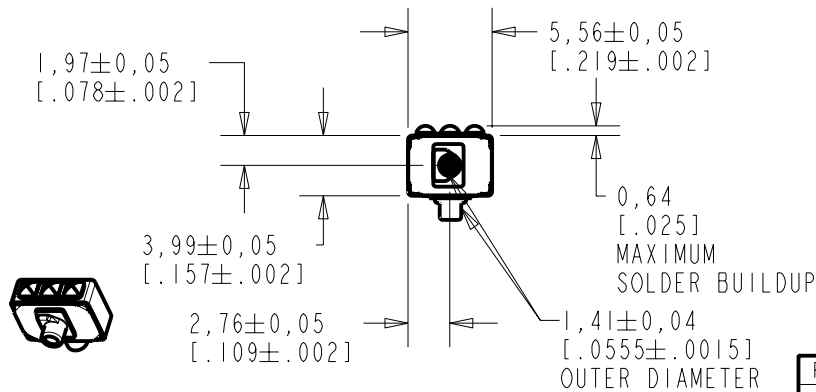
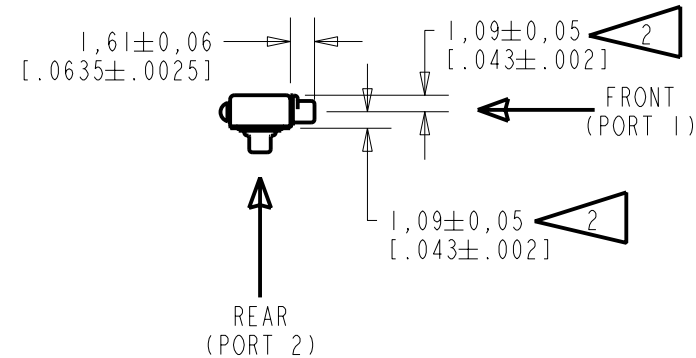
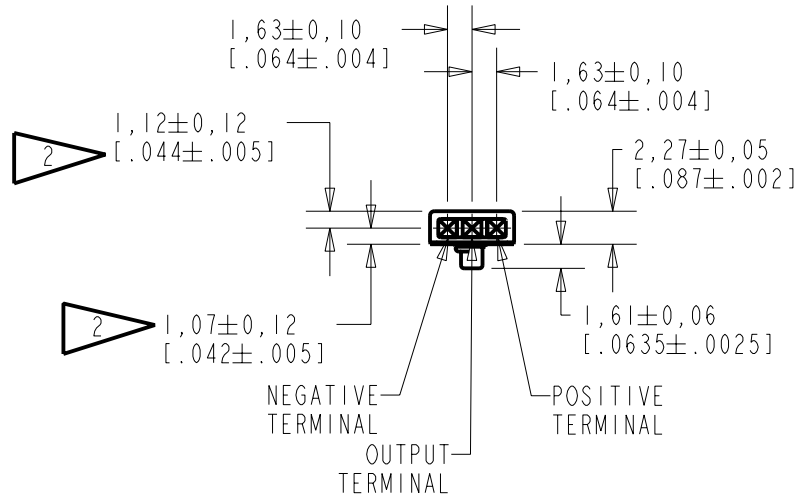


NOTE:

