

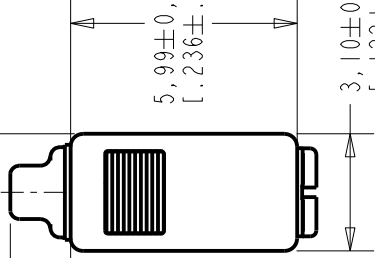


**THE DATASHEET OF  
GD-31475-000**



1,59±0,05  
[.063±.002]

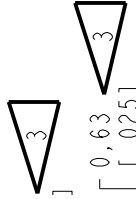
1,55±0,10  
[.061±.004]



5,99±0,05  
[.236±.002]

3,10±0,07  
[.122±.003]

0,85  
[.033]



0,63  
[.025]



TERMINAL 2  
(POSITIVE)



0,63  
[.025]



TERMINAL 1  
(NEGATIVE)

0,51  
[.020]  
MAXIMUM  
SOLDER BUILDUP

NOTES:



A POSITIVE GOING VOLT  
RELATIVE TO TERMINAL  
IN PRESSURE AT THE SO



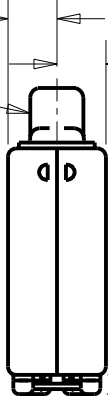
LOCATED FROM TWO SURF  
CONVENIENCE. ONLY AP  
SURFACE, NOT TO BE US



DIMENSION TO APPROXIM  
TERMINAL PAD.

∅ 1,41±0,04  
[.0555±.0015]  
OUTER DIAMETER

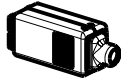
1,30±0,10  
[.051±.004]



2,59±0,07  
[.102±.003]



1,30±0,10  
[.051±.004]



SCALE 2:1  
0.16 GRAMS

DIMENSIONS IN MILLIMETERS [INCHES]

Revision	C.O. #	Implementation Date	RELEASE
A	C10113803	7-4-12	Act

SCALE:

5:1

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

DO NOT SCALE DRAWING

TITLE:

**RECEIVER**

OUTLINE DRAWING

**GD-31475-**

SHT 1.

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

PERFORMANCE SPECIFICATION		TITLE: <b>RECEIVER</b>	
CD-31475-000		SHT 2.1	
DR. BY DATE	LSY 7-4-12	CM. BY DATE	GJP 7-12-12
APP. BY DATE	GJP 7-12-12	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	
7-12-12		GJP	

Revision	C.O. #	Implementation Date	RELEASE LEVEL
A	C10113803	7-4-12	Active
REVISION <b>A</b>			

TABLE 4

NOMINAL SOURCE VOLTAGE	0.118 Vrms, 0 mA DC BIAS
SOURCE IMPEDANCE	< 1 Ohm
TUBING	10 mm [.394"] LONG X 1 mm [.039"] I.D. ("ITE")
COUPLER CAVITY	2 CM <sup>3</sup> , SIMULATED ANSI S3.7 TYPE HA-3 (IEC 60318-5)
MAXIMUM DRIVE VOLTAGE	1.09 Vrms

## TEST CONDITIONS

TABLE 3

POWER (mW)	500 Hz SPL (dB)	REQUIRED VOLTAGE (Vrms)	Peak SPL (dB)	REQUIRED VOLTAGE (Vrms)
50	117.0	1.4	128.0	1.7
10	114.0	0.6	124.0	0.9

MAXIMUM OUTPUT LEVEL (TYPICAL)

