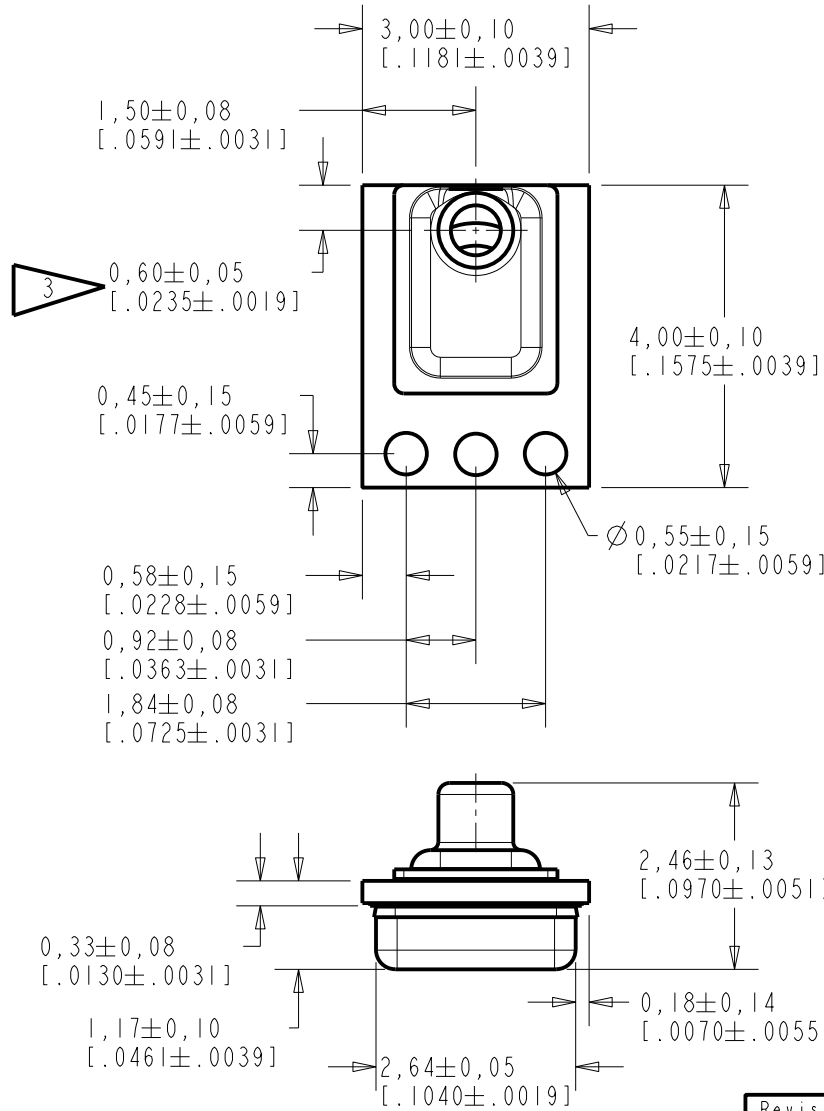


QM-31353-S27

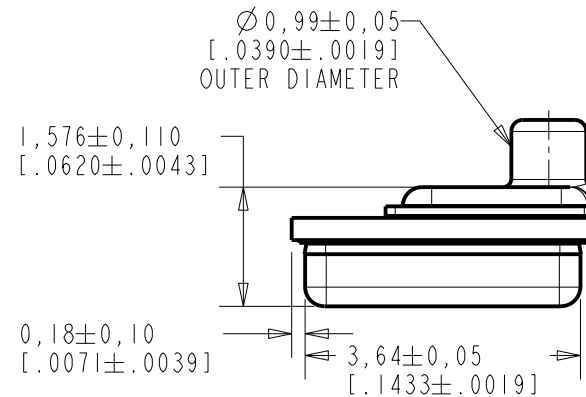
SHT 1.1



NOTES:

- DO NOT PULL A VACUUM OR APPLY AIR PRESSURE OVER THE PORT HOLE OF THE MICROPHONE. PULLING A VACUUM OR APPLYING AIR PRESSURE OVER THE PORT HOLE CAN DAMAGE THE DEVICE.
- DO NOT INSERT ANY OBJECT IN PORT HOLE OF DEVICE AT ANY TIME AS THIS CAN DAMAGE THE DEVICE.
- TUBE CENTER DIMENSION MEASURED FROM THE EDGE OF THE MICROPHONE PCB.
- RECOMMEND NO MORE THAN 3 REFLOW CYCLES.

