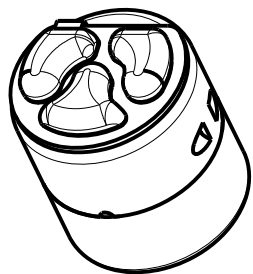
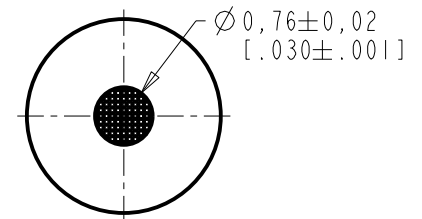
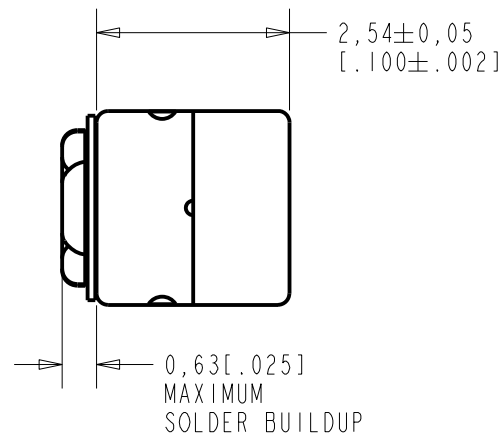
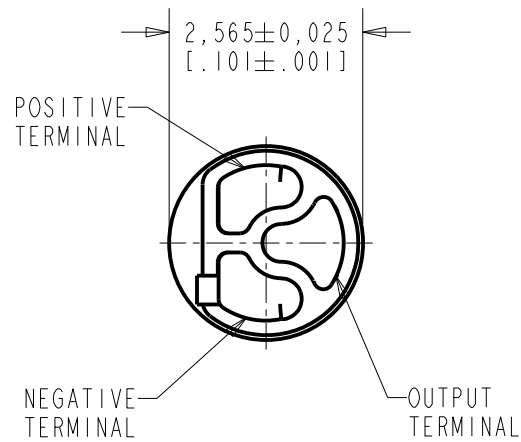


**FC38-30797-S16**  
SHT 1.1

NOTES:

- INCREASED PRESSURE AT THE SOUND INLET CAUSES A POSITIVE GOING VOLTAGE TO APPEAR AT THE OUTPUT TERMINAL, RELATIVE TO THE NEGATIVE TERMINAL.

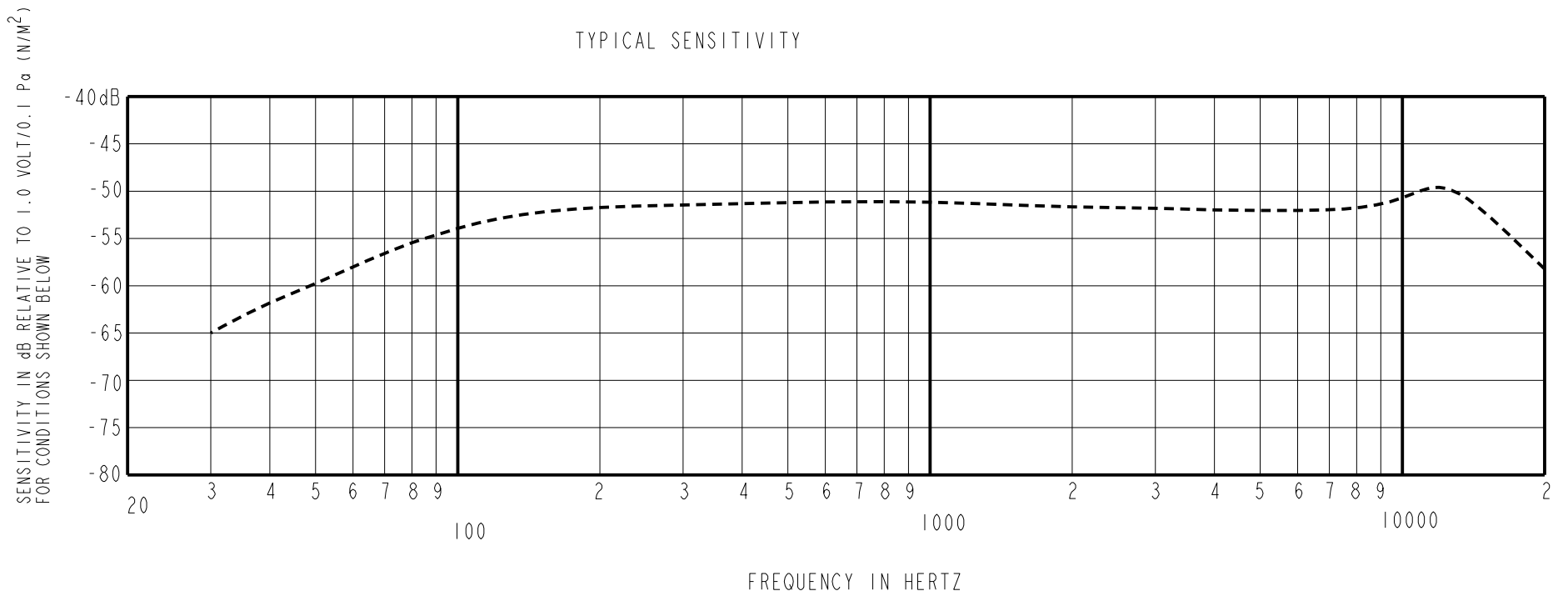


DIMENSIONS IN MILLIMETERS [INCHES]

