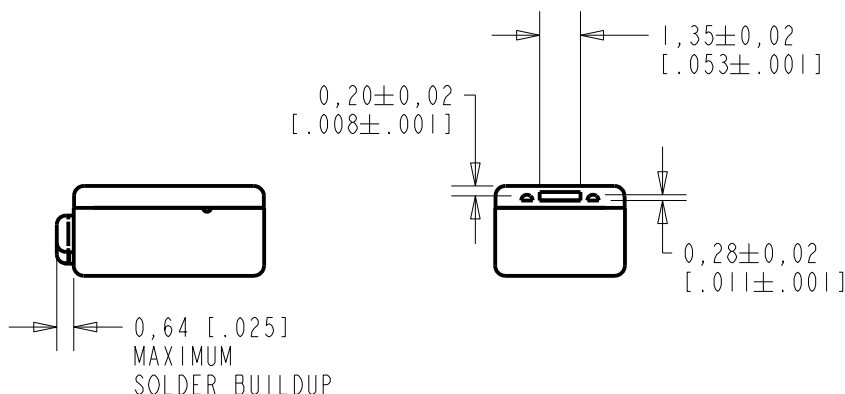
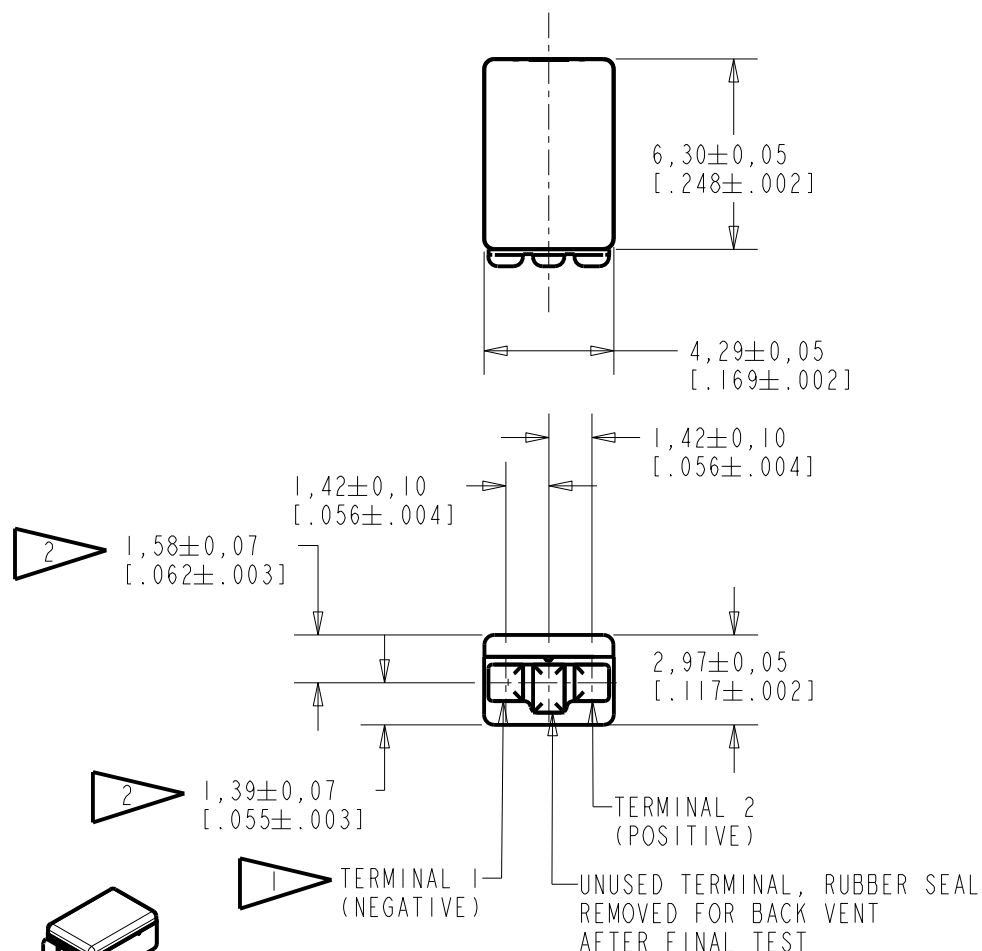


**FED-30048-104**

**SHT 1.1**

NOTE:

- 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].



SCALE 2:1

NOMINAL WEIGHT  
.31 GRAM

DIMENSIONS IN MILLIMETERS [INCHES]

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Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
			<b>Active</b>	<b>D</b>
D	C10113486	5-17-12		
SCALE: 4:1			DR. BY	DATE
DO NOT SCALE DRAWING			LSY	8-25-06
			CK. BY	DATE
TITLE: RECEIVER			GJP	9-8-06
			APP. BY	DATE
OUTLINE DRAWING			GJP	9-8-06

**FED-30048-104**

**SHT 1.1**

KE111ASIZE.FRM

Rev: B

DESCRIPTION

FERROFLUID DAMPING

FED-30048-104  
SHEET 2.1

THE FED-30048-104 IS A FERROFLUID DAMPED, MAGNETIC BALANCED ARMATURE RECEIVER, INTENDED FOR USE IN HEADSETS. THIS MODEL IS SHOCK PROTECTED, HAS LOW IMPEDANCE, INCREASED DCR/IMPEDANCE RATIO, AND A REAR VENT.