3 TUBE CENTER DIMENSION MEASURED FROM THE EDGE OF THE MICROPHONE PCB.

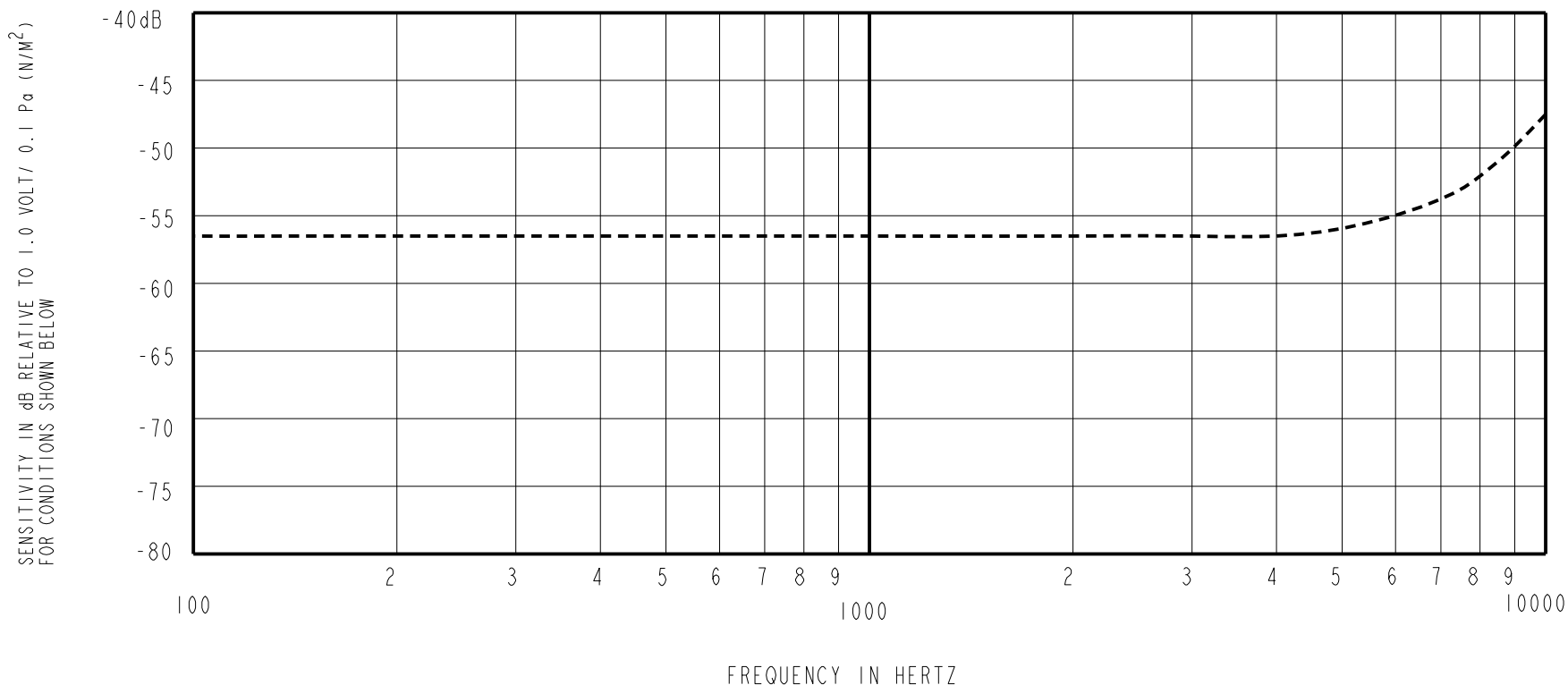


DIMENSIONS IN MILLIMETERS [INCHES]

KNOWLES ELECTRONICS
 ITASCA, ILLINOIS U.S.A.

