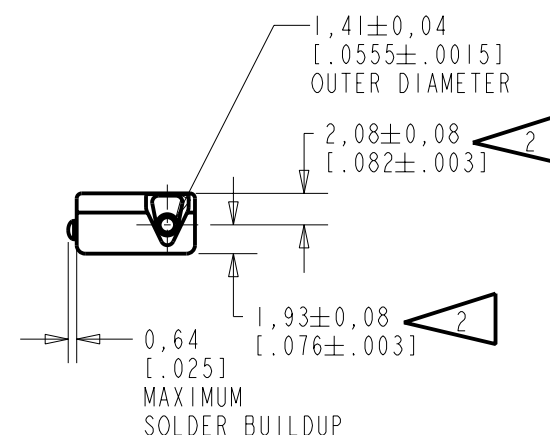
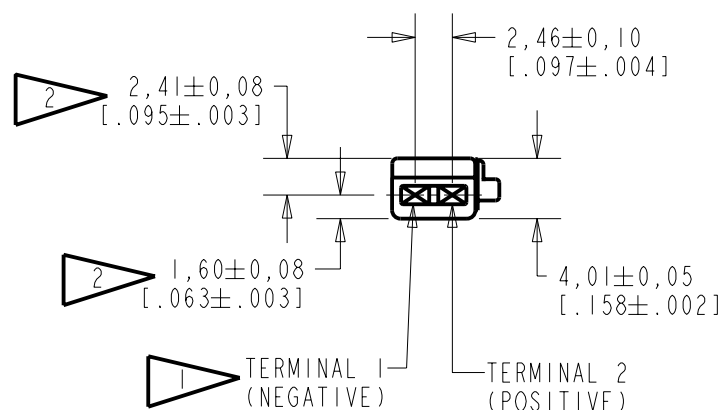
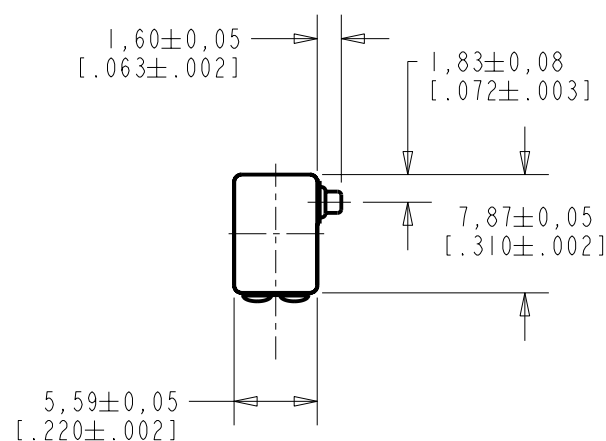


FEF-26790-102

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]

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Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
B	CI0103605	2-3-06	Released	B
A	CI0103191	9-29-05		
SCALE: 2:1			DR. BY	DATE
DO NOT SCALE DRAWING			CRG	9-29-05
			CK. BY	DATE
TITLE: RECEIVER			GJP	9-29-05
			APP. BY	DATE
OUTLINE DRAWING			GJP	9-29-05
FEF-26790-102			SHT 1.1	

