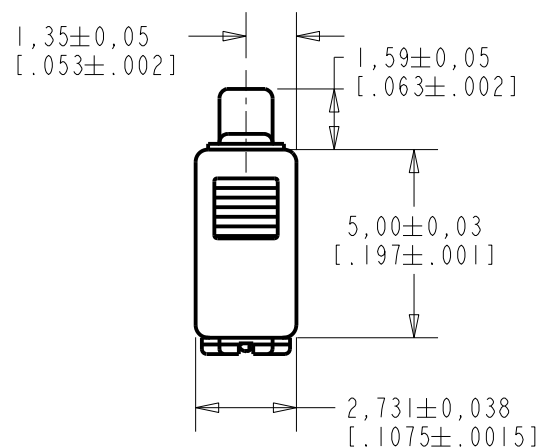


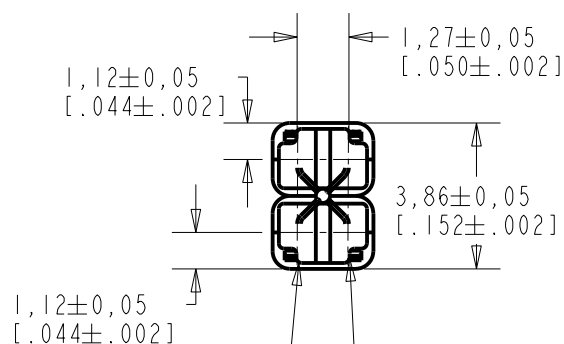
**SWFK-32254-000**  
SHT 1.1



NOTES:

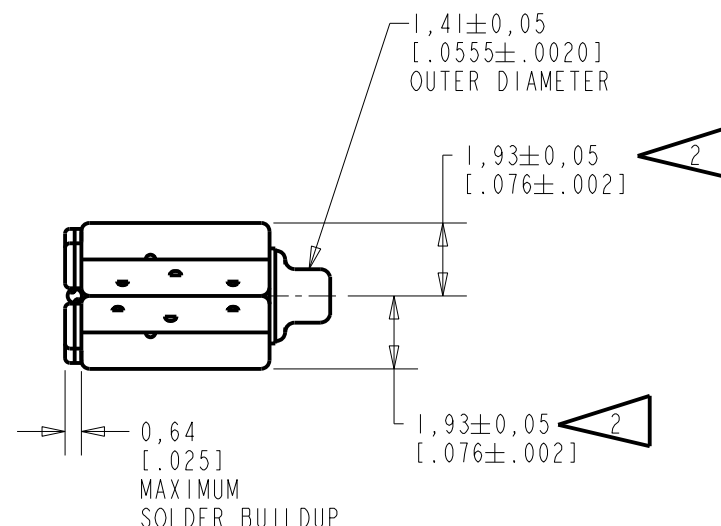
- 1 A POSITIVE GOING VOLTAGE AT TERMINAL 2, RELATIVE TO TERMINAL 1, CAUSES A DECREASE IN PRESSURE AT THE SOUND OUTLET.
- 2 LOCATED FROM TWO SURFACES FOR CUSTOMER CONVENIENCE. ONLY APPLICABLE FROM ONE SURFACE, NOT TO BE USED TOGETHER.

**RED CONTROLLED**



TERMINAL 1  
(NEGATIVE)

TERMINAL 2  
(POSITIVE)



SCALE 2:1  
 NOMINAL WEIGHT 0.19 GRAMS  
 DIMENSIONS IN MILLIMETERS [INCHES]

**KNOWLES ELECTRONICS**  
 ITASCA, ILLINOIS U.S.A.

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
			Active	A
A	PI0000067	7-14-15		
SCALE: 5:1			DR. BY	DATE
DO NOT SCALE DRAWING			LW	7-14-15
TITLE: RECEIVER OUTLINE DRAWING			CK. BY	DATE
			GJP	7-16-15
			APP. BY	DATE
			GJP	7-16-15
			SWFK-32254-000 SHT 1.1	

A PAIR OF MAGNETIC BALANCED ARMATURE RECEIVERS WITH TAPERED REED INTENDED FOR USE AS THE HIGH FREQUENCY DRIVER IN A HI-FI SYSTEM.

