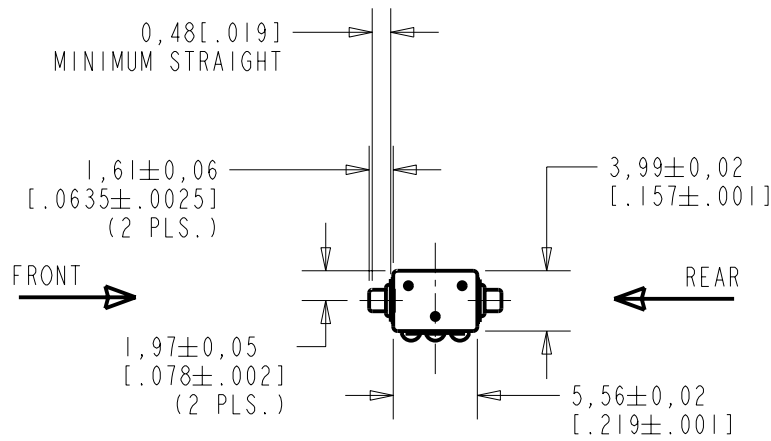


# EL-23085-C75

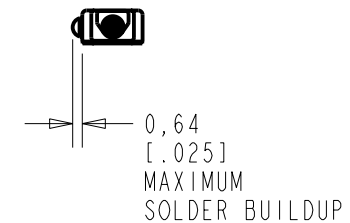
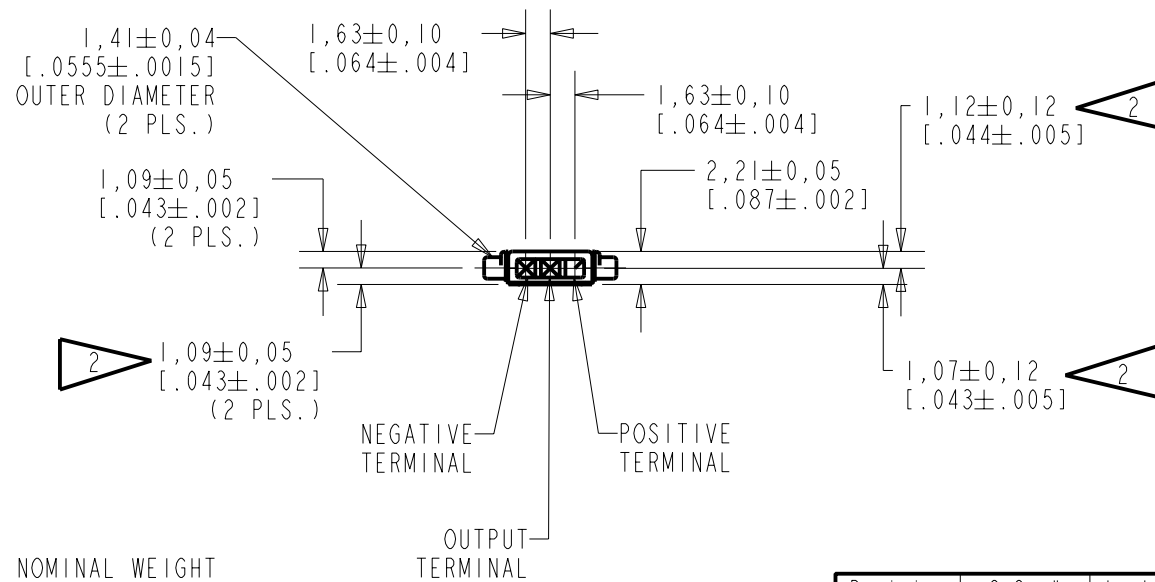
SHT 1.1



