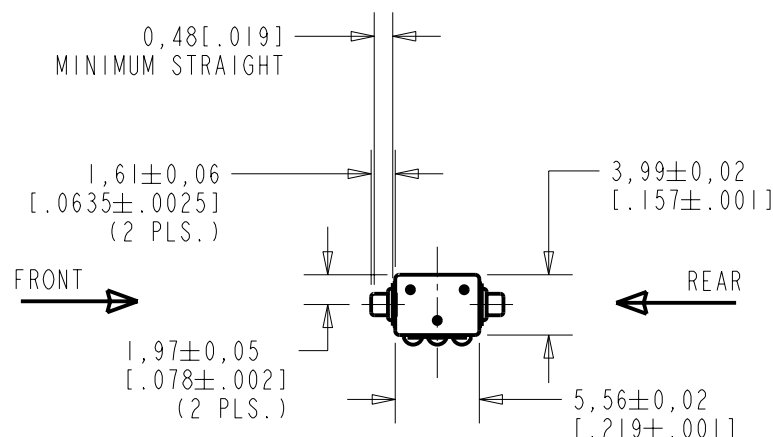


# EL-23085-C28

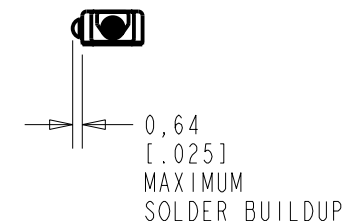
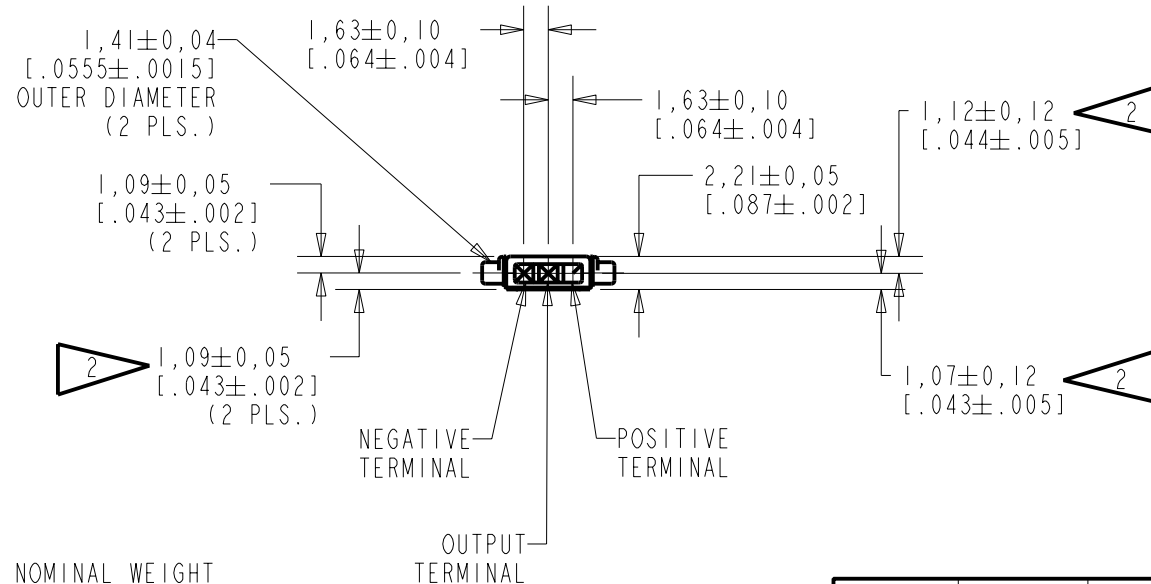
SHT 1.1



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 ±0,17 [.007].



NOMINAL WEIGHT  
.13 GRAM

DIMENSIONS IN MILLIMETERS [INCHES]

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
			Released	A
A	MI0100761	8-23-05		

