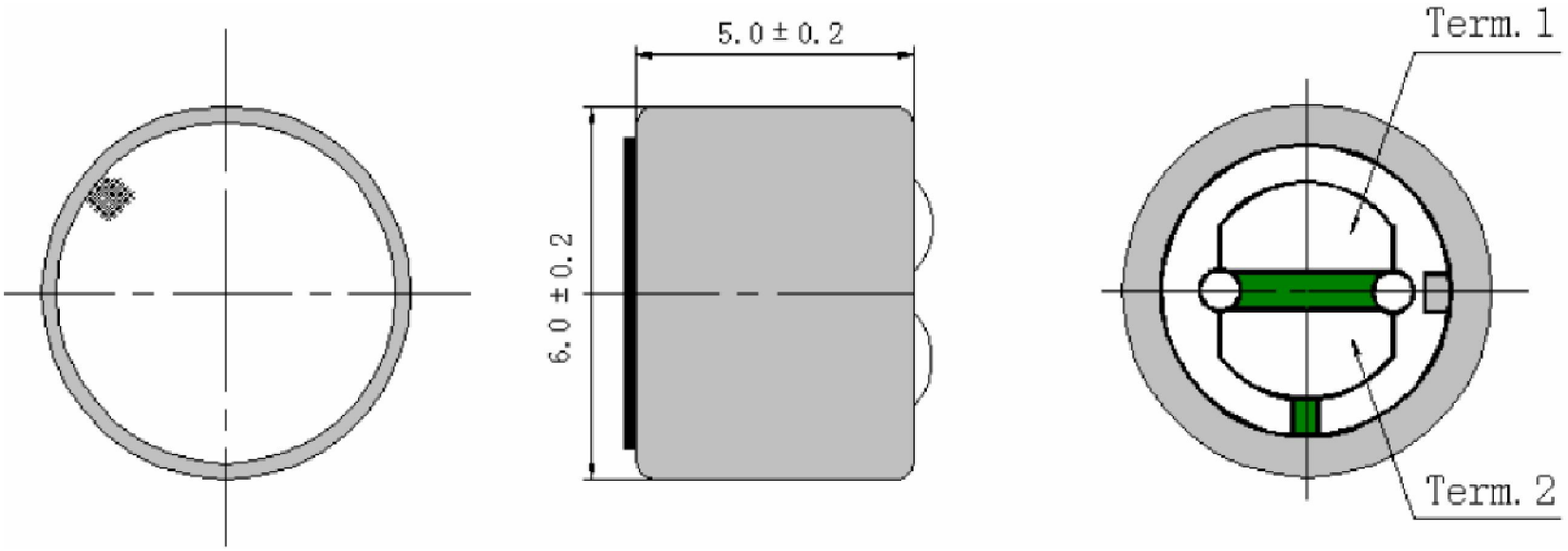
DWG. NO. MI-4515-F REV. "-"

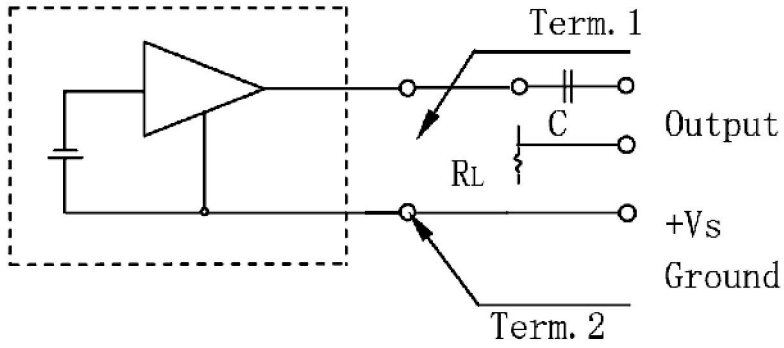
PART NO. REM6050-NL

CONSTRUCTION

Dimensions: φ6.0×5.0(Unit:mm)



MEASUREMENT CIRCUIT



MIC CASE RL=2.2KΩ C=1μF

1. SPECIFICATIONS

No	Item	Standard
1	Sensitivity***	-50±4dB
2	Output Impedance	≤2.2KΩ
3	Directivity	Unidirectional
4	Frequency Range	50-16,000Hz
5	Operation Voltage	DC 1.0V-10V
6	Standard Power Supply	DC 2.0 V
7	Min Operation Voltage	1.0V
8	Current Consumption	≤0.5mA
9	Signal to Noise Ratio	≥56dB

NOTE: ALL DIMS ARE IN mm.

