HITPOINT

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SPECIFICATION

PRODUCT TYPE: **PMOF9767NP-42DQ**

(RoHS)

DATE:2016.09. 22

VER .:0

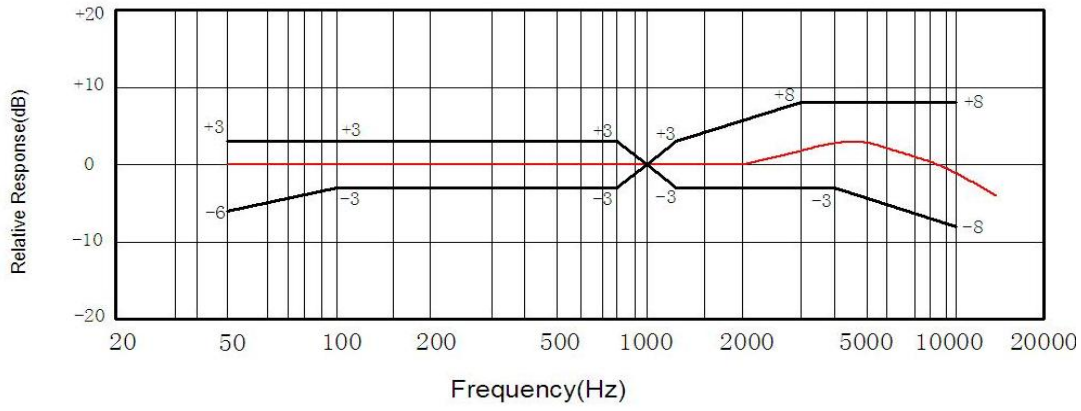
DSND BY		
CHKD BY		
APVD BY		

光 键 股 份 有 限 公 司

HITPOINT INC.

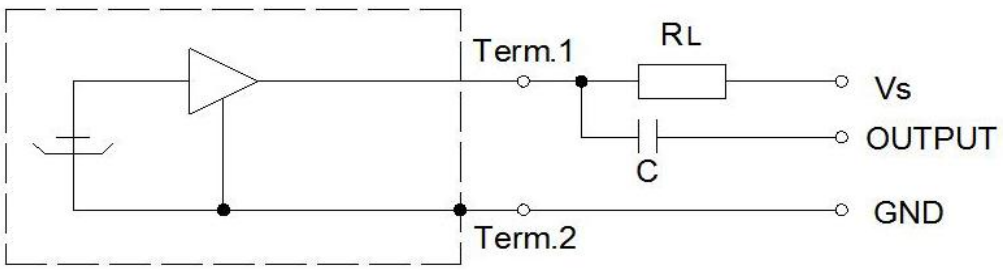
1	**Name：Electret Condenser Microphone**		
2	**TYPE：PMOF9767NP-42DQ**		
3	**Electrical Specifications:**		
	3.1	**Sensitivity Range**	-42±2dB Vs=4.5V RL=2.2KΩ (f=1KHz Pin=1Pa)
	3.2	**Directivity**	Omni-directivity
	3.3	**Frequency**	50-20000 Hz
	3.4	**Current Consumption**	≤500uA
	3.5	**Operating Voltage Range**	1.0v~10v
	3.6	**Max.Sound Pressure Level**	115dB S.P.L
	3.7	**S/N Ratio**	More than 58dB
	3.8	**Total Harmonic Distortion**	≤3%(at 115dB SPL)
	3.9	**Sensitivity reduction**	Vs from 4.5v to 3.0v max -3dB