SCALE: 2:1

DO NOT SCALE DRAWING

TITLE: MICROPHONE

EL-23085-C28

OUTLINE DRAWING

SHT 1.1

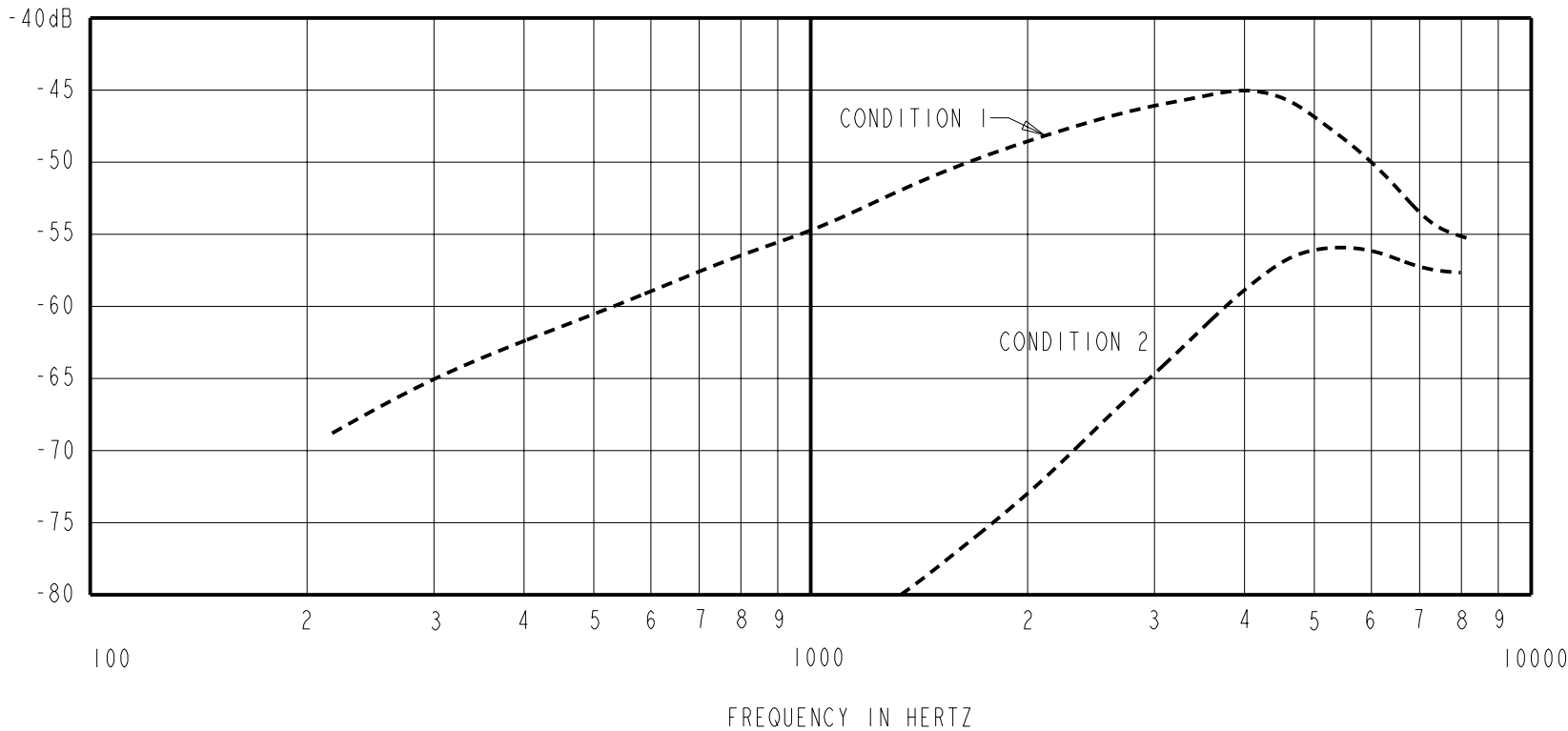
DR. BY	DATE
AB	8-23-05
CK. BY	DATE
GJP	8-26-05
APP. BY	DATE
GJP	8-26-05

KE111ASIZE.FRM

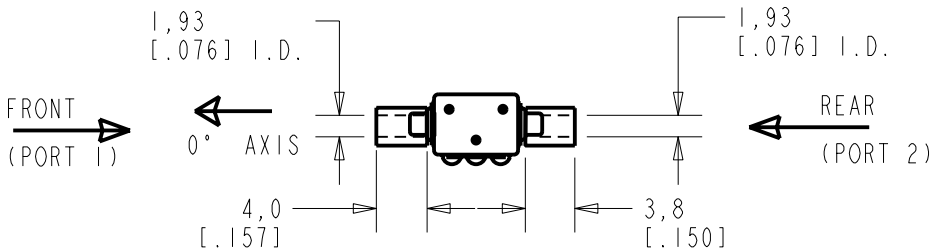
Rev: B

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

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	---	---	
1000	-58.5	-54.5	-12.0 -9.0	-20.0 MIN.	
3100-5100	---	-45.0	0.0 0.0	---	
			+4.5 +14.5		



SIGNAL "A" IS A REFERENCE OF 1.0 MICROBAR.  
SIGNAL "B" IS A PROBE SIGANL 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

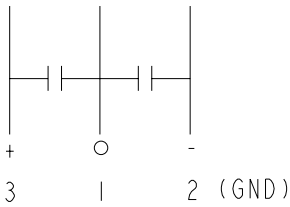
FOR CONDITION 2  
SIGNAL "A" IS APPLIED TO PORT 2  
SIGNAL "B" IS APPLIED TO PORT 1

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	58pF	58pF

CAPACITANCE PROBE POINTS



Revision	C.O. #	Implementation Date	RELEASE LEVEL		REVISION
			Released		A
A	MI0100761	8-23-05			
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			DR. BY DATE		
			AB 8-23-05		
TITLE: MICROPHONE PERFORMANCE SPECIFICATION			EL-23085-C28		
			SHT 2.1		
			CK. BY DATE		
			GJP 8-26-05		
			APP. BY DATE		
			GJP 8-26-05		

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