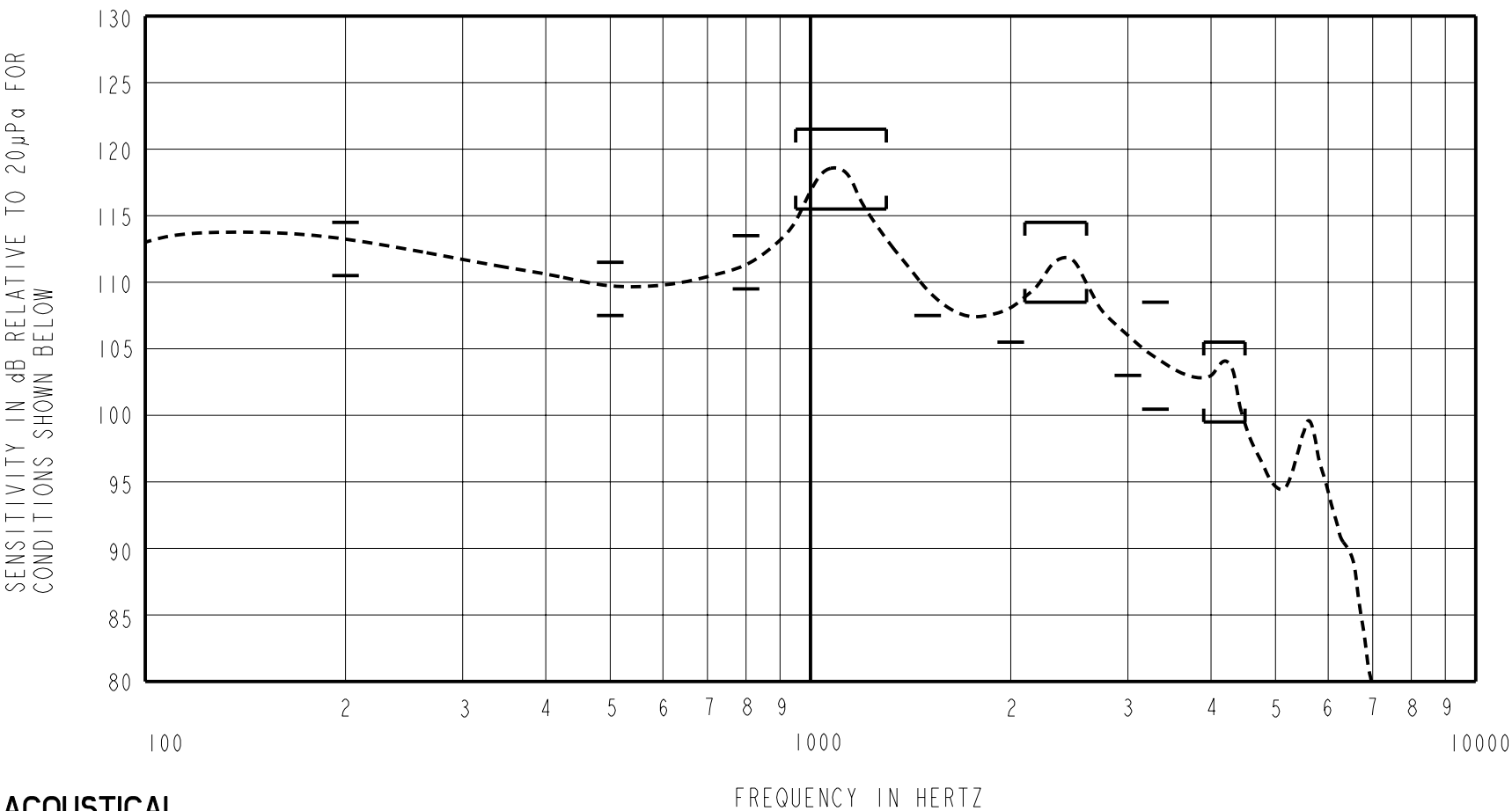
THE FEF-26790-i02 IS A FERROFLUID DAMPED EF RECEIVER.  
THE AMPLITUDE OF PEAK #2 OF THE FREQUENCY RESPONSE IS +2dB  
RELATIVE TO THE SENSITIVITY AT 500 Hz UNDER CONSTANT  
VOLTAGE DRIVE CONDITIONS.

FERROFLUID DAMPING

FEF-26790-102

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

FREQUENCY (Hz)	MINIMUM	NOMINAL	MAXIMUM
200	+1.0	+3.0	+5.0
500	-2.0	109.5	+2.0
800	0.0	+2.0	+4.0
950-1300	+6.0	+9.0	+12.0
1500	107.5	-	-
2000	105.5	-	-
2100-2600	-1.0	+2.0	+5.0
3000	103.0	-	-
3300	-9.0	-5.0	-1.0
3900-4500	-10.0	-7.0	-4.0

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 (%)
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 Ohms ± 10%
IMPEDANCE @ 500 Hz	50 Ohms ± 15%
IMPEDANCE @ 1kHz	88 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
B	C10103605	2-3-06	Released	B
A	C10103191	9-29-05		
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 CRG	DATE 9-29-05
TITLE: RECEIVER			CK. BY GJP	DATE 9-29-05
PERFORMANCE SPECIFICATION			APP. BY GJP	DATE 9-29-05
			FEF-26790-102	
			SHT 2.1	

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