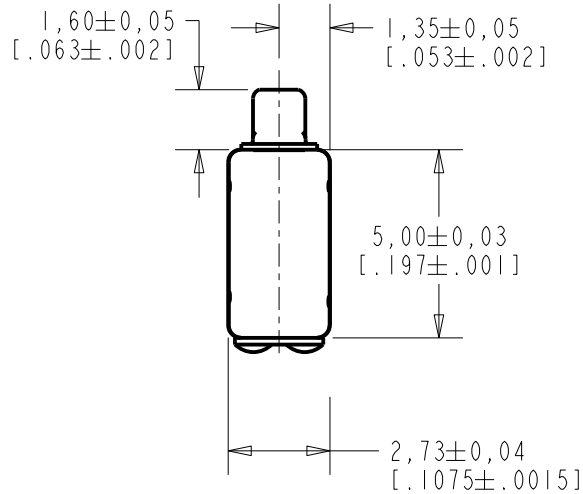
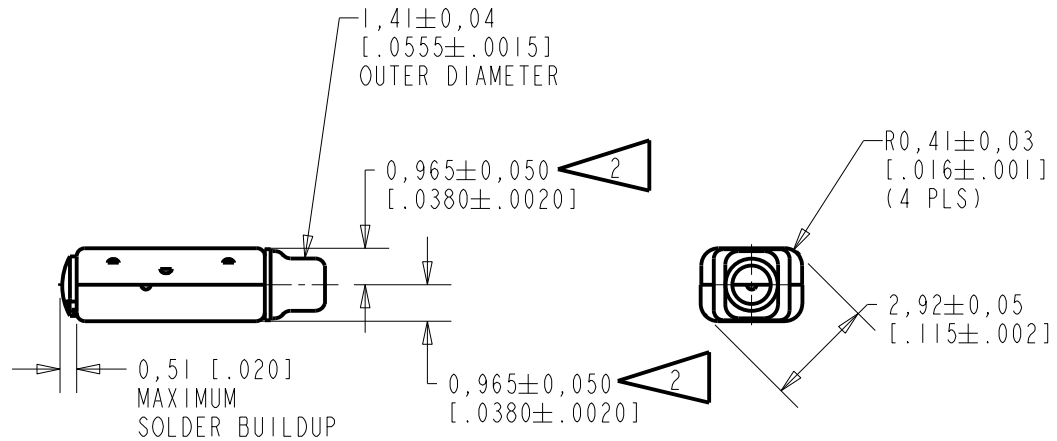
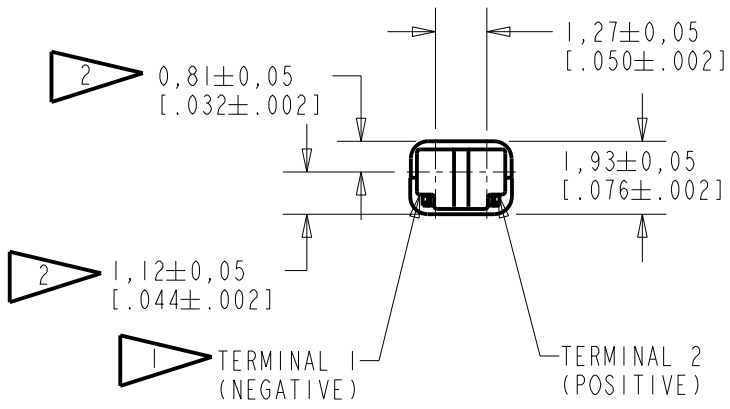


FK-30046-000
SHT 1.1



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.



SCALE 2:1
NOMINAL WEIGHT .11 GRAMS
DIMENSIONS IN MILLIMETERS [INCHES]

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
E	C10114032	11-7-12	Active	E
D	C10111047	3-10-10		

KNOWLES ELECTRONICS
ITASCA, ILLINOIS U.S.A.