3.11Typical Frequency Response Curve：



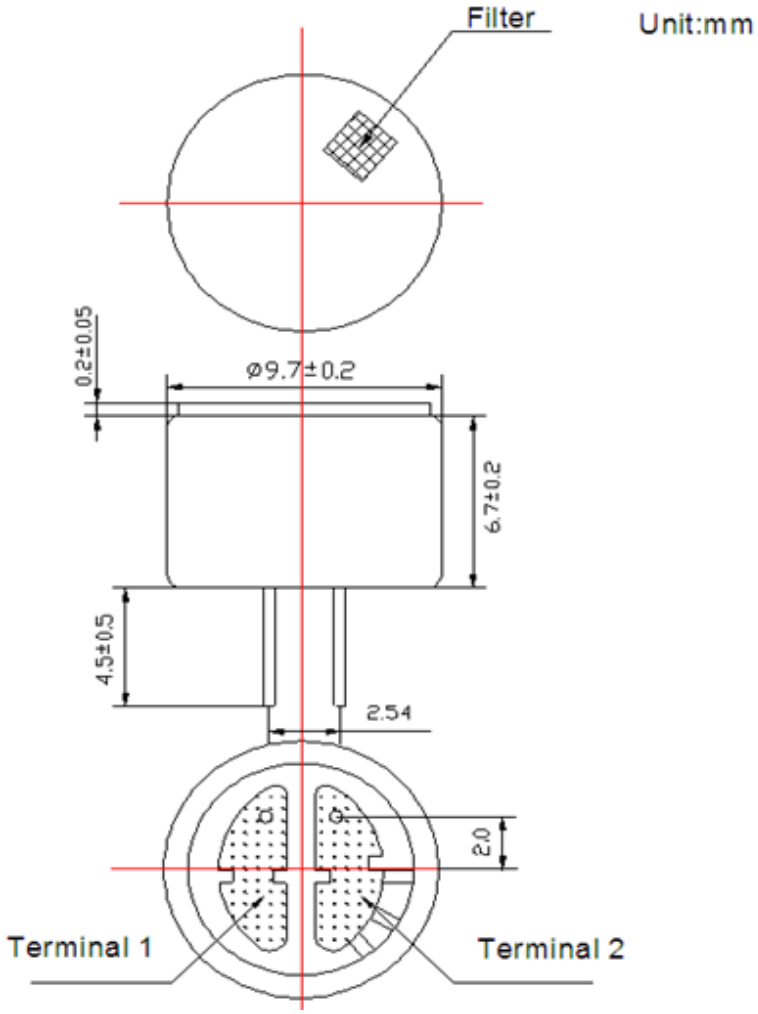
3.12Schematic Diagram：

Vs:Source Voltage 4.5V RL:Load Resistance 2.2KΩ

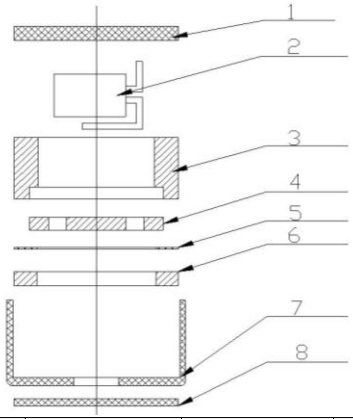


4. Mechanical Specifications：

4.1 Drawing:



4.2 List and Structure of Materials



NO.	PARTS
1	PCB
2	FET
3	Holder
4	Back plate
5	Spacer
6	Film
7	Outer most shell
8	Cloth

NO.	Part name	Material Type	Qty	Origin	Manufacture	Remarks
1	PCB	FR-1	1			
2	FET	CSK596	1			
3	Holder	ABS	1			
4	Back plate	Cu	1			
5	Spacer	Mylar	1			
6	Film	FEP	1			
7	Outer most shell	AL	1			
8	Cloth	Fabrics	1			

5.**Reliability Tests**: All tests should be done after 2 hours of conditioning at 20℃, R.H65% , while the sensitivity is to be within ±3dB from the initial sensitivity after the following experiments..			
	5.1	**Hi-Temp. Test**	+60℃for 72 hours, room temperature,2 hours
	5.2	**Low-Temp. Test**	-40 for 72 hours, room temperature,2hours
	5.3	**Statical Humidity Test**	+ 40℃,90~95%RH for 72 hours, room temperature,2 hours
	5.4	**Temperature Cycle Test**	a)-25℃,30minutes,+60℃; 30minutes,repeated 32cycles; Changeover time10minutes room temperature,2hours
	5.5	**Vibration Test**	2hours ,a frequency of 10-55Hz and a 1.52mm-high amplitude
	5.6	**Dropping Test**	Drop a unit unpacked onto a board of 20mm thick. from a 1.0-meter-repeated 6cycles
	5.7	**ESD Test**	The microphone under test must be discharged between each ESD exposure without ground. (contact:±6KV,air:±8KV)There is no interference in operation after 10 times exposure
	5.8	**Regarding the Soldering operation**	a. Use 15~ 20W soldering iron and maintain 290℃~310℃ in operation. b. Operators who work in the solder fixture and the soldering iron must be statically grounded under each soldering process. C. Soldering should be accomplished within two seconds at each terminal so as not to be overheated. d . Optimal design for heat sink pad is same as below.
6	**Environmental Condition**:		
	6.1	**Storage condition**	-30℃~+70℃ R.H.
	6.2	**Operation condition**	-20℃~+60℃ R.H.
	6.3	**Arbitration condition**	Temperature ：20℃±1℃ Relative humidity：60%~70% Air pressure ：86~106Kpa