

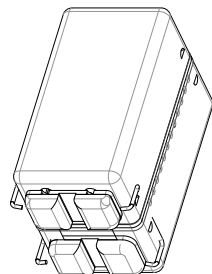
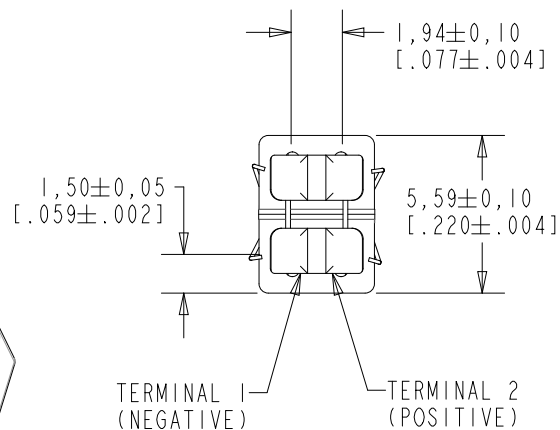
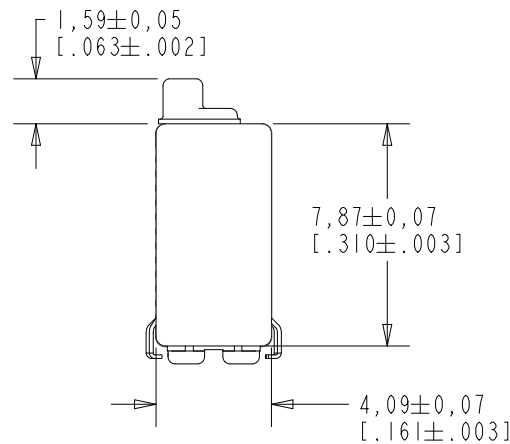
DTEC-33152-000

SHT 1.1

## NOTES:

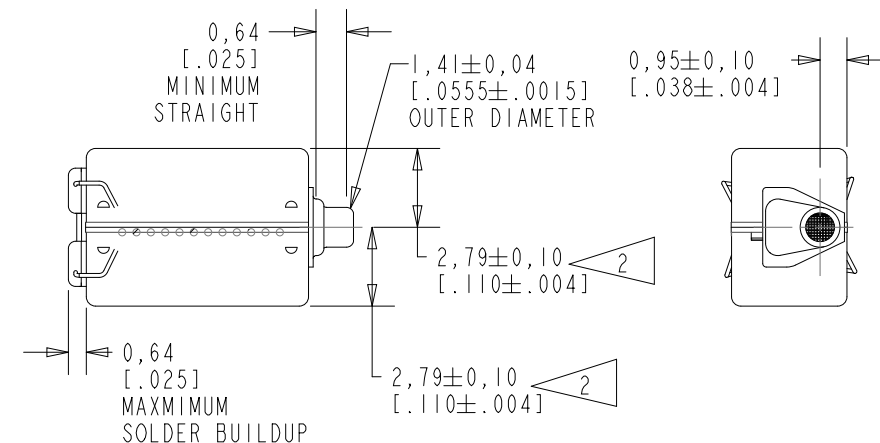
1. A POSITIVE GOING VOLTAGE AT TERMINAL 2, RELATIVE TO TERMINAL 1, CAUSES A DECREASE IN PRESSURE AT THE SOUND OUTLET.

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]



**RED CONTROLLED**  
**KNOWLES CORPORATION**

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
			Active	A
A	PI0002269	9-4-18		
SCALE: 4:1			DR. BY DVJ	DATE 9-4-18
DO NOT SCALE DRAWING			CK. BY GJP	DATE 9-6-18
TITLE: RECEIVER		DTEC-33152-000		APP. BY GJP
OUTLINE DRAWING		SHT 1.1		DATE 9-6-18

A PAIR OF MAGNETIC BALANCED ARMATURE RECEIVERS INTENDED FOR USE AS THE LOW FREQUENCY DRIVER IN A HI-FI SYSTEM.

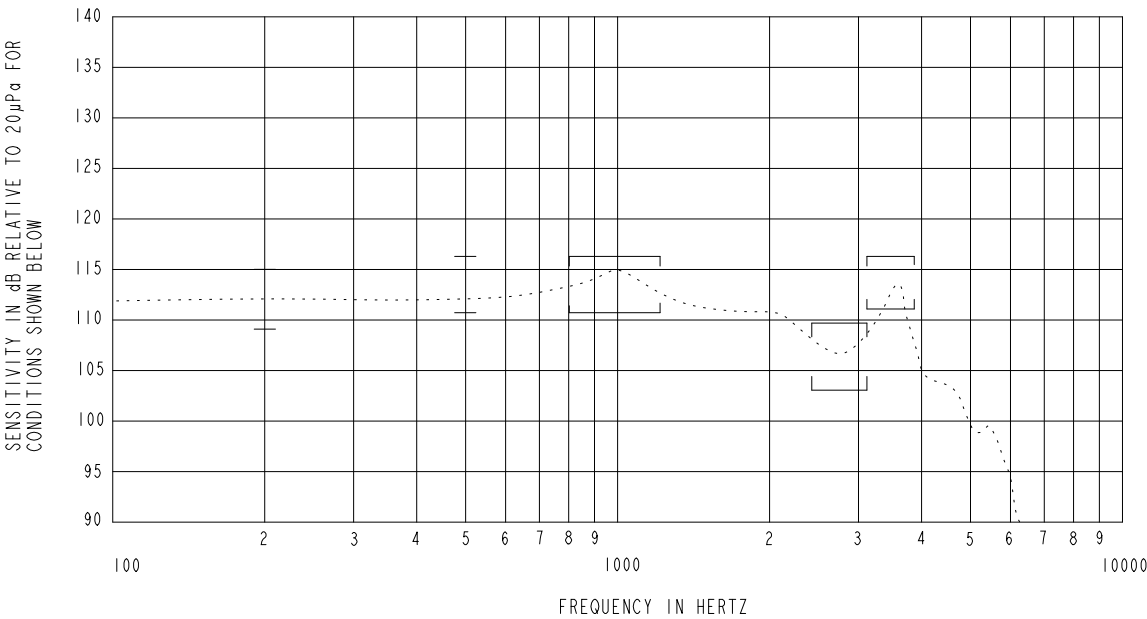
NO DAMPING

DTEC-33152-000

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	0.0	+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	-12.5	-9.5	-6.5

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	0.109	0	5
470	0.109	0	5
470	0.218	0	10

TABLE 2

TEST CONDITIONS

NOMINAL SOURCE VOLTAGE	0.109 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	11.0 OHMS ± 10% *
IMPEDANCE @ 500 Hz	14.5 OHMS ± 15% *
INDUCTANCE @ 500 Hz	5.1 mH TYPICAL
CAPACITANCE @ 10 MHz	18 pF TYPICAL

TABLE 4

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

MECHANICAL

PORT LOCATION: 11S

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

RED CONTROLLED

KNOWLES ELECTRONICS  
ITASCA, ILLINOIS U.S.A.

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
			Active	A
A	PI0002269	9-4-18		
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 DVJ	DATE 9-4-18
TITLE: RECEIVER			CK. BY GJP	DATE 9-6-18
PERFORMANCE SPECIFICATION			APP. BY GJP	DATE 9-6-18
			DTEC-33152-000 SHT 2.1	