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
E	MI0105112	6-14-13	Active	E
D	MI0104622	5-23-12		
SCALE: 10:1			DR. BY	DATE
DO NOT SCALE DRAWING			MMM	5-19-11
TITLE: MICROPHONE			CK. BY	DATE
OUTLINE DRAWING			GJP	5-20-11
QM-31353-S27			APP. BY	DATE
SHT 1.1			GJP	5-20-11

TYPICAL SENSITIVITY

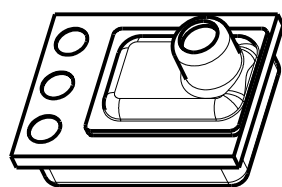


SENSITIVITY MEASURED IN A PRESSURE CAVITY UNDER THE NOMINAL CONDITIONS SHOWN BELOW

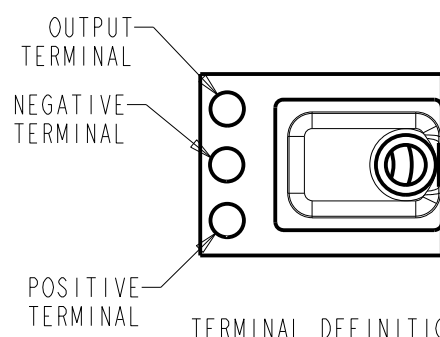
POWER REQUIREMENT					
PARAMETER	UNIT	MINIMUM	NOMINAL	MAXIMUM	REMARKS
SUPPLY VOLTAGE RANGE	VDC	0.9	0.9	1.6	-

PERFORMANCE						
PARAMETERS	UNIT	MINIMUM	NOMINAL	MAXIMUM	REMARKS	
SENSITIVITY	100 Hz	dB	-2.0	-0.0	+2.0	re SENSITIVITY AT 1 kHz
	1000 Hz	dB	-59.5	-56.5	-53.5	dB re 1V/0.1Pa
	10 kHz	dB	+6.0	+9.0	+12.0	re SENSITIVITY AT 1 kHz
CURRENT DRAIN	μA	-	34	55	-	
OUTPUT LOAD VOLTAGE	V _L	0.28	0.45	0.80	OPEN LOAD	
A-WEIGHTED NOISE	dB SPL	-	26.5	30	INPUT REFERRED NOISE re SENSITIVITY AT 1kHz	
OUTPUT IMPEDANCE	Ohms	1900	2900	5900	-	

- NOTES: 1. REFLOWED CUP CONNECTED TO NEGATIVE TERMINAL. GLUED CUP-TUBE PART IS NOT CONNECTED TO NEGATIVE TERMINAL.
 2. PERFORMANCE PARAMETERS ARE VALID AT 0.9 VDC. TYPICAL TEST ENVIRONMENT: 50% RH, 21°C (70°F)



PORT LOCATION: 12JP



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	MI0105112	6-14-13	Active	E
D	MI0104622	5-23-12		