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

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
E	MI0105709	10-23-14	<b>Active</b>	<b>E</b>
D	MI0104555	4-26-12		
SCALE: <b>10:1</b>			DR. BY	DATE
DO NOT SCALE DRAWING			LSY	12-16-09
			CK. BY	DATE
TITLE: <b>MICROPHONE</b>		<b>FC38-30797-S16</b>	GJP	12-17-09
OUTLINE DRAWING		<b>SHT 1.1</b>	APP. BY	DATE
			GJP	12-17-09

RoHS COMPLIANT



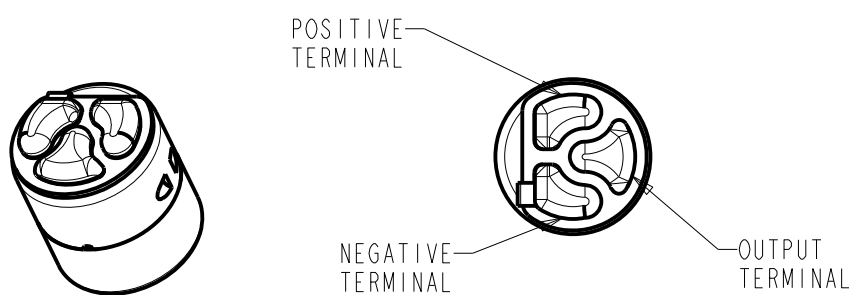
SENSITIVITY MEASURED IN A PRESSURE CAVITY UNDER THE NOMINAL CONDITIONS SHOWN BELOW

POWER REQUIREMENT					
PARAMETER	UNIT	MINIMUM	NOMINAL	MAXIMUM	REMARKS
DC POWER SUPPLY	VDC	0.9	1.3	1.6	-

PERFORMANCE							
PARAMETERS		UNIT	MINIMUM	NOMINAL	MAXIMUM	REMARKS	
SENSITIVITY	100 Hz	dB	-6.0	-3.0	0.0	re SENSITIVITY AT 1 kHz	
	1000 Hz	dB	-54.0	-51.0	-48.0	dB re 1V/0.1Pa	
	10000-14000 Hz	dB	-1.0	2.0	5.0	re SENSITIVITY AT 1 kHz	
SENSITIVITY CHANGE ON REDUCING SUPPLY TO 0.9 VDC		1000 Hz	dB	-3.0	0.0	3.0	REDUCED FROM 1.3 VDC TO 0.9 VDC
AMPLIFIER CURRENT DRAIN		μA	-	26.5	30	-	
OUTPUT LOAD VOLTAGE		V <sub>L</sub>	0.20	0.45	0.90	OPEN LOAD	
A-WEIGHTED NOISE		dB(A)	-	25.0	28.0	INPUT REFERRED NOISE, dB(A) SPL, re SENSITIVITY AT 1kHz	
OUTPUT IMPEDANCE		Ohms	2750	4400	6750		

NOTES: 1. CASE CONNECTED TO NEGATIVE TERMINAL.

2. SENSITIVITY AND NOISE VALUES INDICATED ON THIS SPECIFICATION ARE VALID AT 1.3 VDC AND 909KOhm//<1500pF LOAD IMPEDANCE TYPICAL TEST ENVIRONMENT: 50% RH, 21°C (70°F)



