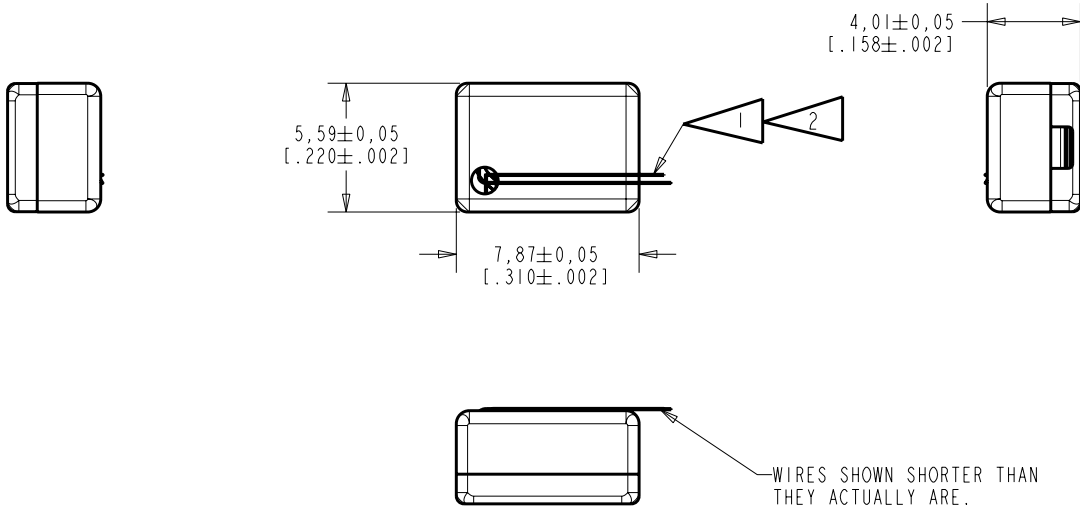


**EF-30038-000**  
SHT 1.1

NOTES:

- 1 BLUE LEAD IS POSITIVE  
RED LEAD IS NEGATIVE
- 2 A POSITIVE GOING VOLTAGE ON THE POSITIVE  
LEAD RELATIVE TO THE NEGATIVE LEAD CAUSES  
A DECREASE IN PRESSURE AT THE SOUND OUTLET.



DIMENSIONS IN MILLIMETERS [INCHES]

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

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
B	C10104776	11-06-06	Released	B
A	C10104524	10-26-06		
SCALE: 4:1			DR. BY	DATE
DO NOT SCALE DRAWING			SDZ	10-26-06
TITLE: RECEIVER			CK. BY	DATE
OUTLINE DRAWING			GJP	10-30-06
EF-30038-000			APP. BY	DATE
SHT 1.1			GJP	10-30-06

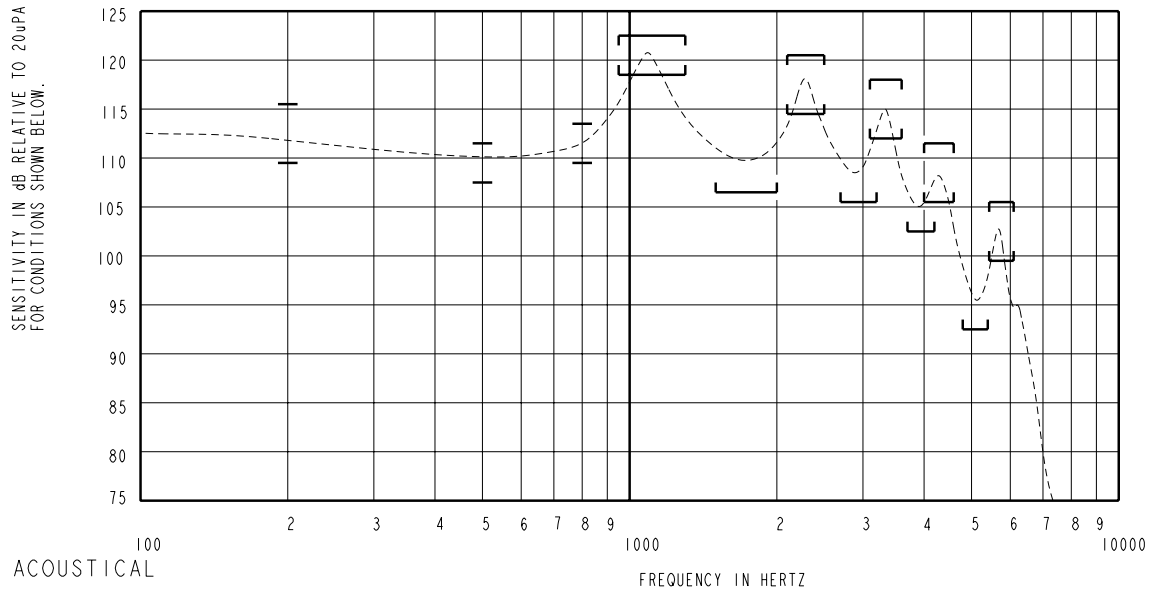
KE111ASTZE.FRM Rev: B

NO DAMPING

EF-30038-000

SHEET 2.1

THE EF-30038-000 IS A SHOCK PROTECTED EF-3815-000 ARMATURE RECEIVER INTENDED FOR USE IN BTE HEARING INSTRUMENTS.



ACOUSTICAL

FREQUENCY IN HERTZ

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 EXCEPT MINIMUM LIMITS AT 1500, 2000, AND 3000 Hz  
 (I.E., dB RE 20 µPa PER CUSTOMER REQUIREMENT).

FREQUENCY (Hz)	MINIMUM	NOMINAL	MAXIMUM
200	0.0	+3.0	+6.0
500	-2.0	109.5	+2.0
800	0.0	+2.0	+4.0
950-1300	+9.0	+11.0	+13.0
1500-2000	-3.0	-	-
2100-2500	+5.0	+8.0	+11.0
2700-3200	-4.0	-	-
3100-3600	+2.5	+5.5	+8.5
3700-4200	-7.0	-	-
4000-4600	-4.0	-1.0	+2.0
4800-5400	-17.0	-	-
5500-6100	-10.0	-7.0	-4.0

PORT LOCATION: I2N

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 (%)
500	0.14	0	5
500	0.25	0	10

TABLE 2

TEST CONDITIONS

NOMINAL SOURCE VOLTAGE	0.14 V rms, 0 mA DC BIAS
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 126)

TABLE 3

ELECTRICAL

DC RESISTANCE	18.3 Ohms ± 10%
IMPEDANCE @ 500 Hz	53 Ohms ± 15%
IMPEDANCE @ 1kHz	130 Ohms ± 15%

TABLE 4

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

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
B	C10104776	11-06-06	Released	B
A	C10104524	10-26-06		

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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

TITLE:	RECEIVER	EF-30038-000	DR. BY	DATE
	PERFORMANCE SPECIFICATION	SHT 2.1	SDZ	10-26-06
			CK. BY	DATE
			GJP	10-30-06
			APP. BY	DATE
			GJP	10-30-06