RED CONTROLLED

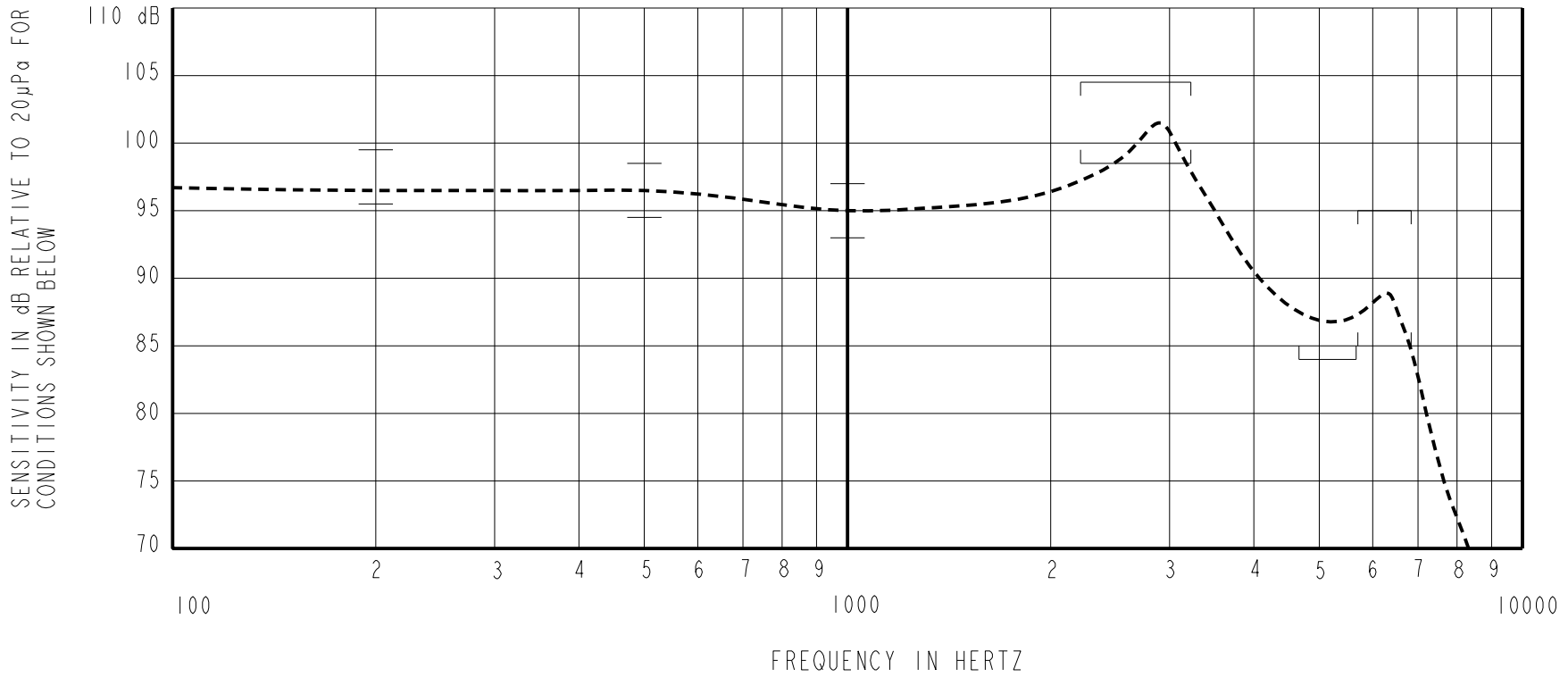
SCALE: 5:1	DR. BY DATE
DO NOT SCALE DRAWING	MMM 8-18-06
TITLE: RECEIVER	FK-30046-000
OUTLINE DRAWING	SHT 1.1
	CK. BY DATE
	GJP 8-18-06
	APP. BY DATE
	GJP 8-18-06

THIS IS AN UNDAMPED MAGNETIC BALANCED ARMATURE RECEIVER WITH A SURFACE TREATMENT ON THE TUBE.

NO DAMPING

FK-30046-000
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 1kHz IS dB RELATIVE TO 20µPa. ALL OTHER VALUES
IN dB RELATIVE TO THE SENSITIVITY AT 1kHz.

FREQUENCY (Hz)	MINIMUM	NOMINAL	MAXIMUM
200	+0.5	+1.5	+4.5
500	-0.5	+1.5	+3.5
1000	-2.0	95.0	+2.0
2250 - 3250	+3.5	+6.5	+9.5
4650 - 5650	-11.0	---	---
5700 - 6700	-10.0	-5.0	0.0

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 (%)
920	0.241	0	5
1380	0.241	0	5
920	0.679	0	10

TABLE 2

TEST CONDITIONS

NOMINAL SOURCE VOLTAGE	0.241 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 60318-5)

TABLE 3

ELECTRICAL

DC RESISTANCE	200 Ohms ± 10%
IMPEDANCE @ 500 Hz	234 Ohms ± 15%
IMPEDANCE @ 1kHz	313 Ohms ± 15%

