

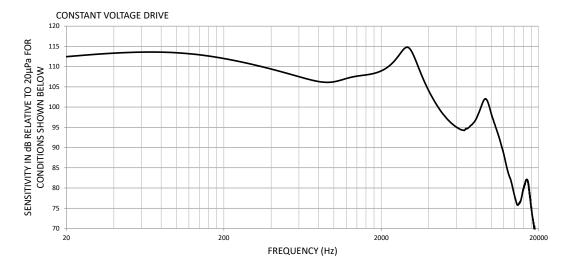
THIS IS AN UNDAMPED MAGNETIC BALANCED ARMATURE RECEIVER INTENDED FOR USE IN EARPHONE APPLICATIONS.

**NO DAMPING** 

RAQ-33985-B148

Sht 2.1

RoHS Compliant



## **ACOUSTICAL**

SENSITIVITY: DEVICE WILL PRODUCE THE SPL LISTED BELOW WITH THE TEST CONDITIONS DESCRIBED IN TABLE 3. NOMINAL SENSITIVITY AT 1000 Hz IS dB RELEATIVE TO 20  $\mu Pa.$  ALL OTHER VALUES IN dB RELATIVE TO THE SENSITIVITY AT 1000 Hz.

LIMIT TYPE	T TYPE FREQUENCY (Hz		NOMINAL	MAXIMUM	
REL	L 20		4.0	8.0	
REL	EL 100		7.0	11.0	
REL	200	2.0	5.0	8.0	
REL	500		1.5	3.5	
REF	1000	-2.0	106.2	+2.0	
PEAK 1	AK 1 2620-3220		9.5	12.5	
VALLEY	5930-7530	+15			
PFAK2	8000-11000	-12 0	-7.0	-2.0	

TABLE 1

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

HARMONIC DISTORTION LEVELS LISTED BELOW.					
FREQUENCY (Hz)	AC DRIVE (Vrms)	BIAS	LIMIT (%)		
50	0.115	0	5		
0.333*PEAK1	0.115	0	5		
0.5*PEAK1	0.115	0	5		
0.333*PEAK1	0.324	0	10		
0.5*PEAK1	0.324	0	10		

TABLE 2

## **TEST CONDITIONS**

NOMINAL SOURCE VOLTAGE	0.115 Vrms
SOURCE IMPEDANCE	<1 Ohm
TUBING	0 mm, excluding receiver tubing
COUPLER CAVITY	IEC60318-4 (GRAS RA0402)

TABLE 3

## **ELECTRICAL**

DC RESISTANCE @ 20°C	22.5 Ohms ± 15%		
IMPEDANCE @ 500 Hz	31.5 Ohms ± 20%		
IMPEDANCE @ 1 kHz	49.5 Ohms ± 20%		

ISOLATION: CASE WILL BE ELECTRICALLY ISOLATED FROM COIL CIRCUIT.

## **MECHANICAL**

PORT LOCATION: 12S

SOLDER TYPE: RoHS COMPLIANT, SAC 305

TEMPERATURE

OPERATING: SENSITIVITY WILL NOT VARY MORE THAN

+3/-3 dB FROM -17°C to +63°C.

STORAGE: -40°C TO +63°C

Knowles reserves the right to make changes to improve reliability and performance of the product.

TENITATIVE	Revision	C.O.#	Implementation Date	Release level		Revision
TENTATIVE				DRAFT		1
Specifications for laboratory produced samples.				1		-
	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
Knowles Corporation					Ck by	Date
	Receiver Performance Specification		RAQ-33985-B148			
			App by		Date	
			Sht 2.1			