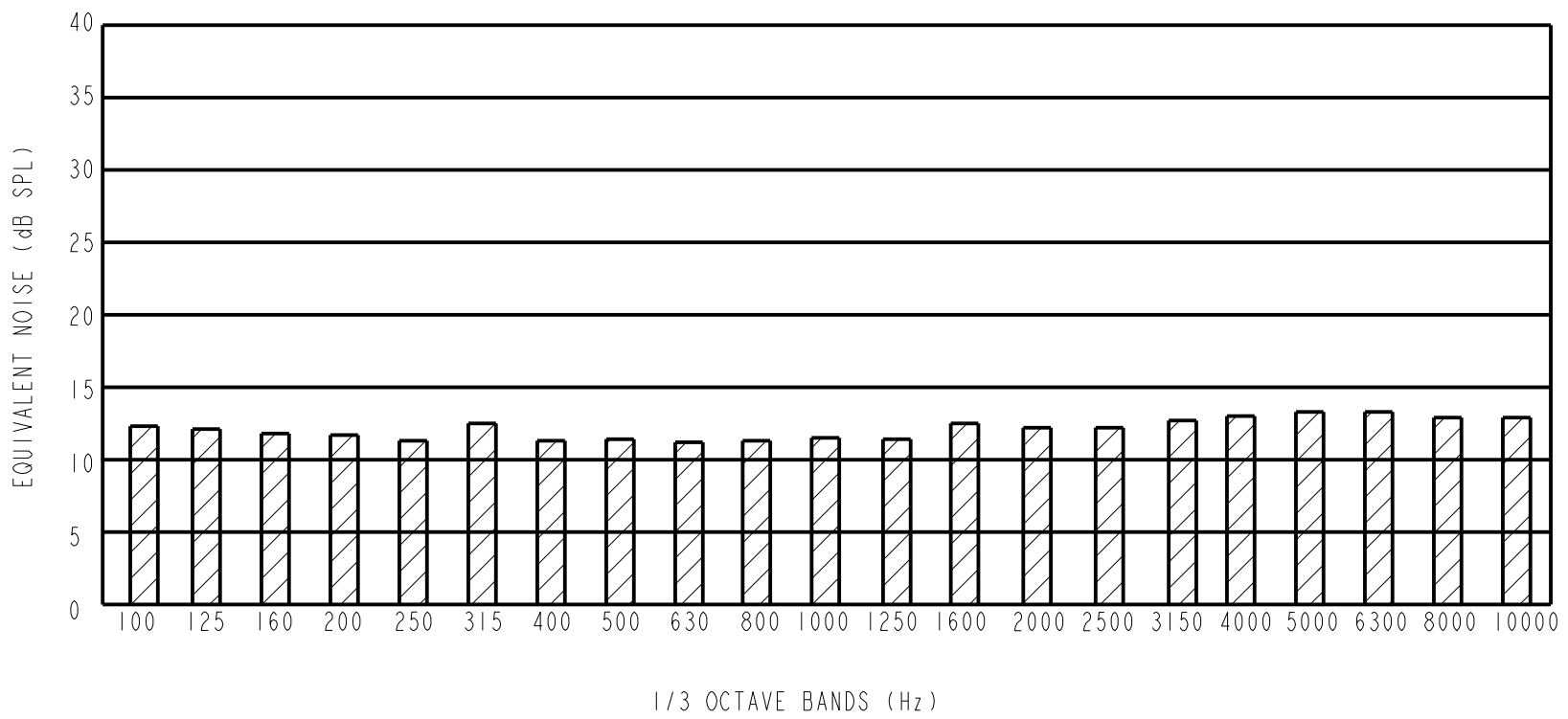
KNOWLES ELECTRONICS
 ITASCA, ILLINOIS U.S.A.

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: **MICROPHONE** **OM-31353-S27**
 PERFORMANCE SPECIFICATION **SHT 2.1**

DR. BY	DATE
MMM	5-19-11
CK. BY	DATE
GJP	5-20-11
APP. BY	DATE
GJP	5-20-11

A) 1/3 OCTAVE INPUT REFERRED NOISE



B) PERFORMANCE

PERFORMANCE						
PARAMETERS		UNIT	MINIMUM	TYPICAL	MAXIMUM	REMARKS
POWER SUPPLY REJECTION RATIO (PSRR)	1000 Hz	dB	-	-42	-18	SUPPLY VOLTAGE @ 0.9 VDC
				-	-	SUPPLY VOLTAGE @ 1.3 VDC
INPUT REFERRED VIBRATION SENSITIVITY	1000 Hz	dB SPL	-	54	60	BLOCKED PORT; 1g ACCELERATION
HUMIDITY COEFFICIENT	1000 Hz	dB		0.0		PER %RH
TEMPERATURE RANGE	OPERATION	°C (°F)	0 (32)	-	63 (145)	CELSIUS (FAHRENHEIT)
	STORAGE	°C (°F)	-40 (-40)	-	100 (212)	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	M10105112	6-14-13	Active	E
D	M10104622	5-23-12		

<p>KNOWLES ELECTRONICS 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: MICROPHONE PERFORMANCE SPECIFICATION	OM-31353-S27 SHT 2.2	MMM	5-19-11
			GJP	5-20-11
			APP. BY	DATE
		GJP	5-20-11	