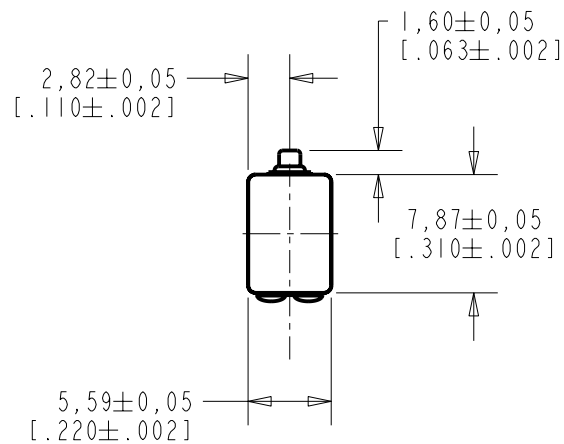
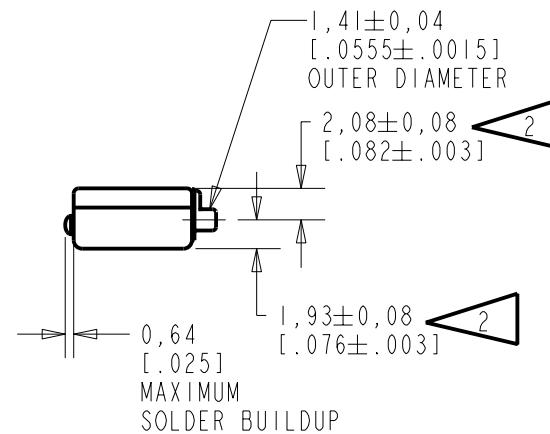
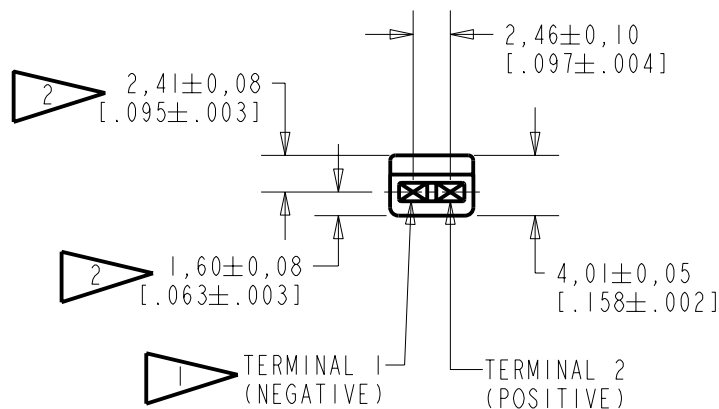


FEF-27351-104
SHT 1.1



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
.66 GRAMS

DIMENSIONS IN MILLIMETERS [INCHES]

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
C	CI0104205	5-11-06	Released	C
B	CI0103605	2-3-06		
A	CI0103001	9-19-05		

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SCALE: 2:1		DR. BY	DATE
DO NOT SCALE DRAWING		MMM	9-19-05
		CK. BY	DATE
TITLE: RECEIVER OUTLINE DRAWING		GJP	9-20-05
		FEF-27351-104 SHT 1.1	

