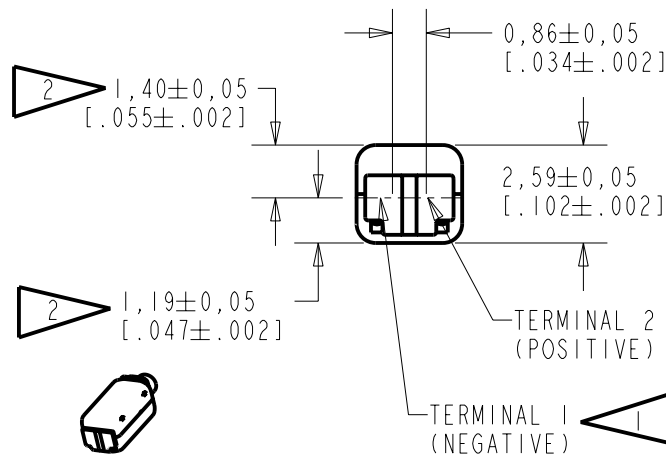
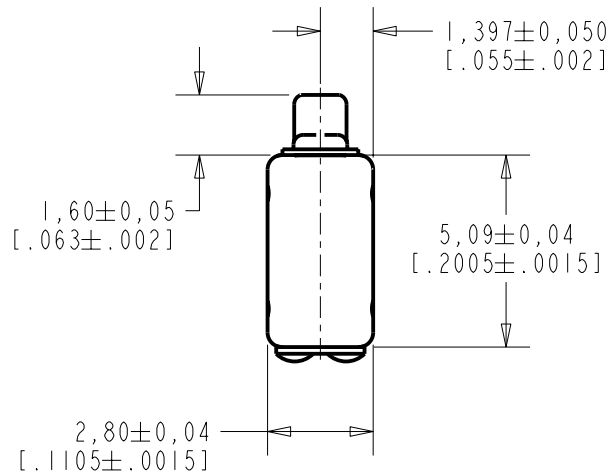


FFH-23371-104

SHT 1.1

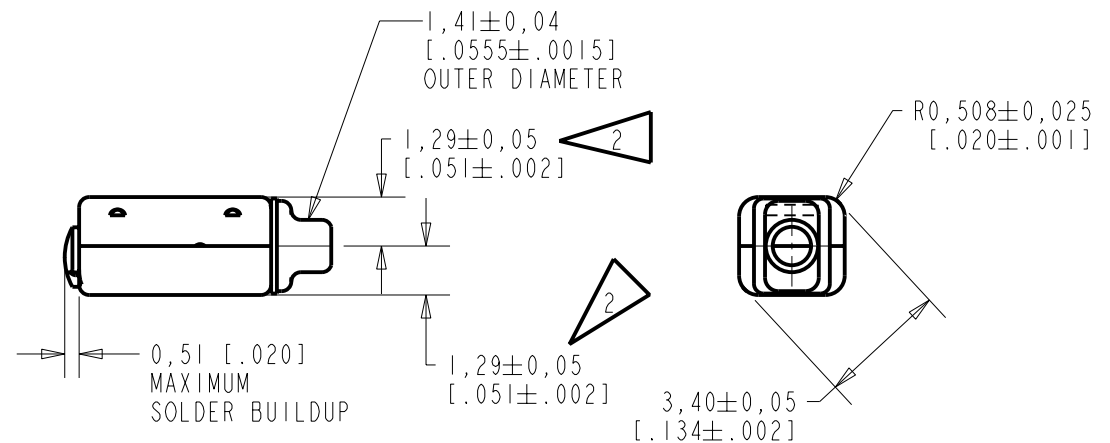
NOTES:

- 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.