CONSTANT VOLTAGE DRIVE CONDITIONS (NOTE: REAR VENT, CENTER TERMINAL PAD, BLOCKED FOR TEST)

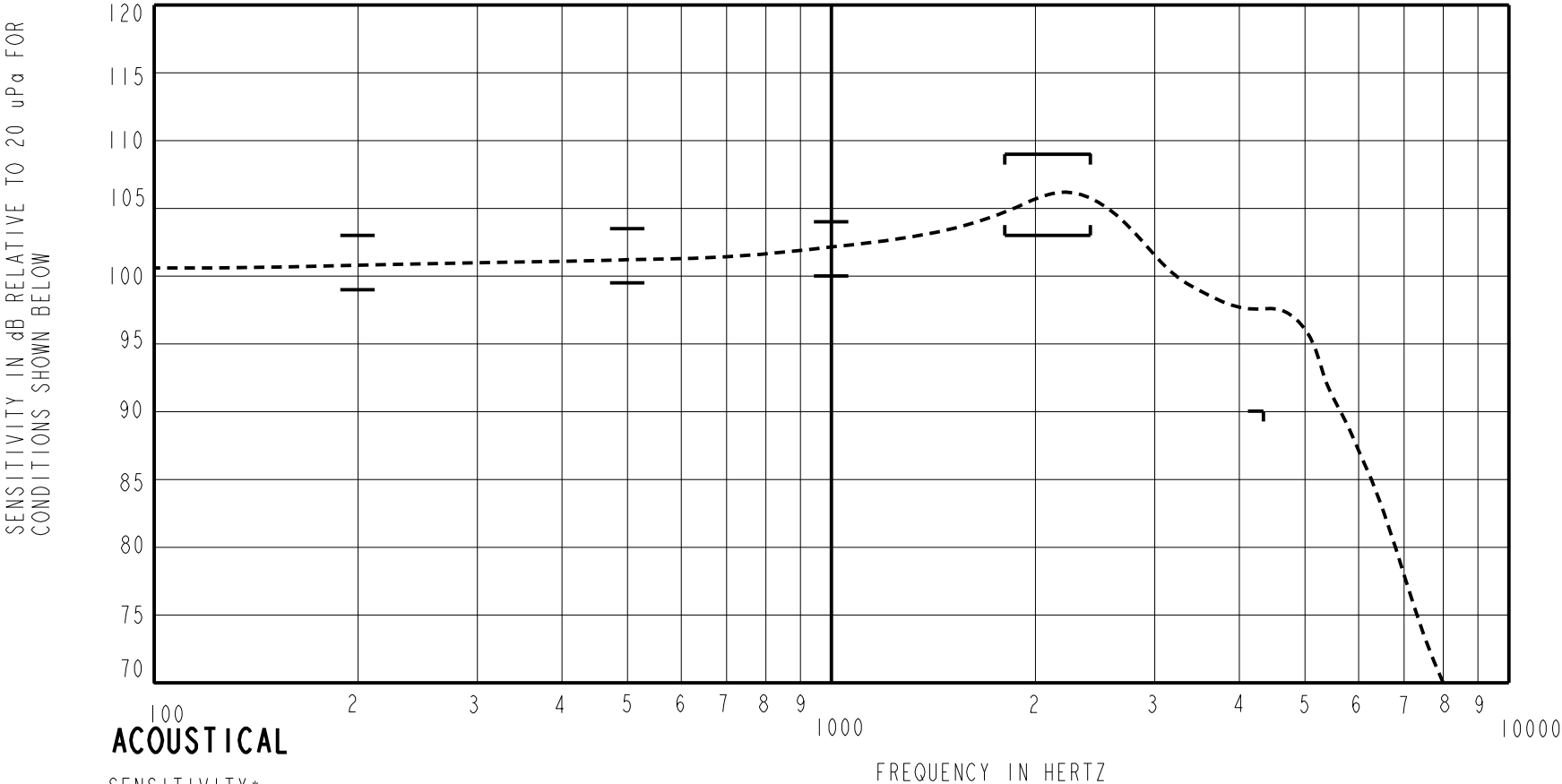


TABLE 1.

TOTAL HARMONIC DISTORTION  
DEVICE WILL NOT EXCEED TOTAL HARMONIC DISTORTION LEVELS LISTED BELOW.

FREQUENCY (Hz)	DRIVE (V RMS)	DC BIAS (mA)	LIMIT (%)
500	0.363	0	10
780	0.13	0	5
1175	0.13	0	5

TABLE 2.

TEST CONDITIONS

NOMINAL SOURCE VOLTAGE	0.13 Vrms, 0 mA DC BIAS
SOURCE IMPEDANCE	< 1 Ω
TUBING	10 mm (.394) LONG, 1 mm (.039) ID.
COUPLER CAVITY	2 CM <sup>3</sup> SIMULATED ANSI S3.7 TYPE HA-3, (IEC 60318-5)

TABLE 3.

ELECTRICAL

DC RESISTANCE	23Ω ±10%
IMPEDANCE @ 500 Hz	26Ω ±15%
IMPEDANCE @ 1 kHz	29Ω ±15%

TABLE 4.

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

TEMPERATURE: OPERATING RANGE FROM 0°C TO 63°C (SENSITIVITY WILL NOT VARY BY MORE THAN ±3 dB WITHIN RANGE)  
SENSITIVITY AT 0°C IS 2dB LOWER THAN THE SENSITIVITY AT ROOM TEMPERATURE.  
DELTA PEAK IS 1dB HIGHER AT BODY TEMPERATURE (37°C)  
STORAGE RANGE FROM -40°C TO 63°C.

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Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
			Active	D
D	C10113486	5-17-12		
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 LSY	DATE 8-25-06
TITLE:  RECEIVER  PERFORMANCE SPECIFICATION			CK. BY GJP	DATE 9-8-06
			APP. BY	DATE
			GJP	9-8-06
			FED-30048-104 SHT 2.1	

# Mouser Electronics

Authorized Distributor

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Knowles:

[FED-30048-I04](#)