PROJECTION

SCALE N/A

TOLERANCE EXCEPT AS NOTED

DEC. INCHES N/A

DEC. MILLIMETERS ±0.5

ANG. N/A

RDI Research Develop Innovate

RDI, Inc. 333 North Bedford Road, Suite 135, Mount Kisco, NY 10549

TITLE: Omni-Directional Microphone/ 2.2K -50dB

DR.	DATE	REF.	SHEET
Tina	04/29/14	P/N: REM6050-NL	1 OF 3

CK.	PRE-	DRAWING NO.	SIZE	REV.
GM	MI	4515	F	-

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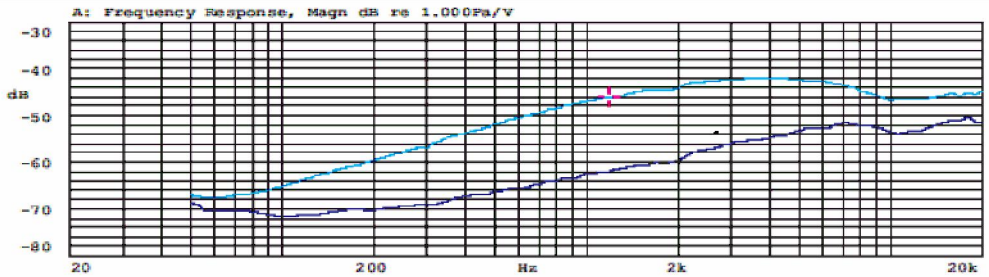
ECN#	DATE	SYM	REVISION RECORD	AUTH	BY

2 ELECTRICAL SPECIFICATIONS

Test Condition(Vs=DC 2.0 V, RL= 2.2K Ω Temp=20℃, Room Humidity=65%)

Item	Symbol	Test Condition	Minimum	Standard	Maximum	Unit
Sensitivity Output impedance	S Zout	f=1kHz,P=1Pa f=1KHz, P=1Pa	-54	-50	-46 2.2K	dB Ω
Directivity						
Current Consumption	I				0.5	mA
S/N Ratio	S/N	f=1kHz, P=1Pa A curve	56			dB
Decreasing Voltage Characteristic	ΔS	f=1kHz, P=1Pa Vs=1.5V to 1.0V			-3	dB
Sound Pressure Level		f=1kHz	110			dB

3. FREQUENCY RESPONSE ALLOWANCE RANGE



4 MECHANICAL SPECIFICATION

Weight	Less than:1.1g	
Soldering Heat Shock	To be no interfere in operation after soldering heat shock, Temperature 260℃±5℃ for 10±1 seconds.	
Terminal Mechanical Strength	To be no interfere in operation after pulled the terminal with 1Kg strength for 1 minute.	
Abiolute maximum Ratings	Operating Voltage 10V	Storage temperature range -20-+60℃

5 RELIABILITY TEST

Vibration Test	To be no interference in operation after vibration 10Hz to 30Hz for 1 minute full amplitude 0.55mm for 1 hours at three axises.
Drop Test	To be no interference in operation after dropped to concrete floor each one Time form 1 meter height at three directions in state of packing.
Temperature Test	a) After exposure at 55℃ for 2 hours, sensitivity to be within ±3dB from initial sensitivity. (The measurement to be done after 2 hours of conditioning at 20℃) b) After exposure at -40℃ for 2 hours, sensitivity to be within ±3dB from initial sensitivity. (The measurement to be done after 2 hours of conditioning at 20℃)
Humidity Test	After exposure at 40℃±2℃ and 90 to 93±2% relative humidity for 48 hours, sensitivity to be within ±3dB from initial sensitivity (The measurement to be done after 2 hours of conditioning at 20℃)
Temperature Cycle Test	After exposure at -25℃ for 30 minutes, at 20℃ for 10 minutes, at 60℃ for 30 minutes, at 20℃ for 10 minutes, 5 cycles, sensitivity to be within ±3dB form initial sensitivity. (The measurement to be done after 2 hours of conditioning at 20℃)

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PROJECTION

SCALE N/A

TOLERANCE EXCEPT AS NOTED

DEC. INCHES N/A

DEC. MILLIMETERS ±0.5

ANG. N/A

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6.PART STOFF LIST

Item	Part Name	Material	Qty	Color	Supplier
1	Fixed Electrode	BRASS TYPE (NI COATING)	1	Bright	CHINA
2	F.E.T	2SK1109	1	Black	CHINA
3	CASE	ALUMINIUN PLATES	1	Bright	CHINA
4	CLOTH	BLACK CLOTH	1	Black	CHINA
5	P.C.B	SINGLE-SIDE EPOXY RESIN	1	Green	CHINA
6	DIAPHRAGM	IMPORTED PLATE (Ni or AU COATING)	1	Bright	DUPONT USA
7	PLASTIC HOLDER	ABS	1	Bright	CHINA
8	GAP SPACER	POLYESTER FILM	1	Blue(Red)	CHINA
9	Soundproof material	Soundproof PAPER	1	White	JAPAN

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