TABLE 2

FREQUENCY (Hz)	AC DRIVE (Vrms)	DC BIAS (V)	LIMIT (%)
833	0.118	0	3
1250	0.118	0	3
833	0.331	0	8
1250	0.331	0	8

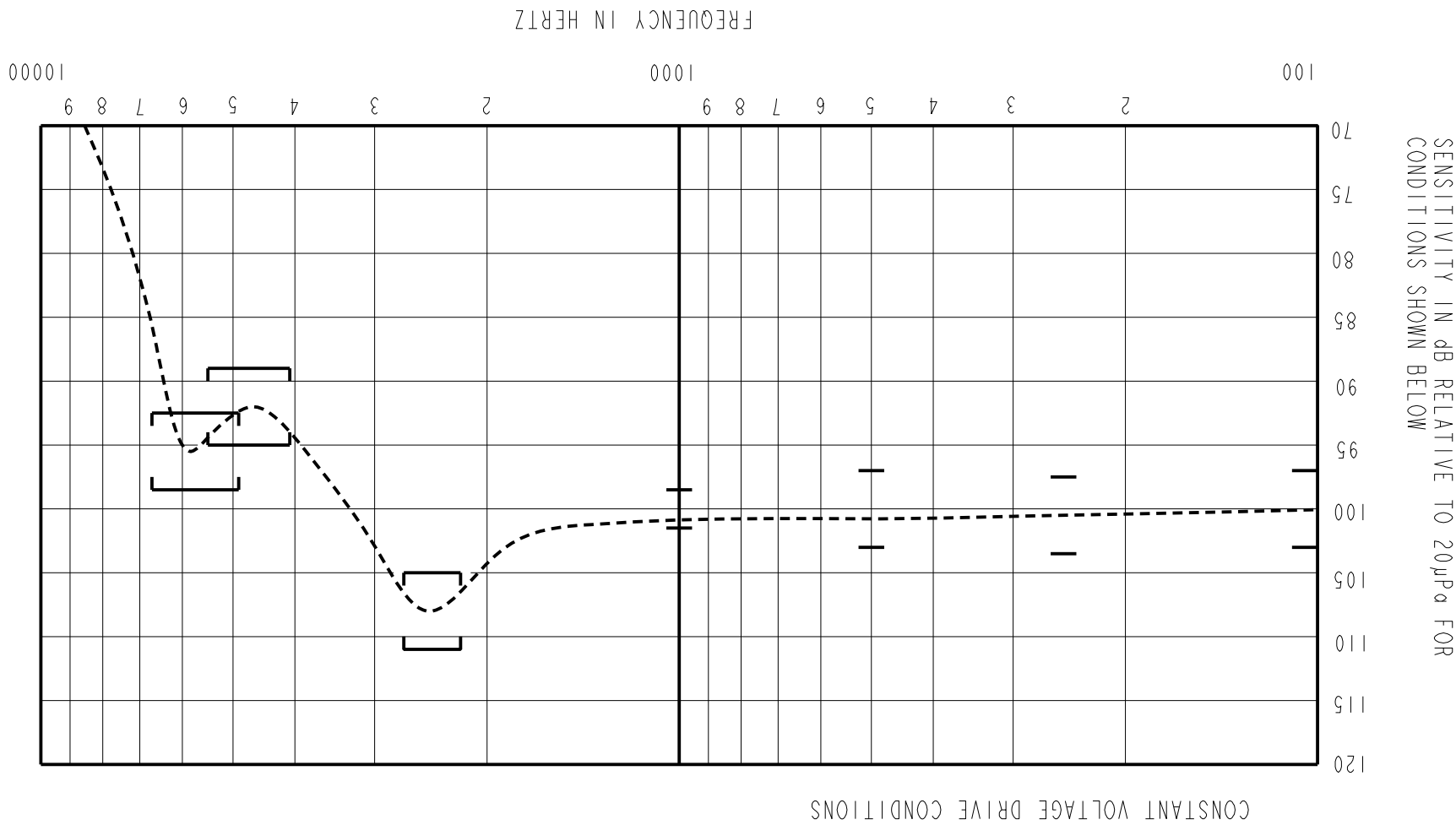
TOTAL HARMONIC DISTORTION DEVICE WILL NOT EXCEED TOTAL HARMONIC DISTORTION LEVELS LISTED BELOW.

TABLE 1

LIMIT TYPE	FREQUENCY (Hz)	MINIMUM	NOMINAL	MAXIMUM
REL	100	-3.0	0.0	+3.0
REL	250	-2.5	+0.5	+3.5
REL	500	-3.0	0.0	+3.0
REF	1000	-1.5	100.0	+1.5
PEAK	2200 - 2700	+5.0	+8.0	+11.0
VALLEY	4075 - 5475	-11.0	-8.0	-5.0
PEAK	4900 - 6700	-7.5	-4.5	-1.5

SENSITIVITY TO 20µPa. ALL OTHER VALUES IN DB RELATIVE TO THE SENSITIVITY AT 1KHz. DEVICE WILL PRODUCE THE SPL LISTED BELOW UNDER TEST CONDITIONS DESCRIBED IN TABLE 4. NOMINAL SENSITIVITY AT 1KHz IS DB RELATIVE TO 20µPa.

## ACOUSTICAL



INTENDED FOR USE IN CIC, RIC, AND MINI-BTE APPLICATIONS. THIS IS A PAIR OF GE RECEIVERS WITH VERY LOW VIBRATION IN ALL DIRECTIONS. ONE GE RECEIVER IS REVERSE MAGNETIZED FOR MAGNETIC LEAKAGE CONSIDERATIONS.

NO DAMPING

CD-31475-000 SHEET 2.1

## MECHANICAL

PORT LOCATION: 12S

SOLDER TYPE: SAC305

TEMPERATURE

OPERATING: SENSITIVITY WILL NOT VARY MORE THAN +1/-3 DB AT 500 HZ FROM -17°C TO 63°C

STORAGE: -40°C TO 63°C

SHOCK RESISTANCE: 90% SURVIVAL RATE WITH THD @ 1/3 PEAK FREQUENCY LESS THAN 10%, THD @ 1/2 PEAK FREQUENCY LESS THAN 20% AND LESS THAN 3DB CHANGE IN SENSITIVITY AT 1KHz WHEN SUBJECTED TO 15,000 G.

## ELECTRICAL

TABLE 5

DC RESISTANCE @ 20°C	33.5 Ohms ± 10%
IMPEDANCE @ 500 Hz	35.6 Ohms ± 15%
IMPEDANCE @ 1 KHz	42.9 Ohms ± 15%
INDUCTANCE @ 500 Hz	22.2 mH TYPICAL
CAPACITANCE @ 10 MHz	6.27 pF TYPICAL

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

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 [Knowles](#) Information

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-  Cost Control Management
-  Shortage Management
-  Alternative Solution
-  Excess Inventory Management