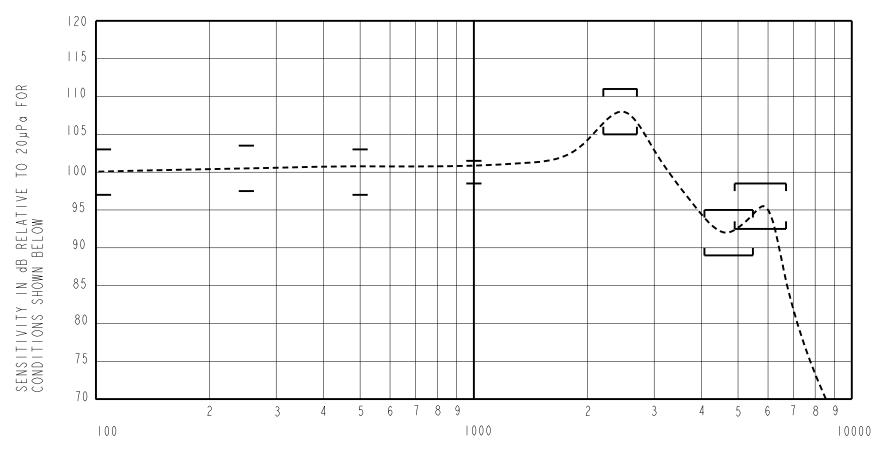


GD-31475-000 SHEET 2.1

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.





FREQUENCY IN HERTZ

#### **ACOUSTICAL**

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

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	+     . 0
VALLEY	4075 - 5475	-11.0	-8.0	-5.0
PEAK	4900 - 6700	-7.5	- 4 . 5	-1.5

TABLE I

TOTAL HARMONIC DISTORTION

DEVICE WILL NOT EXCEED TOTAL HARMONIC DISTORTION LEVELS LISTED BELOW.

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

TABLE 2

MAXIMUM OUTPUT LEVEL (TYPICAL)

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

TABLE 3

#### **ELECTRICAL**

DC RESISTANCE @ 20°C	33.5 Ohms $\pm$ 10%
IMPEDANCE @ 500 Hz	$35.6$ Ohms $\pm$ 15%
IMPEDANCE @ I kHz	42.9 Ohms ± 15%
INDUCTANCE @ 500 Hz	22.2 mH TYPICAL
CAPACITANCE @ 10 MHz	6.27 pF TYPICAL

TABLE 5

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

### **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 IKHZ WHEN SUBJECTED TO 15,000 G.

#### **TEST CONDITIONS**

.20. 0020	
NOMINAL SOURCE VOLTAGE	0.118 Vrms, 0 mA DC BIAS
SOURCE IMPEDANCE	< I Ohm
TUBING	10 mm [.394"] LONG X   mm [.039"]     D. (" TE")
COUPLER CAVITY	2 CM <sup>3</sup> , SIMULATED ANSI S3.7 TYPE HA-3 (IEC 60318-5)
MAXIMUM DRIVE VOLTAGE	1.09 Vrms

TABLE 4

Revision	C.O. #	Implementation Date	RELEASE LEVEL		REVISION
A	C10113803 7-4-12 Active			Α	
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 - 4 - 1 2
TITLE:	RE	CEIVER	CD-31475-000	CK. BY  GJP  APP. BY	7 -   2 -   2 DATE
	PERFORMAI	NCE SPECIFICATION	SHT 2.1	GJP	7-12-12

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

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