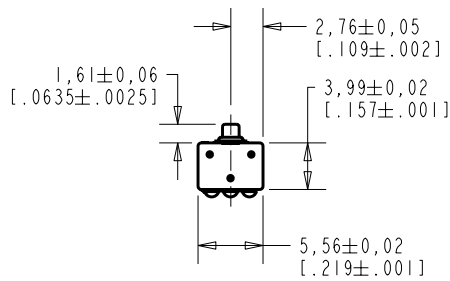


**EK-23089-C48**  
SHT 1.1

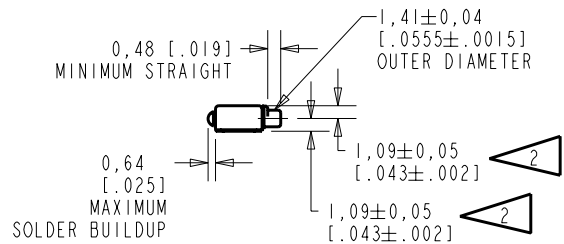
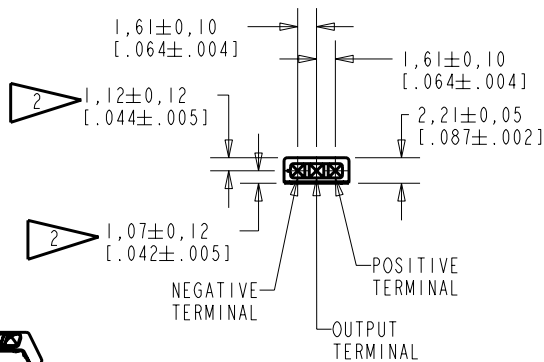


NOTE

1. INCREASED PRESSURE AT THE SOUND INLET CAUSES A POSITIVE GOING VOLTAGE TO APPEAR AT THE OUTPUT TERMINAL, RELATIVE TO THE NEGATIVE TERMINAL.



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

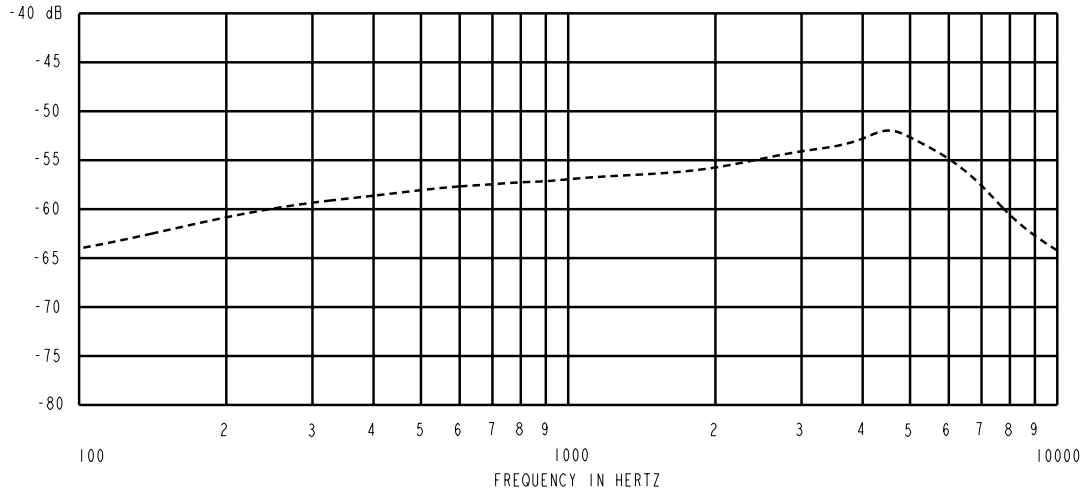
DIMENSIONS IN MILLIMETERS [INCHES]

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Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
			Released	A
A	MI0101309	1-08-07		
SCALE: 2:1			DR. BY	DATE
DO NOT SCALE DRAWING			SDZ	1-08-07
TITLE: MICROPHONE			CK. BY	DATE
OUTLINE DRAWING			GJP	1-10-07
EK-23089-C48			APP. BY	DATE
SHT 1.1			GJP	1-10-07

KE111ASTZE.FRM Rev: B

SENSITIVITY IN dB RELATIVE TO 1.0 VOLT/0.1 Pa (N/M<sup>2</sup>) FOR CONDITIONS SHOWN BELOW.



FREQUENCY	SENSITIVITY			DEVICE CONFORMITY	
	MIN.	NOM.	MAX.	RANGE OF DEVIATION FROM 1kHz	
100	---	-64.0	---	-11.0	-4.0
1000	-59.0	-57.0	-55.0	0.0	0.0
3500-5500	---	-52.5	---	+1.5	+7.5

GRADES FOR 1kHz SENSITIVITY WITH 1.3 V SUPPLY AND NO LOAD:

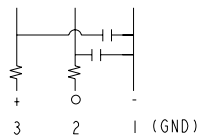
GRADE A: -55.00 TO -57.00

GRADE B: -57.01 TO -59.00

- 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 1000Hz IS 0.02 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 15 mVOLTS AT 1 MHz AND 0 VDC. INCLUDES CIRCUIT CAPACITANCE IN PARALLEL WITH CAPACITOR.
  - \*CUSTOM SHEET 1.1 MAY APPLY.
  - VL SPEC: 0.15 - 0.90V

PORT LOCATION	DC SUPPLY	AMPLIFIER CURRENT DRAIN	SENSITIVITY CHANGE ON REDUCING SUPPLY TO 0.9 VDC	"A" WEIGHTED NOISE (1 kHz EQUIVALENT SPL)	OUTPUT IMPEDANCE OHMS (EACH HALF)			CAPACITANCE ± 50%	
					MIN.	NOM.	MAX.	1-2	1-3
1.3V	1.3V	50µA MAX.	3 dB MAX.	26.0 dB MAX.	4300	6900	10900	100pF	100pF

CAPACITANCE PROBE POINTS



Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
A	M10101309	1-08-07	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**  
PERFORMANCE SPECIFICATION

**EK-23089-C48**  
SHT 2.1

DR. BY	DATE
SDZ	1-08-07
CK. BY	DATE
GJP	1-10-07
APP. BY	DATE
GJP	1-10-07