PORT LOCATION: 12N

TERMINAL DEFINITION

KNOWLES RESERVES THE RIGHT TO MAKE CHANGES TO IMPROVE RELIABILITY AND PERFORMANCE OF THE PRODUCT

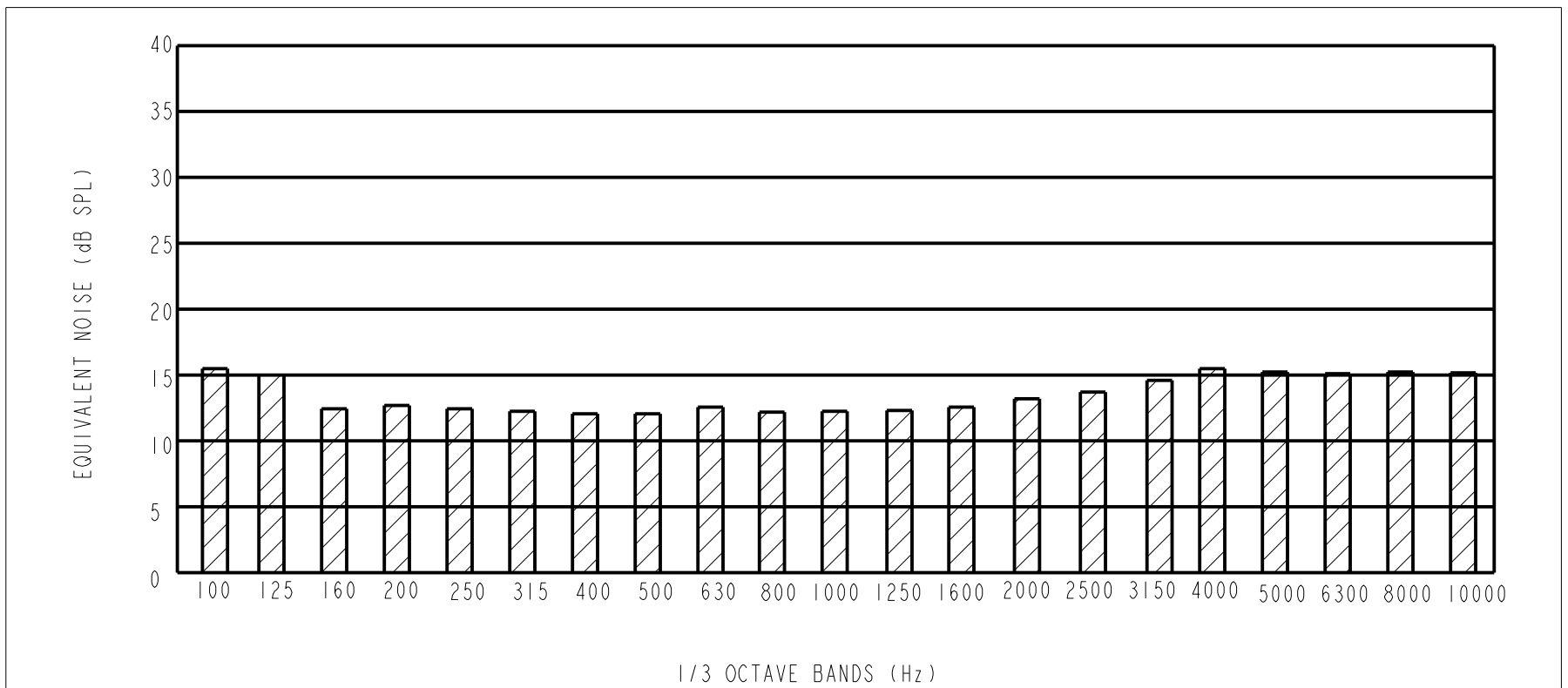
Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
E	MI0105709	10-23-14	Active	E
D	MI0104555	4-26-12		

<p><b>KNOWLES ELECTRONICS</b> ITASCA, ILLINOIS U.S.A.</p>	<p>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</p>	<p>DR. BY DATE</p> <p>LSY 12-16-09</p>
	<p>TITLE: <b>MICROPHONE</b></p>	<p>CK. BY DATE</p> <p>GJP 12-17-09</p>
	<p><b>PERFORMANCE SPECIFICATION</b></p>	<p>APP. BY DATE</p> <p>GJP 12-17-09</p>
	<p><b>FC38-30797-S16</b></p> <p>SHT 2.1</p>	

RoHS COMPLIANT

A) 1/3 OCTAVE INPUT REFERRED NOISE



B) PERFORMANCE

PERFORMANCE						
PARAMETERS		UNIT	MINIMUM	NOMINAL	MAXIMUM	REMARKS
POWER SUPPLY REJECTION RATIO (PSRR)	1000 Hz	dB	-	-32	-20	SUPPLY VOLTAGE @ 1.3 VDC
INPUT REFERRED VIBRATION SENSITIVITY	1000 Hz	dB SPL	-	-	57	BLOCKED PORT; 1g ACCELERATION
HUMIDITY COEFFICIENT	1000 Hz	dB		0.06		PER %RH
TEMPERATURE RANGE	OPERATION	°C(°F)	-17(1.4)	-	63(145.4)	CELSIUS(FAHRENHEIT)
	STORAGE	°C(°F)	-40(-40)	-	63(145.4)	CELSIUS(FAHRENHEIT)
ESD TOLERANCE	MIL-STD-750 CLASS 2 RATING EOS/ESD-S5.1-1993 CLASS 2 RATING					

KNOWLES RESERVES THE RIGHT TO MAKE CHANGES TO IMPROVE RELIABILITY AND PERFORMANCE OF THE PRODUCT

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
E	M10105709	10-23-14	<b>Active</b>	<b>E</b>
D	M10104555	4-26-12		

<p><b>KNOWLES ELECTRONICS</b> ITASCA, ILLINOIS U.S.A.</p>	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
	TITLE: <b>MICROPHONE</b> PERFORMANCE SPECIFICATION		LSY	12-16-09
			GJP	12-17-09
	<b>FC38-30797-S16</b> SHT 2.2		APP. BY	DATE
GJP			12-17-09	