TABLE 4

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

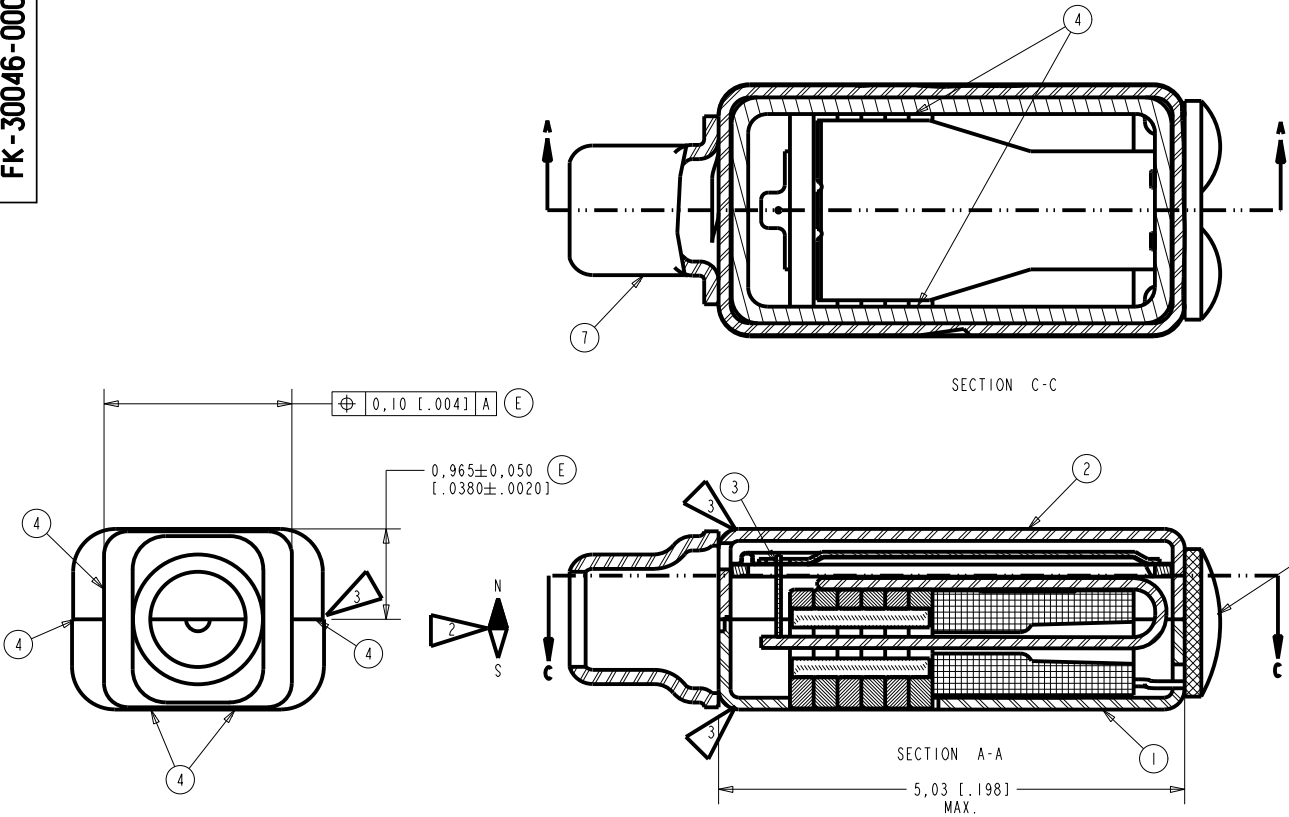
RED CONTROLLED

KNOWLES ELECTRONICS
ITASCA, ILLINOIS U.S.A.

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
E	C10114032	11-7-12	Active	E
D	C10111047	3-10-10		
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 PERFORMANCE SPECIFICATION			MMM	8-18-06
			FK-30046-000 SHT 2.1	
			CK. BY	DATE
			GJP	8-18-06
			APP. BY	DATE
			GJP	8-18-06

FK-30046-000

PROPRIETARY NOTE: THIS DOCUMENT CONTAINS INFORMATION WHICH IS THE PROPRIETARY PROPERTY OF KNOWLES ELECTRONICS, LLC. OR ITS AFFILIATED ENTITIES. IT IS ISSUED TO THE BUYER FOR THE BUYER'S USE ONLY. IT IS NOT TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY MANNER WITHOUT PRIOR WRITTEN PERMISSION OF, AND MUST BE RETURNED UPON REQUEST BY, KNOWLES ELECTRONICS, LLC.



