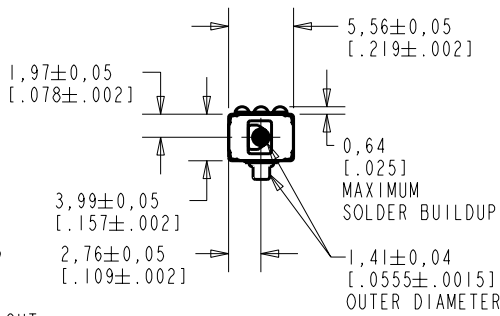
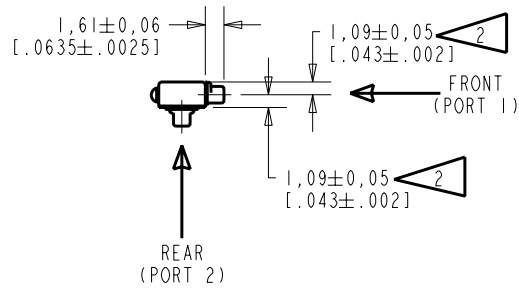
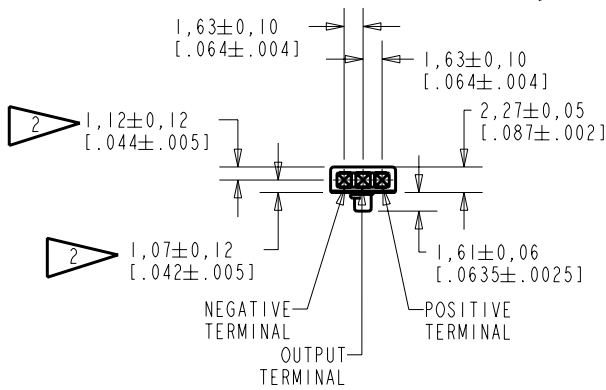


**EL-23078-D44**  
SHT 1.1

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  $\pm 0,17$  [.007].



NOMINAL WEIGHT  
.13 GRAM

DIMENSIONS IN MILLIMETERS [INCHES]

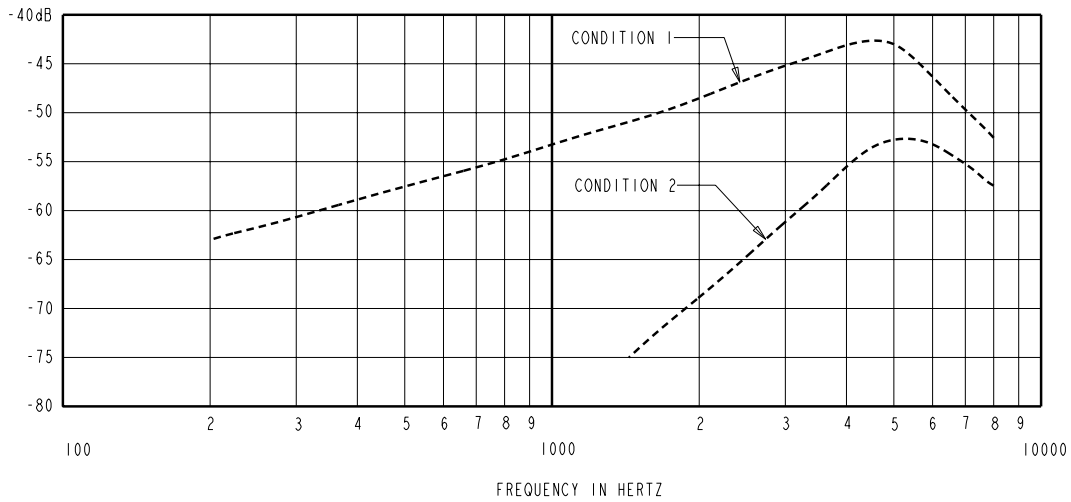
Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
			Released	A
A	MI0101526	8-3-07		

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SCALE:	2:1		DR. BY	DATE
	DO NOT SCALE DRAWING		LSY	8-3-07
TITLE:	MICROPHONE	EL-23078-D44	CK. BY	DATE
	OUTLINE DRAWING	SHT 1.1	GJP	8-8-07
			APP. BY	DATE
			GJP	8-8-07

KE11ASTZE.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



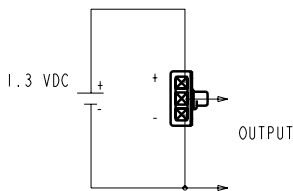
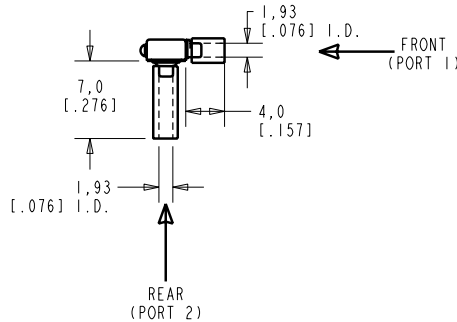
CONDITION 1 SENSITIVITY				DEVICE CONFORMITY		
FREQUENCY	MIN.	NOM.	MAX.	RANGE OF DEVIATION FROM 1 kHz		
				CONDITION 1	CONDITION 2	
300	---	-63.0	---	-8.5	---	
1000	-55.0	-53.0	-51.0	0.0	0.0	
3400-5400	---	-43.0	---	+5.0	+15.0	

NOTES:

- OPEN CIRCUIT SENSITIVITY IN dB RELATIVE TO 1.0 VOLT/MICROBAR (0.1 N/m<sup>2</sup>) UNDER THE TEST CONDITIONS SHOWN IN A9 BELOW.
  - DC SUPPLY: 1.3V
  - AMPLIFIER CURRENT DRAIN: 50 μA MAX.
  - OUTPUT IMPEDANCE: 2800 TO 6800 OHMS (4400 OHMS NOMINAL).
  - CASE CONNECTED TO NEGATIVE TERMINAL.
  - SENSITIVITY CHANGE ON REDUCING SUPPLY TO 0.9 VDC: 3 dB MAX.
  - "A" WEIGHTED NOISE (RE 1.0 VOLT): -100.0 dB MAX.
- GRADES FOR 1kHz SENSITIVITY WITH 1.3 V SUPPLY AND NO LOAD: FOR CONDITION 1  
 GRADE A : -51.00 TO -53.00  
 GRADE B : -53.01 TO -55.00

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		
					MIN.	NOM.	MAX.
12S, 0JP	1.3V	50 μA MAX	3 dB MAX.	-100.0 dB MAX.	2800	4400	6800

TEST CONDITIONS WITH TUBING AND SIGNALS DESCRIBED BELOW: DIMENSIONS IN MILLEMMETERS [INCHES].



SIGNAL "A" IS A REFERENCE SIGNAL OF 1.0 MICROBAR.  
 SIGNAL "B" IS A PROBE SIGNAL DELAYED 56.8 MICROSECONDS WITH RESPECT TO SIGNAL "A" AND HAVING 0.981 TIMES THE AMPLITUDE.

FOR CONDITION 1

SIGNAL "A" IS APPLIED TO PORT 1  
 SIGNAL "B" IS APPLIED TO PORT 2

FOR CONDITION 2

SIGNAL "A" IS APPLIED TO PORT 2  
 SIGNAL "B" IS APPLIED TO PORT 1

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
A	M10101526	8-3-07	Released	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**      **EL-23078-D44**  
 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