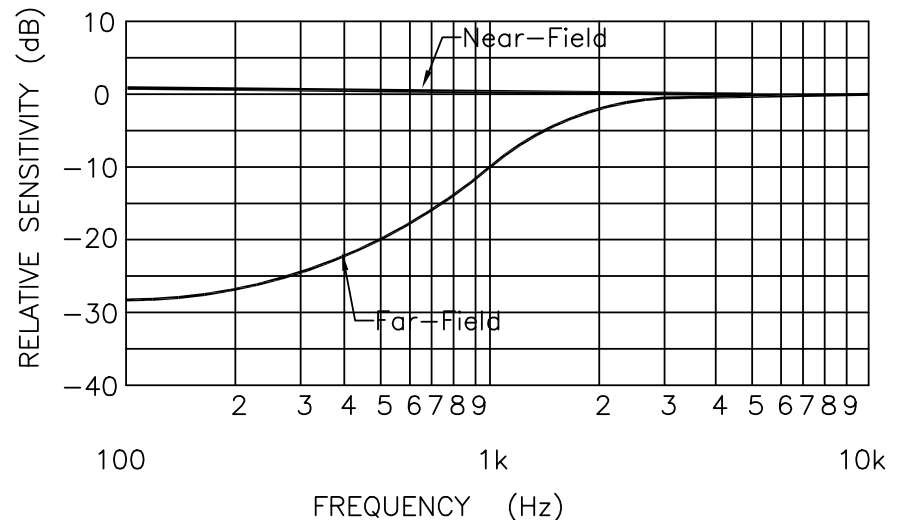
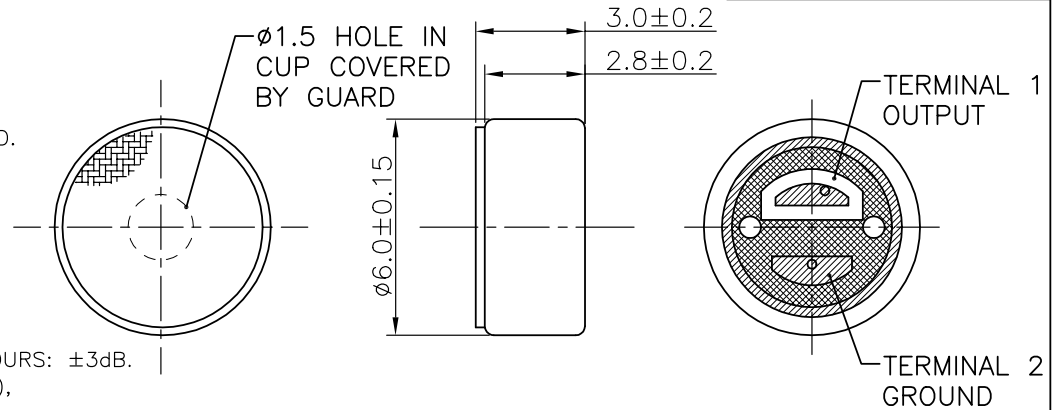


MD6030NSC-0

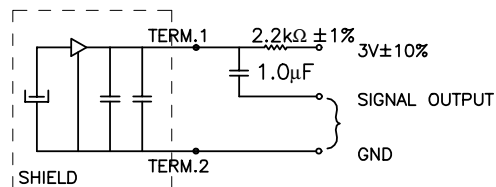
SHT 1.1 & 2.1

NOTES:

1. SENSITIVITY: -37 ± 3 dB re 1.0V/Pa(N/m²) AT 1kHz $22 \pm 5^\circ\text{C}$.
2. IMPEDANCE: LESS THAN $2.2\text{k}\Omega$ (1kHz).
3. STANDARD VOLTAGE: 3.0V.
4. RANGE OF OPERATING VOLTAGE: 2.5V TO 10.0V.
5. CURRENT DRAIN: 0.5mA MAX.
6. S/N RATIO: GREATER THAN OR EQUAL TO 60dB.
7. MAXIMUM INPUT SOUND PRESSURE LEVEL: 120dB.
8. BOTH 33pF & 10pF CAPACITORS ACROSS OUTPUT & GROUND.
9. SENSITIVITY REDUCTION: WITHIN -3 dB AT 2.5V.
10. NOMINAL WEIGHT: .190g.
11. ELECTRET TYPE: CHARGED DIAPHRAGM/FOIL.
12. DIRECTIVITY: NOISE CANCELING.
13. P.C. BOARD TYPE: SOLDER.
14. OPERATING TEMPERATURE: -25°C TO $+70^\circ\text{C}$
(SENSITIVITY WITHIN OPERATING TEMPERATURE ± 10 dB).
15. STORAGE TEMPERATURE: -40°C TO $+85^\circ\text{C}$.
16. SENSITIVITY CHANGE DUE TO $+40^\circ\text{C}$ AT 95% RH FOR 240 HOURS: ± 3 dB.
17. SENSITIVITY CHANGE AFTER EXPOSURE TO -40°C (45 MINUTES),
 $+20^\circ\text{C}$ (10 MINUTES), $+85^\circ\text{C}$ (45 MINUTES), $+20^\circ\text{C}$ (10 MINUTES),
27 CYCLES TOTAL(THE MEASUREMENT TO BE DONE AFTER 2 HOURS
OF CONDITIONING AT 20°C): ± 3 dB.
18. SENSITIVITY CHANGE AFTER -40°C FOR 96 HOURS: THE MICROPHONE
MUST OPERATE WITHIN ITS SENSITIVITY SPECIFICATIONS.
19. SENSITIVITY CHANGE AFTER $+80^\circ\text{C}$ FOR 96 HOURS: THE MICROPHONE
MUST OPERATE WITHIN ITS SENSITIVITY SPECIFICATIONS.
20. ESD PERFORMANCE: THE UNIT MUST OPERATE WITHIN ITS SENSITIVITY
SPECIFICATION AFTER 10kV OF ESD USING THE HUMAN BODY MODEL.
21. SENSITIVITY CHANGE AFTER VIBRATING THE MICROPHONE WITH 10Hz
TO 55Hz AT 1.52mm(PEAK TO PEAK) FOR 2 HOURS EACH AXIS: THE
MICROPHONE MUST OPERATE WITHIN ITS SENSITIVITY SPECIFICATIONS.
22. SENSITIVITY CHANGE AFTER BEING DROPPED ON EACH AXIS FROM A
HEIGHT OF 1m ONTO A METAL PLATE: THE MICROPHONE MUST
OPERATE WITHIN ITS SENSITIVITY SPECIFICATIONS.
23. PULL STRENGTH OF EACH SOLDER PAD: 0.5kgf(4.9N).



TEST CIRCUIT:



DIMENSIONS IN MILLIMETERS

FREQUENCY (Hz)
CONFIDENTIAL, DON'T RELEASE TO THIRD PARTY.

RELEASE LEVEL	ISSUE
RELEASED	C

KNOWLES ELECTRONICS
ITASCA, ILLINOIS U.S.A.

SCALE:	5 : 1	DR. BY	DATE
DO NOT SCALE DRAWING		K.Z.	10/20/03
TITLE:	MICROPHONE SPECIFICATIONS	CK. BY	DATE
	MD6030NSC-0	L.C.	10/20/03
	SHT 1.1 & 2.1	APP. BY	DATE
		S.Y.	10/20/03