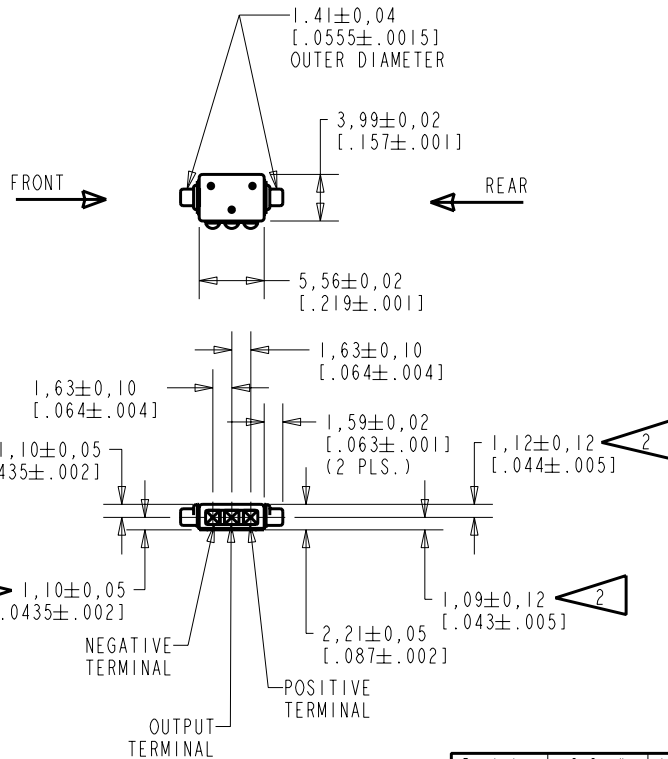


**EL-23077-000**  
SHT 1.1

NOTES:

1. INCREASED PRESSURE AT THE SOUND INLET CAUSE 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  $\pm 0,17$  [.007].



NOMINAL WEIGHT  
.13 GRAM

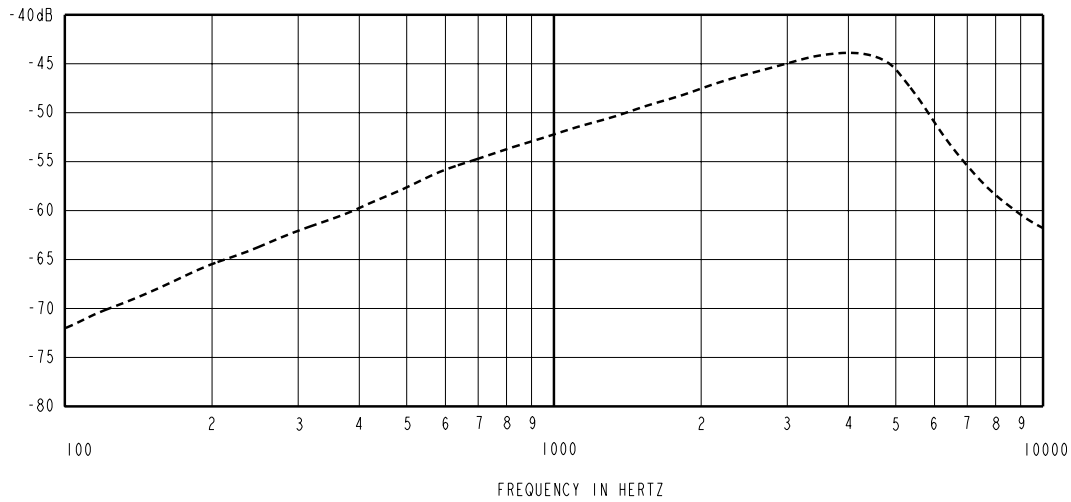
DIMENSIONS IN MILLIMETERS [INCHES]

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

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
			Released	A
A	MI0101526	8-3-07		
SCALE: 2:1			DR. BY	DATE
DO NOT SCALE DRAWING			LSY	8-3-07
TITLE: MICROPHONE			CK. BY	DATE
OUTLINE DRAWING			GJP	8-8-07
EL-23077-000			APP. BY	DATE
SHT 1.1			GJP	8-8-07

KE111ASTZE.FRM Rev: B

SENSITIVITY IN dB RELATIVE TO 1.0 VOLT/MICROBAR (0.1 N/m<sup>2</sup>), UNDER THE TEST CONDITIONS SHOWN BELOW



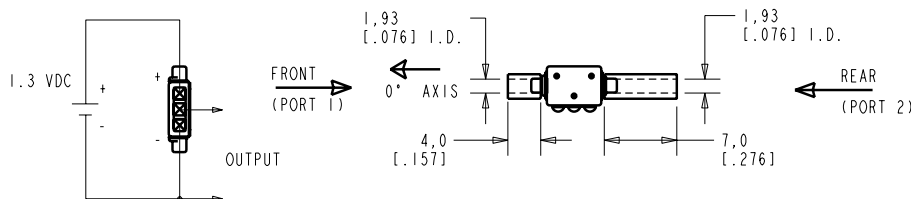
SENSITIVITY (0° ON AXIS)				DEVICE CONFORMITY	
FREQUENCY	MIN.	NOM.	MAX.	RANGE OF DEVIATION FROM 1 kHz	
300	---	-62.0	---	-8.5	-11.5
1000	-54.0	-52.0	-50.0	0.0	0.0
3100-5100	---	-43.5	---	+3.5	+13.5

INTERNAL DELAY AT 1000Hz 54µS 62µS 70µS

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 0.03 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 15m VOLTS AT 1 KHz AND 0 VDC INCLUDES CIRCUIT CAPACITANCE IN PARALLEL WITH CAPACITOR.
- TEST CONDITIONS WITH TUBING DESCRIBED BELOW  
DIMENSIONS IN MILLIMETERS (INCHES)

PORT LOCATION	DC SUPPLY	AMPLIFIER CURRENT DRAIN	SENSITIVITY CHANGE ON REDUCING SUPPLY TO 0.9VDC	"A" WEIGHTED NOISE (RE 1.0 VOLT)	OUTPUT IMPEDANCE OHMS			CAPACITANCE ±50%		
					MIN.	NOM.	MAX.	OUTPUT TO NEGATIVE	OUTPUT TO POSITIVE	POS. TO NEGATIVE
3S,9S	1.3V	50 µA MAX	3 dB MAX.	-100.0 dB MAX.	2800	4400	6800	N/A	N/A	N/A



Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
A	M10101526	8-3-07	Released	A

**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** EL-23077-000  
PERFORMANCE SPECIFICATION SHT 2.1

DR. BY	DATE
LSY	8-3-07
CK. BY	DATE
GJP	8-8-07
APP. BY	DATE
GJP	8-8-07