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

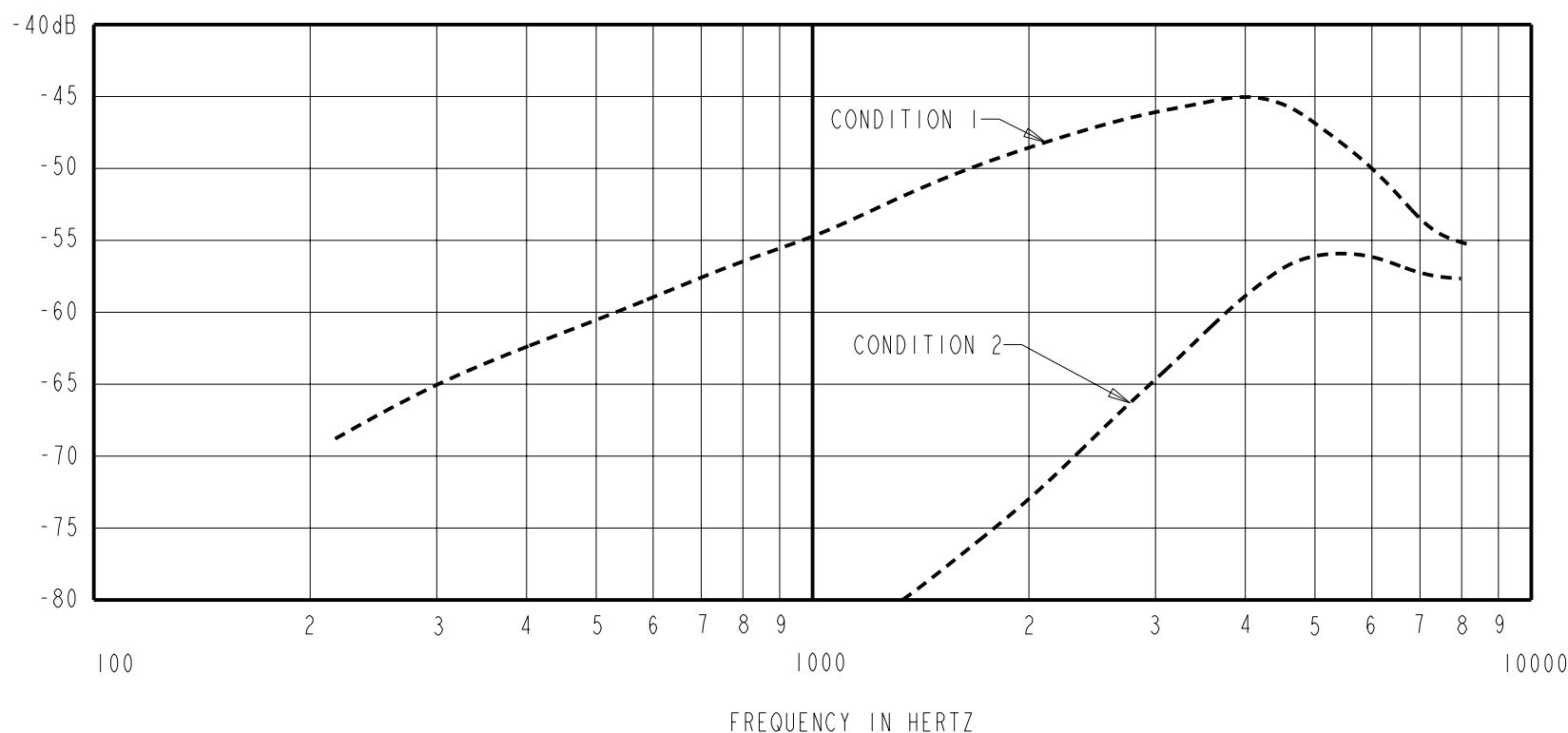
DIMENSIONS IN MILLIMETERS [INCHES]

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
			Released	A
A	MI0100741	7-27-05		

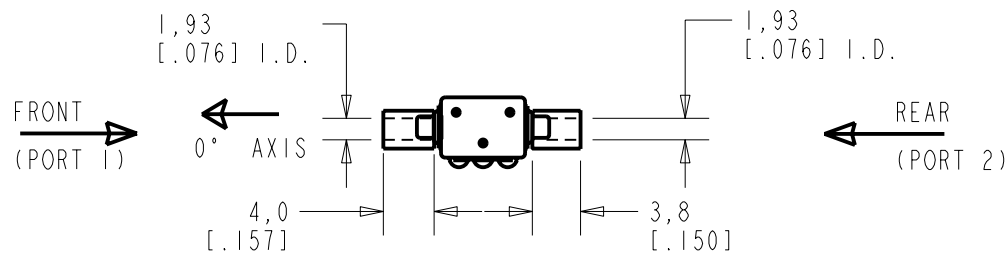
SCALE: 2:1		DR. BY	DATE
DO NOT SCALE DRAWING		AB	7-27-05
TITLE: MICROPHONE		CK. BY	DATE
OUTLINE DRAWING		MMM	8-9-05
EL-23085-C75		APP. BY	DATE
SHT 1.1		MMM	8-9-05

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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 RANGE OF DEVIATION FROM 1 KHz		
FREQUENCY	MIN.	NOM.	CONDITION 1	CONDITION 2	
300	---	-65.0	-12.0	-9.0	---
1000	-58.5	-54.5	0.0	0.0	-20.0 MIN.
3100-5100	---	-45.0	+4.5	+14.5	---



SIGNAL "A" IS A REFERENCE OF 1.0 MICROBAR.  
SIGNAL "B" IS A PROBE SIGNAL DELAYED 43.2 MICROSECONDS WITH RESPECT TO SIGNAL "A" AND HAVING .987 TIMES THE AMPLITUDE.

TEST CONDITIONS WITH TUBING AND SIGNALS DESCRIBED TO THE RIGHT. DIMENSIONS IN MILLIMETERS (INCHES).

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

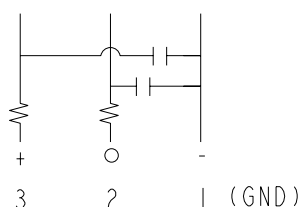
FOR CONDITION 2  
SIGNAL "A" IS APPLIED TO PORT 2  
SIGNAL "B" IS APPLIED TO PORT 1

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.

DC SUPPLY	AMPLIFIER CURRENT DRAIN	SENSITIVITY CHANGE ON REDUCING SUPPLY TO 0.9VDC	"A" WEIGHTED NOISE (RE 1.0 VOLT)	OUTPUT IMPEDANCE OHMS			CAPACITANCE ±75%	
				MIN.	NOM.	MAX.	1-2	1-3
1.3V	50 µA MAX	3 dB MAX.	-100.0 dB MAX.	2800	4400	6800	100pF	100pF

CAPACITANCE PROBE POINTS



Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
A	MI0100741	7-27-05	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**  
PERFORMANCE SPECIFICATION

**EL-23085-C75**  
SHT 2.1

DR. BY	DATE
AB	7-27-05
CK. BY	DATE
MMM	8-9-05
APP. BY	DATE
MMM	8-9-05