TYPE 1

SWFK-32254-000  
SHEET 2.1

NOTE: SPECIFICATIONS FOLLOWED BY AN ASTERISK (\*) ARE 100% TESTED.  
CONSTANT VOLTAGE DRIVE CONDITIONS.

SENSITIVITY IN dB RELATIVE TO 20μPa FOR  
CONDITIONS SHOWN BELOW

115 dB

110

105

100

95

90

85

80

75

100

2

3

4

5

6

7

8

9

1000

2

3

4

5

6

7

8

9

10000

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FREQUENCY IN HERTZ

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	-3.0	-1.0	+1.0
500	-2.0	0.0	+2.0
1000	-2.0	97.0	+2.0
3000-4000 PEAK	+5.0	+8.0	+11.0
6600-7600 PEAK	0.0	+3.0	+6.0

MECHANICAL  
PORT LOCATION: I2S  
SOLDER TYPE: SAC305  
TEMPERATURE  
OPERATING: SENSITIVITY WILL NOT VARY MORE  
THAN +1 / -3 dB FROM -17°C TO 63°C.  
STORAGE: -40°C TO 63°C.

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 (%)
1166	.094	0	5
1750	.094	0	5
1750	.265	0	10

TABLE 2

TEST CONDITIONS

NOMINAL SOURCE VOLTAGE	0.94 V rms, 0 mA DC BIAS
SOURCE IMPEDANCE	<0.2 Ohm
TUBING	10 mm [.394"] LONG, 1mm [.039"] I.D.
COUPLER CAVITY	2 CM <sup>3</sup> , SIMULATED ANSI S3.7 TYPE HA-3 (IEC 60318-5)

TABLE 3

ELECTRICAL

DC RESISTANCE	6.3 Ohms ± 10%	
IMPEDANCE @ 500 Hz	6.8 Ohms ± 20%	MEASURED WITH 5.8 mArms, 0dc DRIVE
IMPEDANCE @ 1kHz	7.2 Ohms ± 20%	MEASURED WITH 5.8 mArms, 0dc DRIVE

TABLE 4

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

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
			Active	A
A	PI0000067	7-14-15		

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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

