

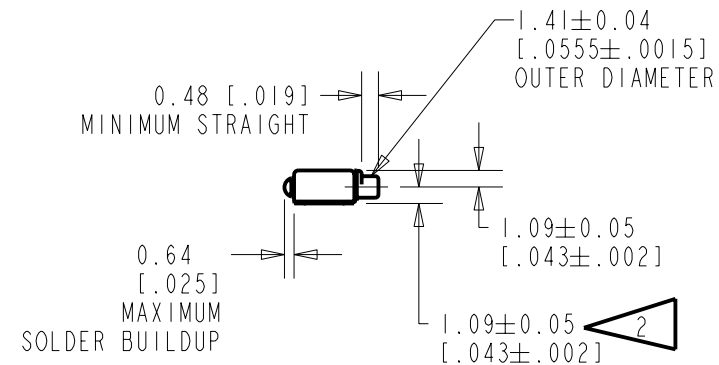
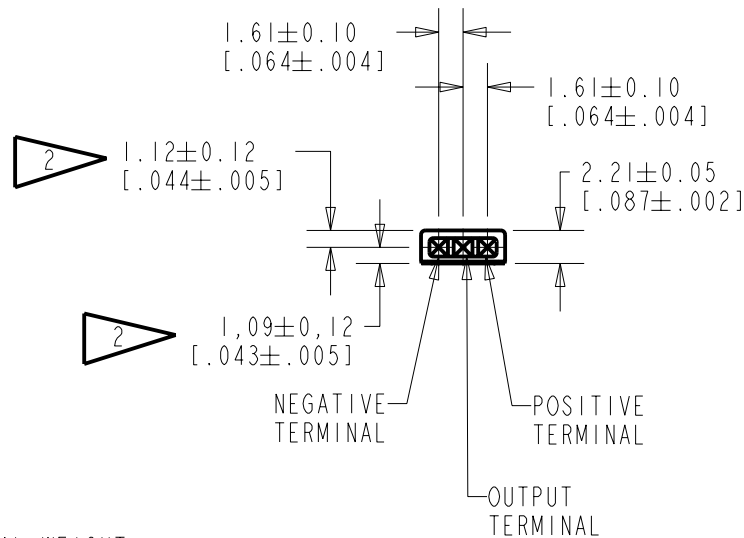
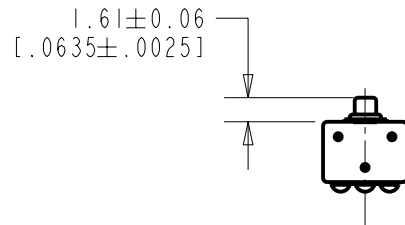
**EK-23024-000**

**SHT 1.1**

**NOTE**

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

2 LOCATED FROM TWO SURFACES FOR CUSTOMER CONVENIENCE. ONLY APPLICABLE FROM ONE SURFACE, NOT TO BE USED TOGETHER. HORIZONTAL LOCATION FOR TERMINAL CENTERED TO  $\pm 0,17$  [0.007].



