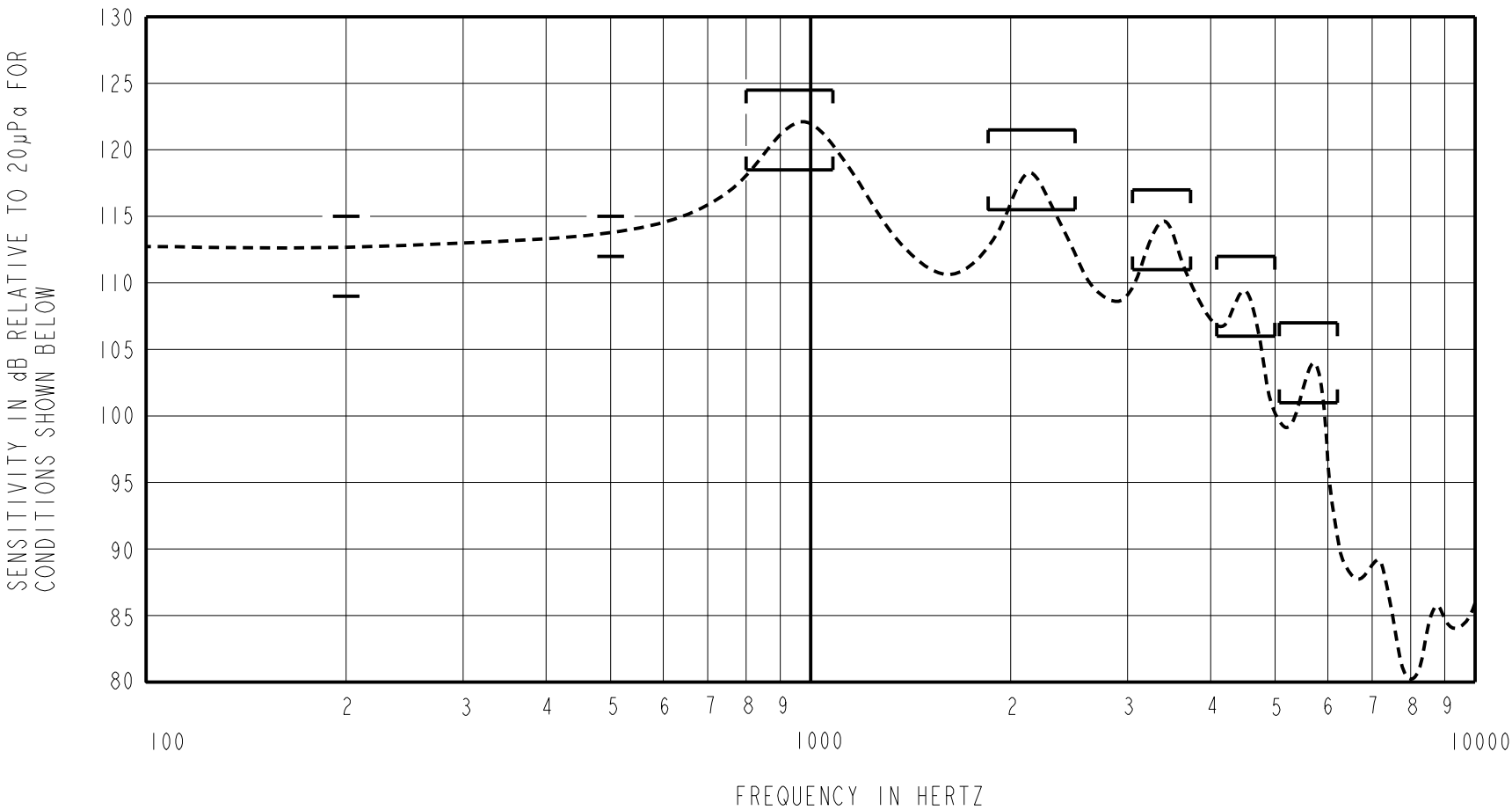
THE DTEC-31116-000 IS A PAIR OF BALANCED ARMATURE RECEIVERS INTENDED FOR USE IN BTE HEARING AIDS. IT HAS A LOW DCR TO IMPEDANCE RATIO, HAS THE CENTER TERMINAL CONNECTED TO CASE AND IS THE SAME SIZE AS AN EF RECEIVER

NO DAMPING

DTEC-31116-000  
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
4085-4995	-7.5	-4.5	-1.5
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	0.164	0	5
470	0.164	0	5
470	0.328	0	10

TABLE 2

TEST CONDITIONS

NOMINAL SOURCE VOLTAGE	0.164 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	22 OHMS ± 10% *
IMPEDANCE @ 500 Hz	38 OHMS ± 15% *
INDUCTANCE @ 500 Hz	16 mH TYPICAL
CAPACITANCE @ 10 MHz	2 pF TYPICAL

TABLE 4

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

MECHANICAL

PORT LOCATION: I2C

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
			Active		A
A	C10111188	4-6-10			
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
				SDZ	4-6-10
TITLE: RECEIVER				CK. BY	DATE
				GJP	4-6-10
PERFORMANCE SPECIFICATION				APP. BY	DATE
				GJP	4-6-10
			DTEC-31116-000		
			SHT 2.1		