SWFK-32254-000  
SHT 2.1

DR. BYDATE  
LW7-14-15

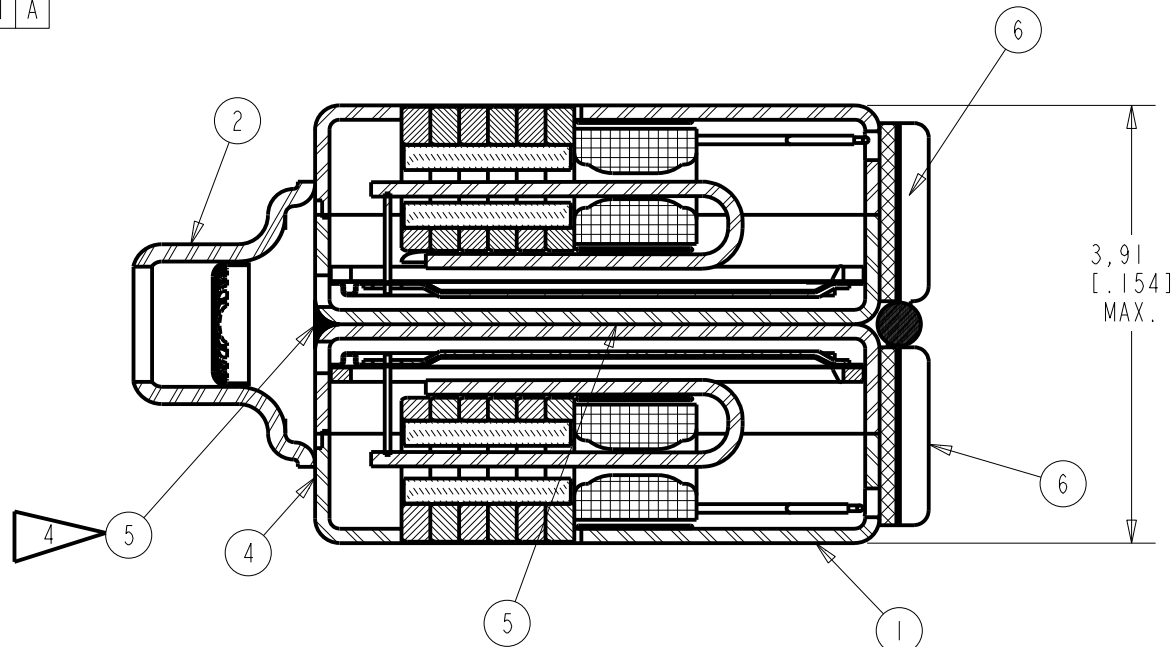
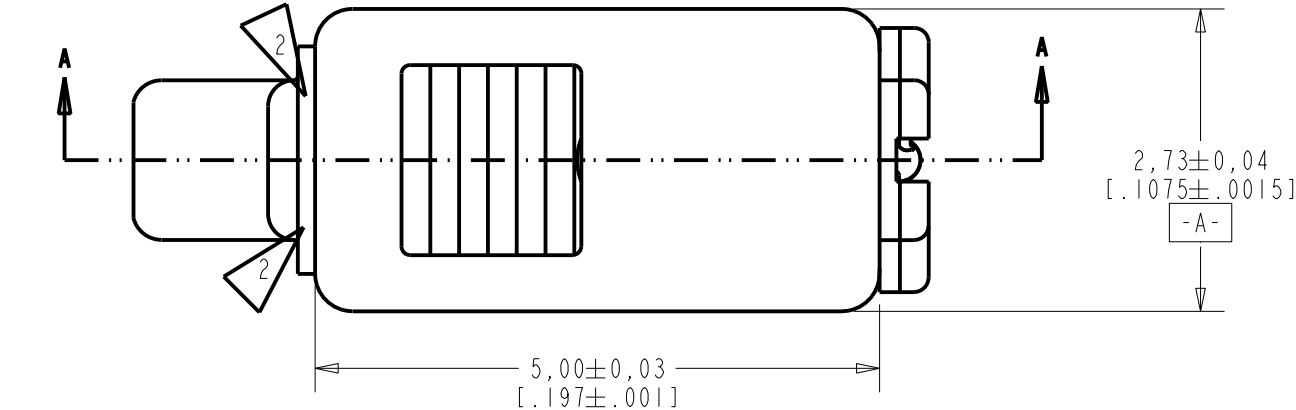
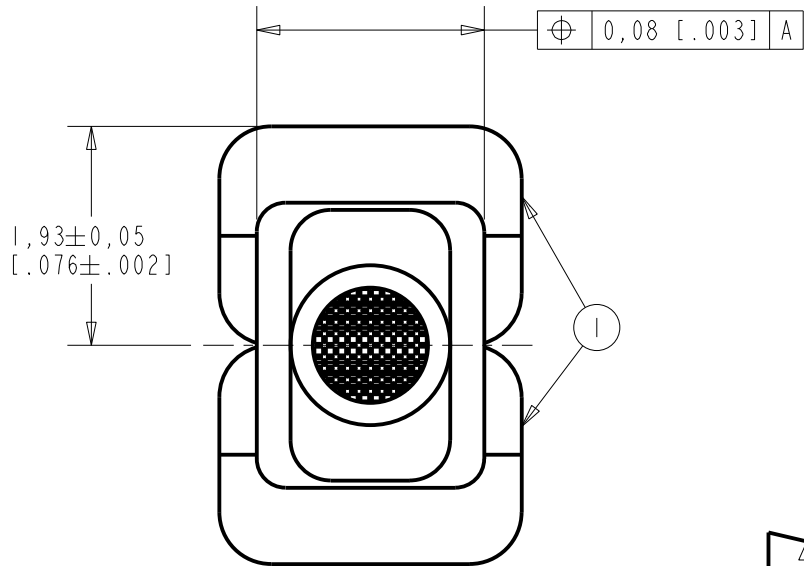
CK. BYDATE  
GJP7-16-15