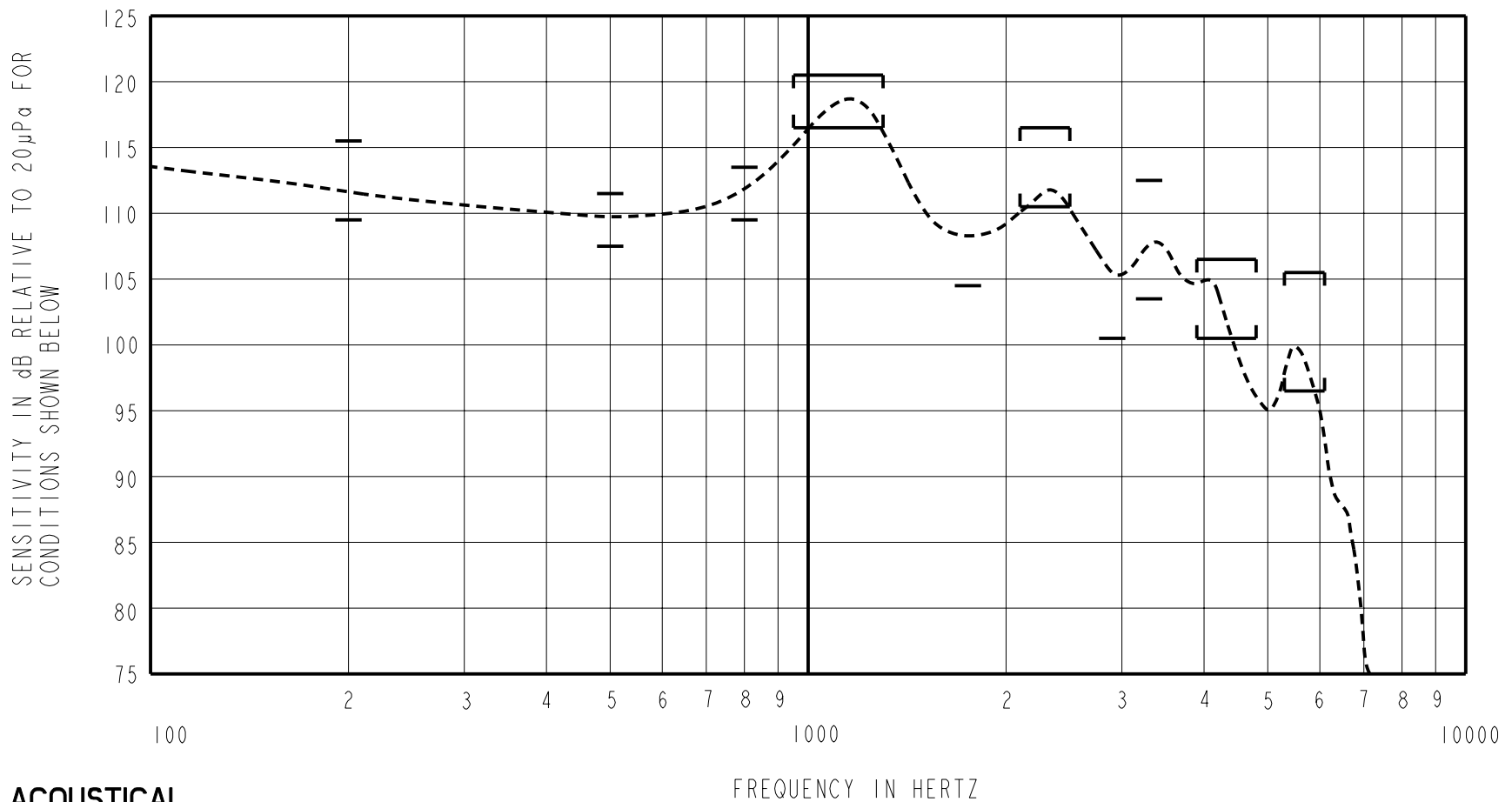
THE FEF-27351-104 IS A FERROFLUID DAMPED EF-27351-000 RECEIVER. THE AMPLITUDE OF PEAK #2 OF THE FREQUENCY RESPONSE IS +4dB RELATIVE TO THE SENSITIVITY AT 500 Hz UNDER CONSTANT VOLTAGE DRIVE CONDITIONS.

FERROFLUID DAMPING

FEF-27351-104

SHEET 2.1

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. (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	+7.0	+9.0	+11.0
1750	-5.0	-	-
2100-2500	+1.0	+4.0	+7.0
2900	-9.0	-	-
3300	-6.0	-1.5	+3.0
3900-4800	-9.0	-6.0	-3.0
5300-6100	-13.0	-8.5	-4.0

PORT LOCATION: 12S

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 ³ , SIMULATED ANSI S3.7 TYPE HA-3 (IEC 126)

TABLE 3

ELECTRICAL

DC RESISTANCE	19 Ohms ± 10%
IMPEDANCE @ 500 Hz	56 Ohms ± 15%
IMPEDANCE @ 1kHz	113 Ohms ± 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 1.5dB LOWER THAN THE SENSITIVITY AT ROOM TEMPERATURE. DELTA PEAK IS 1.8dB HIGHER AT BODY TEMPERATURE (37°C) STORAGE RANGE FROM -40°C TO 63°C

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
C	C10104205	5-11-06	Released	C
B	C10103605	2-3-06		
A	C10103001	9-19-05		

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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
PERFORMANCE SPECIFICATION

FEF-27351-104
SHT 2.1

DR. BY	DATE
MMM	9-19-05
CK. BY	DATE
GJP	9-20-05
APP. BY	DATE
GJP	9-20-05