

SHT 1.1



NOMINAL WEIGHT
.18 GRAMS

KNOWLES ELECTRONICS
ITASCA, ILLINOIS U.S.A.



Technical drawing of a component showing dimensions and tolerances:

- Outer Diameter: $1,41 \pm 0,04$ [$.0555 \pm .0015$]
- Dimension 1: $1,29 \pm 0,05$ [$.051 \pm .002$]
- Dimension 2: $1,29 \pm 0,05$ [$.051 \pm .002$]
- Maximum Solder Buildup: $0,51$ [$.020$]
- Dimension 3: $3,40 \pm 0,05$ [$.134 \pm .002$]
- Radius: $R0,508 \pm 0,025$ [$.020 \pm .001$]

Revision	C.O. #	Implementation Date	RELEASE LEVEL		REVISION
			Released		A
A	C10103482	12-7-05			
SCALE: 5:1				DR. BY	DATE
DO NOT SCALE DRAWING				CRG	12-7-05
TITLE: RECEIVER OUTLINE DRAWING				CK. BY	DATE
				GJP	12-8-05
				APP. BY	DATE
				GJP	12-8-05
FFH-23373-104					
SHT 1.1					

THE FFH-23373-104 IS A FERROFLUID DAMPED FH-23373 RECEIVER WITH A PEAK OF 4dB RELATIVE TO THE SENSITIVITY AT 1kHz UNDER CONSTANT VOLTAGE DRIVE CONDITIONS.

FERROFLUID DAMPING

FFH-23373-104
SHEET 2.1

CONSTANT VOLTAGE DRIVE CONDITIONS

SENSITIVITY IN dB RELATIVE TO 20μPa FOR CONDITIONS SHOWN BELOW

120

115

110

105

100

95

90

85

80

75

70

100

2

3

4

5

6

7

8

9

1000

2

3

4

5

6

7

8

9

10000

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	1.0	2.0	5.0
500	0.0	2.0	4.0
1000	-2.0	96.0	2.0
2100 - 3100	1.0	4.0	7.0
4500	-12.0	---	---

PORT LOCATION: 12S

TOTAL HARMONIC DISTORTION
DEVICE WILL NOT EXCEED TOTAL HARMONIC DISTORTION LEVELS LISTED BELOW.

FREQUENCY (Hz)	AC DRIVE (V rms)	DC BIAS (V)	LIMIT (%)
500	0.50	0	10
870	0.18	0	6
1300	0.18	0	6

TEST CONDITIONS

NOMINAL SOURCE VOLTAGE	0.18 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)

ELECTRICAL

DC RESISTANCE	125 Ohms ± 10%
IMPEDANCE @ 500 Hz	190 Ohms ± 15%
IMPEDANCE @ 1kHz	280 Ohms ± 15%

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

TEMPERATURE: OPERATING RANGE FROM 0°C TO 63°C (SENSIVITY 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

Revision

C.O. #

Implementation Date

RELEASE LEVEL

REVISION

A

C10103482

12-7-05

Released

A

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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

FFH-23373-104
SHT 2.1

DR. BY

DATE

CRG

12-7-05

CK. BY

DATE

GJP

12-8-05

APP. BY

DATE

GJP

12-8-05