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

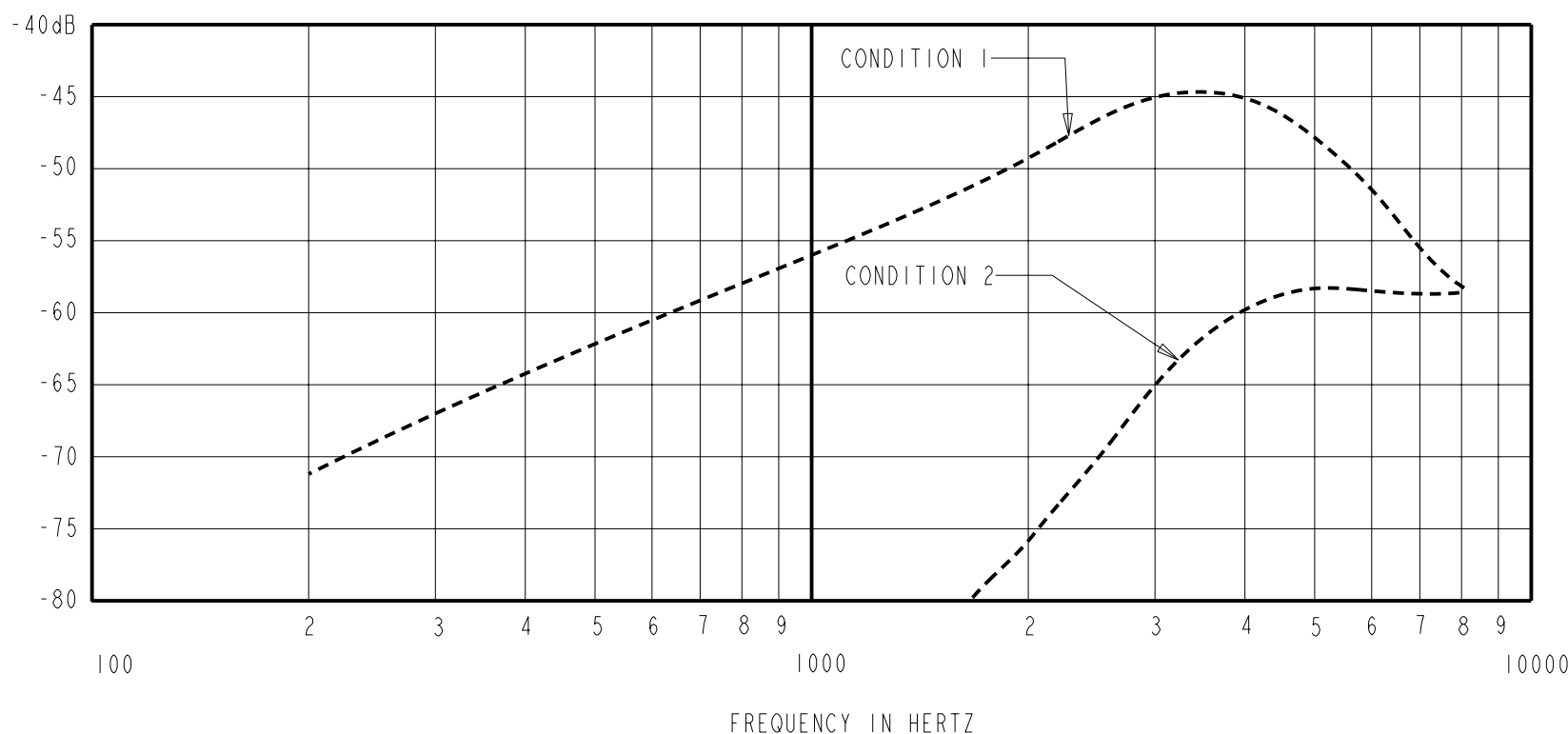
DIMENSIONS IN MILLIMETERS [INCHES]

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

SCALE:	2:1		DR. BY	DATE
DO NOT SCALE DRAWING			LSY	8-3-07
TITLE:	MICROPHONE	EL-23083-000	CK. BY	DATE
OUTLINE DRAWING		SHT 1.1	GJP	8-8-07
			APP. BY	DATE
			GJP	8-8-07

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



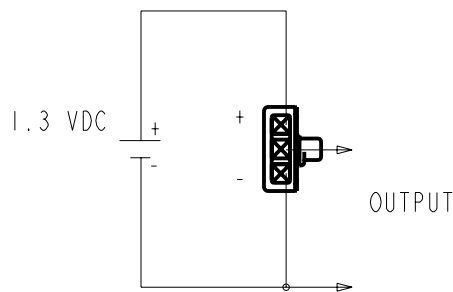
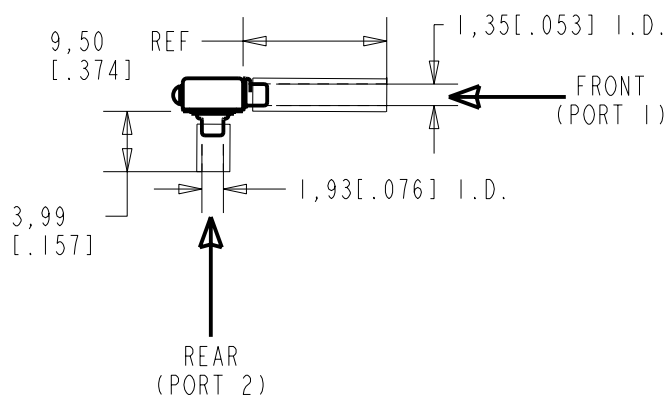
CONDITION 1 SENSITIVITY				DEVICE CONFORMITY		
FREQUENCY	MIN.	NOM.	MAX.	RANGE OF DEVIATION FROM 1 kHz		
				CONDITION 1		CONDITION 2
300	---	-67.0	---	-12.5	-9.5	---
1000	-58.0	-56.0	-54.0	0.0	0.0	-20.0 MIN.
2400-4400	---	-45.0	---	+6.0	+16.0	---

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.

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.
I2S, 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 32.8 MICROSECONDS WITH RESPECT TO SIGNAL "A" AND HAVING 0.989 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	MI0101526	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-23083-000**  
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