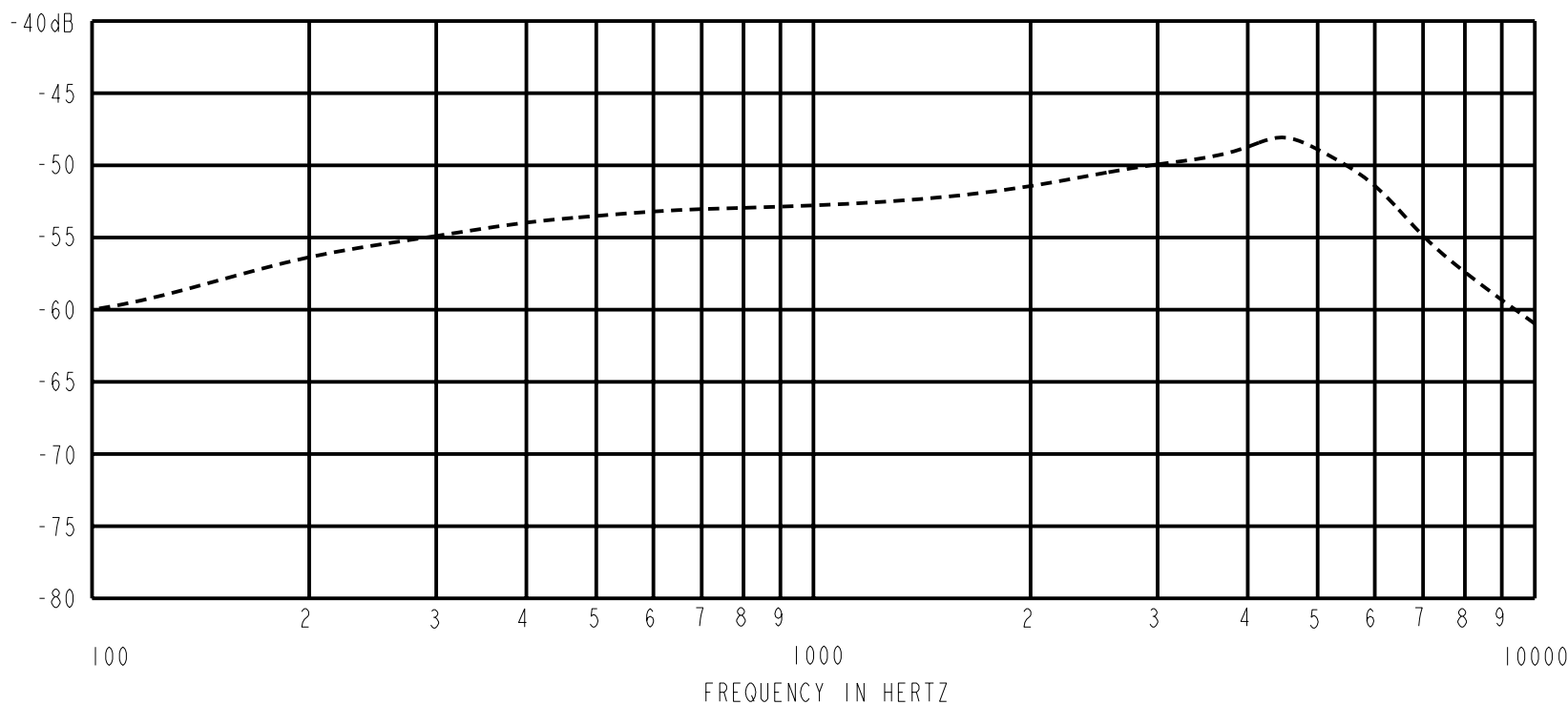
NOMINAL WEIGHT  
.13 GRAM

DIMENSIONS IN MILLIMETERS [INCHES]

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

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
A	MI0100922	11/23/05	<b>Released</b>	<b>A</b>
SCALE: 2:1			DR. BY: DMS	DATE: 11/23/05
DO NOT SCALE DRAWING			CK. BY: GJP	DATE: 11/27/05
TITLE: MICROPHONE		EK-23024-000	APP. BY: GJP	DATE: 11/27/05
OUTLINE DRAWING		SHT 1.1		

SENSITIVITY IN dB RELATIVE TO 1.0 VOLT/0.1 Pa (N/M<sup>2</sup>)  
FOR CONDITIONS SHOWN BELOW.



FREQUENCY	SENSITIVITY			DEVICE CONFORMITY	
	MIN.	NOM.	MAX.	RANGE OF DEVIATION FROM 1KHz	
100	---	-60.0	---	-11.0	+4.0
1000	-55.0	-53.0	-51.0	0.0	0.0
3500-5500	---	-48.5	---	+1.5	+7.5

NOTES:

- CASE CONNECTED TO NEGATIVE TERMINAL.
- MICROPHONE TO BE FUNCTIONAL WITH 10 VDC SUPPLY.
- CONFORMS TO REQUIREMENTS SHOWN ON 'ELECTRET MICROPHONE ENVIRONMENTAL QUALIFICATIONS TEST, EK-PA SHEET 2.2' WITH REF. FREQ. OF 1000 Hz.
- TYPICAL SENSITIVITY TO HUMIDITY AT 1000 Hz IS 0.02 dB/%RH.
- SENSITIVITY AND NOISE VALUES INDICATED ON THIS SPECIFICATION ARE VALID AT 50% HUMIDITY.
- CAPACITANCE MEASUREMENT MADE WITH BOONTON MODEL 7200 OR EQUIVALENT WITH APPLIED AC VOLTAGE OF 15 mVOLTS AT 1 kHz AND 0 VDC. INCLUDES CIRCUIT CAPACITANCE IN PARALLEL WITH CAPACITOR.

PORT LOCATION	DC SUPPLY	AMPLIFIER CURRENT DRAIN	SENSITIVITY CHANGE ON REDUCING SUPPLY TO 0.9VDC	"A" WEIGHTED NOISE (1 kHz EQUIV. SPL)	OUTPUT IMPEDANCE OHMS			CAPACITANCE ±50%		
					MIN.	NOM.	MAX.	OUTPUT TO NEGATIVE	OUTPUT TO POSITIVE	POS. TO NEGATIVE
12S	1.3V	50 µA MAX.	3 dB MAX.	26.0 dB MAX.	2800	4400	6800	N/A	N/A	N/A

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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**  
PERFORMANCE SPECIFICATION

**EK-23024-000**  
SHT 2.1

DR. BY	DATE
DMS	11/23/05
CK. BY	DATE
GJP	11/27/05
APP. BY	DATE
GJP	11/27/05