NOMINAL WEIGHT
.18 GRAMS

DIMENSIONS IN MILLIMETERS [INCHES]



RED CONTROLLED

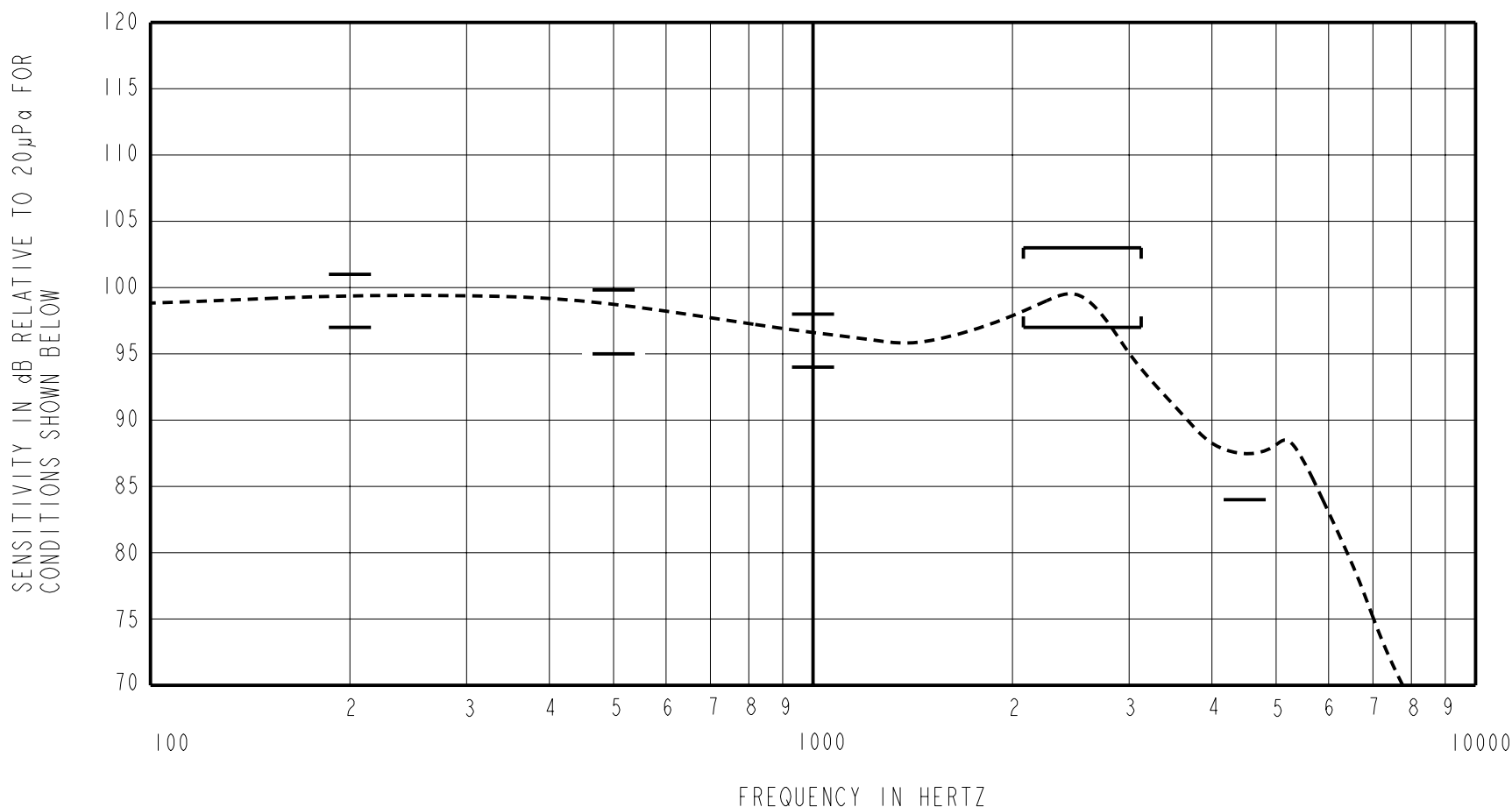
Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
			Released	A
A	CI0103482	12-7-05		

SCALE: 5:1		DR. BY	DATE
DO NOT SCALE DRAWING		CRG	12-7-05
		CK. BY	DATE
TITLE: RECEIVER		GJP	12-8-05
		FFH-23371-104	
OUTLINE DRAWING		APP. BY	DATE
		GJP	12-8-05

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THE FFH-23371-104 IS A FERROFLUID DAMPED FH-23371 RECEIVER WITH A PEAK OF 4dB RELATIVE TO THE SENSITIVITY AT 1kHz UNDER CONSTANT VOLTAGE DRIVE CONDITIONS.