- NOTES:
- 1. ITEM NUMBERS (SHOWN THUS **⑥**) CORRESPOND TO ITEM NUMBERS ON BILL OF MATERIAL.
 - 2. ORIENTATION OF COMPASS NEEDLE IN THE MAGNETIZING FIELD.
 - 3. AIRTIGHT SEAL ALL AROUND.

DIMENSIONS IN MILLIMETERS [INCHES]

RELEASE LEVEL	REVISION
Active	E
SCALE: 20:1	DO NOT SCALE DRAWING
DR. BY DATE	MM 8-18-06
CH. BY DATE	GJP 8-18-06
APP. BY DATE	GJP 8-18-06

REF.	NOTE	MATERIAL	SEE BILL OF MATERIAL	FINISH
A	C10104668			
B	C10104880			
SEE SHEET 2.1				
LSY 9-28-06				
C	C10108259P			
COIL FLIPPED				
LSY 12-29-08				
D	C10111047			
MODIFIED SHEET 2.1				
SOZ 3-10-10				
E	C10114032			
TOLERANCE UPDATED				
DIMENSIONS ADDED				
LSY 11-17-12				

KNOWLES ELECTRONICS
ITASCA, ILLINOIS U.S.A.

RECEIVER
ASSEMBLY

FK-30046-000
SHEET 3.1

RED CONTROLLED

REV: B

FK-30046-000			KNOWLES ELECTRONICS		FK-30046-000	
Sheet 4.1			ITASCA, ILLINOIS U.S.A.		Sheet 4.1	
Dr.	By	Date	Subject:	RECEIVER ASSEMBLY	Revision	E
Ch.	MMM	8-18-06				
App.	GJP	8-18-06				
	GJP	8-18-06				
Release Level						
Active						

COL. 1	2	3	4	Item No.	Line No.
Part or Dwg. no.	Tot. Req.	Nomenclature:	Applicable Specs or Remarks		
FK-134-006	1	MOTOR & CUP ASSEMBLY		1	1
FK-106	1	CUP & DIAPHRAGM ASSEMBLY		2	2
13-825-3160	A/R	CEMENT		3	3
13-825-3145	A/R	CEMENT		4	4
FH-020	1	TAB		5	5
FK-012	1	TUBE		6	6
285-007-001	A/R	SOLDER LEAD FREE		7	7

(E)

RED CONTROLLED

REVISION	A	c.o. C10104668
	B	c.o. C10104880
	SEE SHEET 2.1 LSY 9-28-06	
	C	c.o. C10108259P
	COIL FLIPPED LSY 12-29-08	
D	c.o. C10111047	
MODIFIED SHEET 5.1 SDZ 3-10-10		
E	c.o. C10114032	
13-825-3160 WAS 13-092 13-825-3145 WAS 13-092 LSY 11-7-12		

FK-30046-000
Sheet 4.1

PROPRIETARY NOTE: THIS DOCUMENT CONTAINS INFORMATION WHICH IS THE PROPRIETARY PROPERTY OF KNOWLES ELECTRONICS, LLC. OR ITS AFFILIATED ENTITIES. IT IS ISSUED IN STRICT CONFIDENCE AND SHALL NOT BE REPRODUCED, COPIED, USED, OR DISCLOSED TO ANY THIRD PARTY PARTIALLY OR WHOLLY IN ANY MANNER WITHOUT PRIOR WRITTEN PERMISSION OF, AND MUST BE RETURNED UPON REQUEST BY, KNOWLES ELECTRONICS, LLC.

REF: 30046-000-000-000-000

PRODUCTION TEST INFORMATION

SOFTWARE REVISION PXI FCART	SOFTWARE 2.5 MIN.
HARDWARE REVISION PXI FCART	KE 1065E.008 MIN.
TEST BOARD	T-7834
TEST COUPLER	T-8049

PHASE

FREQUENCY (Hz)	AC DRIVE (mArms)	MINIMUM (Deg)	NOMINAL (Deg)	MAXIMUM (Deg)
500	0.77	140	160	180

RED CONTROLLED

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
E	C10114032	11-7-12	Active	E
D	C10111047	3-10-10		

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 MMM	DATE 8-18-06
TITLE: RECEIVER PERFORMANCE SPECIFICATION		FK-30046-000	GJP 8-18-06
		SHT 5.1	GJP 8-18-06

KNOWLES ELECTRONICS
ITASCA, ILLINOIS U.S.A.