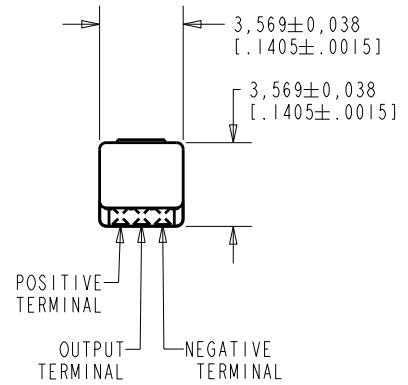
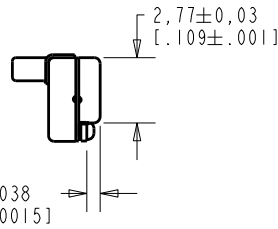
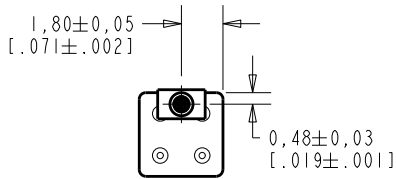
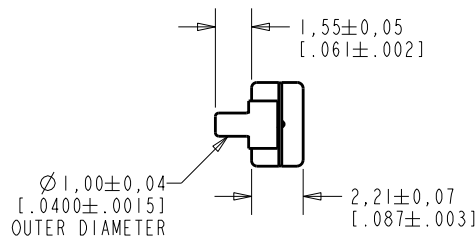


**EM-27901-C46**

SHT 1.1

NOTE:

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



NOMINAL WEIGHT  
.08 GRAMS

DIMENSIONS IN MILLIMETERS [INCHES]

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
C	MI0102070	12-30-08	Active	C
B	MI0101168	7-21-06		
A	MI0100902	12-22-05		

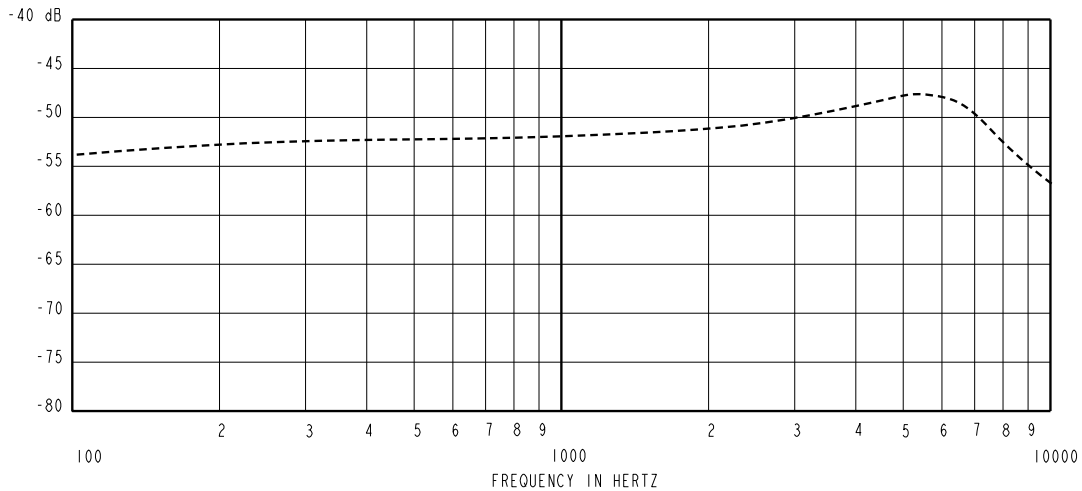
**KNOWLES ELECTRONICS**  
ITASCA, ILLINOIS U.S.A.

SCALE:	4:1		DR. BY	DATE
DO NOT SCALE DRAWING				
TITLE:	MICROPHONE	EM-27901-C46	GJP	1-2-06
	OUTLINE DRAWING	SHT 1.1	APP. BY	DATE
			GJP	1-2-06

HE111AS12E.FRM

Rev: B

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



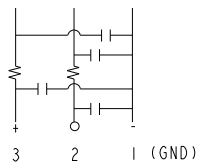
FREQUENCY	SENSITIVITY			DEVICE CONFORMITY	
	MIN.	NOM.	MAX.	RANGE OF DEVIATION FROM 1KHz	
100	---	-53.5	---	-3.0	0.0
1000	-55.0	-52.0	-49.0	0.0	0.0
≈ 5000	---	-47.5	---	+1.5	+7.5

NOTES:

- CASE CONNECTED TO NEGATIVE TERMINAL.
- MICROPHONE TO BE FUNCTIONAL WITH 1.6 VDC SUPPLY.
- TYPICAL SENSITIVITY TO HUMIDITY AT 1000Hz 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 15 mVOLTS AT 1MHz 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 (1 KHz EQUIV. SPL)	OUTPUT IMPEDANCE OHMS			CAPACITANCE ±50%	
					MIN.	NOM.	MAX.	1-2	1-3
12KP	1.3V	50 µA MAX.	3 dB MAX.	28.0 dB MAX.	2800	4400	6800	30pF	30pF

CAPACITANCE PROBE POINTS



Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
C	MI0102070	12-30-08	Active	C
B	MI0101168	7-21-06		
A	MI0100902	12-22-05		

**KNOWLES ELECTRONICS**  
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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		DR. BY MMM	DATE 12-22-05
TITLE: MICROPHONE PERFORMANCE SPECIFICATION	EM-27901-C46 SHT 2.1	CK. BY GJP	DATE 1-2-06
		APP. BY GJP	DATE 1-2-06