CONSTANT VOLTAGE DRIVE CONDITIONS



ACOUSTICAL

SENSITIVITY
 DEVICE WILL PRODUCE THE SPL LISTED BELOW UNDER TEST CONDITIONS DESCRIBED IN TABLE 3.
 NOMINAL SENSITIVITY AT 1kHz IS dB RELATIVE TO 20µPa. ALL OTHER VALUES
 IN dB RELATIVE TO THE SENSITIVITY AT 1kHz.

FREQUENCY (Hz)	MINIMUM	NOMINAL	MAXIMUM
200	+1.0	3.0	5.0
500	-1.0	1.0	3.0
1000	-2.0	96.0	2.0
2100 - 3100	+1.0	4.0	7.0
4500	-12.0	---	---

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 (V)	LIMIT (%)
500	0.35	0	10
870	0.125	0	6
1300	0.125	0	6

TABLE 2

TEST CONDITIONS

NOMINAL SOURCE VOLTAGE	0.125 V rms, 0 mA DC BIAS
SOURCE IMPEDANCE	<1 Ohm
TUBING	10mm [.394"] LONG, 1mm [.039"] I.D.
COUPLER CAVITY	2 CM ³ , SIMULATED ANSI S3.7 TYPE HA-3 (IEC 126)

TABLE 3

ELECTRICAL

DC RESISTANCE	61 Ohms ± 10%
IMPEDANCE @ 500 Hz	85 Ohms ± 15%
IMPEDANCE @ 1kHz	128 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 2dB LOWER THAN THE SENSITIVITY AT ROOM TEMPERATURE.
 DELTA PEAK IS 1.5dB 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
A	C10103482	12-7-05	Released	A
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	DATE
TITLE: RECEIVER			CRG	12-7-05
PERFORMANCE SPECIFICATION			FFH-23371-104	CK. BY
			GJP	DATE
			APP. BY	DATE
			GJP	12-8-05
			DATE	
			GJP	12-8-05

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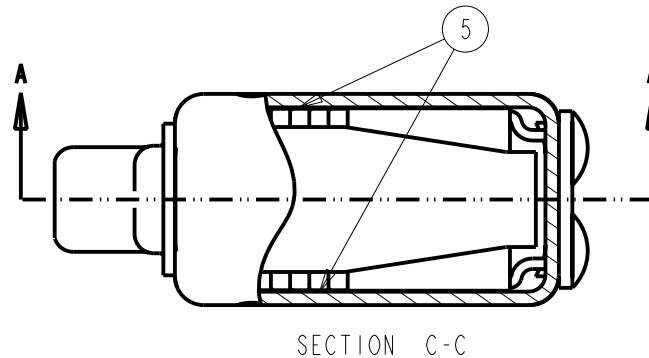
FFH-23371-104

NOTES:

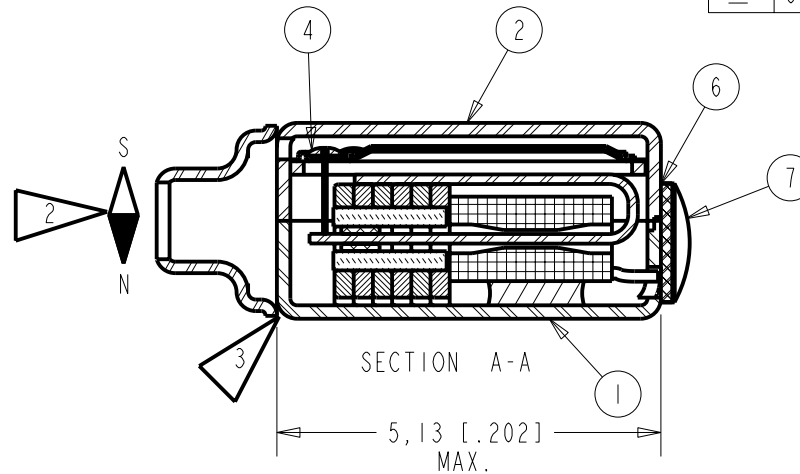
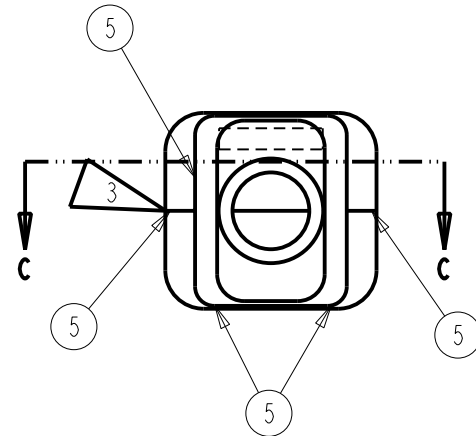
1. ITEM NUMBERS (SHOWN THUS ) CORRESPOND TO ITEM NUMBER ON BILL OF MATERIAL.

 ORIENTATION OF COMPASS NEEDLE IN THE MAGNETIC FIELD.

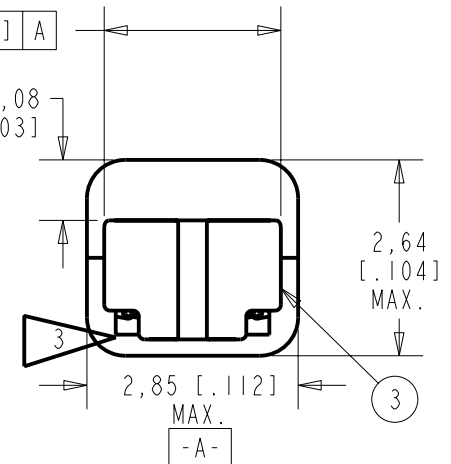
 AIRTIGHT SEAL ALL AROUND.



SECTION C-C



SECTION A-A



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DIMENSIONS IN MILLIMETERS [INCHES]

RELEASE LEVEL	REVISION
Released	A

MATERIAL SEE BILL OF MATERIAL

FINISH ---

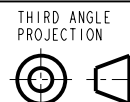
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DO NOT SCALE DRAWING

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DR. BY	DATE
CRG	12-7-05
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GJP	12-8-05
APP. BY	DATE
GJP	12-8-05

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES.



TITLE

RECEIVER ASSEMBLY

FFH-23371-104

SHEET 3.1

FFH-23371-104	KNOWLES ELECTRONICS ITASCA, ILLINOIS U.S.A.	FFH-23371-104
Sheet 4.1		Sheet 4.1
Dr. By Date CRG 12-7-05	RECEIVER ASSEMBLY	Revision
Ch. GJP 12-8-05		A
App. GJP 12-8-05		Released

COL. 1	2	3	4	Item No.	Line No.
Part or Dwg. no.	Tot. Req.	Nomenclature:	Applicable Specs or Remarks		
FFH-124-400	1	MOTOR, CUP & FERROFLUID ASSEMBLY		1	1
FH-115	1	CUP & DIAPHRAGM ASSEMBLY		2	2
FH-020	1	TAB		3	3
13-092	A/R	CEMENT		4	4
13-092	A/R	CEMENT		5	5
13-092	A/R	CEMENT		6	6
285-007-001	A/R	SOLDER LEAD FREE		7	7

REVISION	A	C 10103503	<div style="border: 2px solid red; padding: 5px; display: inline-block;">RED CONTROLLED</div>	FFH-23371-104 Sheet 4.1
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REV: C

PRODUCTION TEST INFORMATION

SOFTWARE REVISION PCI/GPIB FCART	SOFTWARE 4.13 MIN.
HARDWARE REVISION PCI FCART	KE 1065D.004 MIN.
HARDWARE REVISION GPIB FCART	KE 1065C.008G MIN.

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