APP. BYDATE  
GJP7-16-15

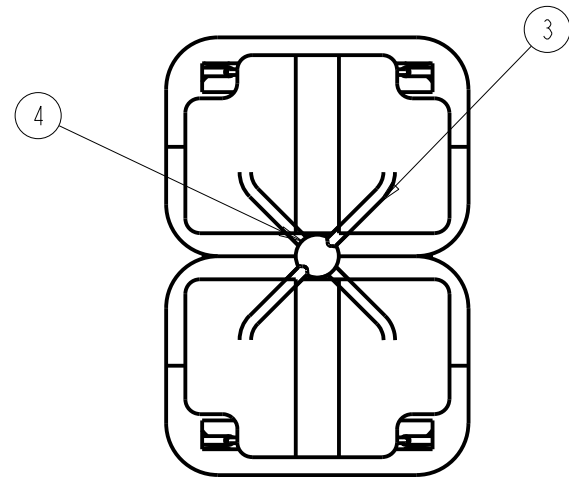
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SWFK-32254-000

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SECTION A-A



- NOTES:
1. ITEM NUMBERS (SHOWN THUS ) CORRESPOND TO ITEM NUMBER ON BILL OF MATERIAL.
  - 2  AIRTIGHT SEAL ALL AROUND.
  3. THIS ASSEMBLY IS GLUED TOGETHER AND THE TUBE IS WELDED TO THE CUPS.
  - 4  SEAL JOINT ACROSS FRONT OF RECEIVER.

DIMENSIONS IN MILLIMETERS [INCHES]

MATERIAL			SEE BILL OF MATERIAL			FINISH			---			SCALE:			15:1			DO NOT SCALE DRAWING		
REF.	A	C.O.	NONE	P10000067	UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES	THIRD ANGLE PROJECTION	KNOWLES ELECTRONICS										DR. BY		DATE	
							ITASCA, ILLINOIS U.S.A.										LW		7-14-15	
																	GJP		7-16-15	
							RECEIVER ASSEMBLY							SWFK-32254-000						
														SHEET 3.1						

SWFK-32254-000			KNOWLES ELECTRONICS			SWFK-32254-000		
Sheet 4.1			ITASCA, ILLINOIS U.S.A.			Sheet 4.1		
Dr. By Date			Subject:			Revision		
LW 7-14-15			RECEIVER			A		
Ch. GJP 7-16-15			ASSEMBLY			Release Level		
App. GJP 7-16-15						Active		
COL. 1			2			3		
Part or Dwg. no.			Tot. Req.			Nomenclature:		
WBFK-31142-000			2			RECEIVER ASSEMBLY		
FH-172-022			1			TUBE ASSEMBLY		
103-012			A/R			WIRE		
13-825-3145			A/R			CEMENT		
13-637			1			LOCTITE 496 CEMENT		
285-007-221			1			SOLDER LEAD FREE		

RED CONTROLLED

REVISION		A		c.o. P10000067		SWFK-32254-000	
						Sheet 4.1	
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PRODUCTION TEST INFORMATION

SOFTWARE REVISION PXI FCAAT	SOFTWARE 2.5 MIN.
HARDWARE REVISION PXI FCAAT	I065E.008 MIN
TEST BOARD	T4530
TEST COUPLER	T8049

PHASE TEST

FREQUENCY (Hz)	AC DRIVE (mArms)	DEGREE LIMIT	
		MIN	MAX
500	5.8	140	220

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ITASCA, ILLINOIS U.S.A.

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
			Active	A
A	PI0000067	7-14-15		
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			LW	7-14-15
			CK. BY	DATE
			GJP	7-16-15
TITLE: RECEIVER			SWFK-32254-000	
PERFORMANCE SPECIFICATION			SHT 5.1	
			APP. BY	DATE
			GJP	7-16-15

# Mouser Electronics

Authorized Distributor

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