GONGDA

SPECIFICATION

PRODUCT TYPE：BOM4015LF7.3-G443-C1033-R4922

DSND BY		2004/10/21
CHKD BY		2004/10/21
APRVD BY		2004/10/21

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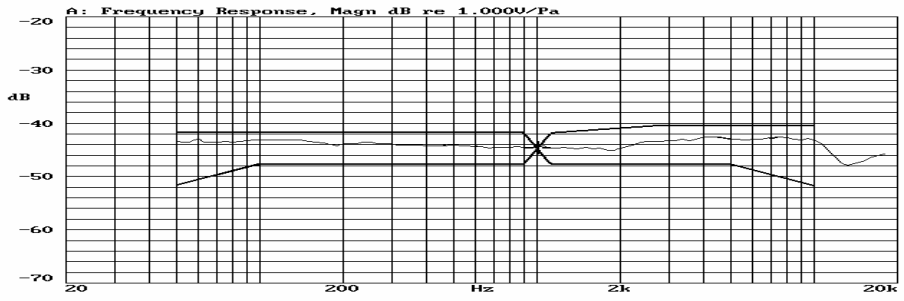
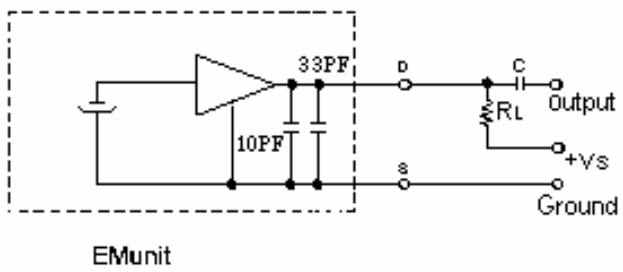
1	**Name：Omnidirectional Electret Condenser Microphone (Back Electret Type)**		
2	**TYPE：BOM4015LF7.3-G443-C1033-R4922**		
3	**Electrical Specifications:**		
	3.1	**Sensitivity Range**	-44±3dB RL=2.2KΩ Vs=2.0V (1KHz 0dB=1V/Pa)
	3.2	**Impedance**	Max. 2.2KΩ 1KHz (RL=2.2KΩ)
	3.3	**Frequency**	50-12000 Hz
	3.4	**Current Consumption**	Max.0.5mA
	3.5	**Operation 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	**Sensitivity Reduction**	2.0V-1.5V Sensitivity Variation less than 3dB

3.9 Typical Frequency Response Curve：

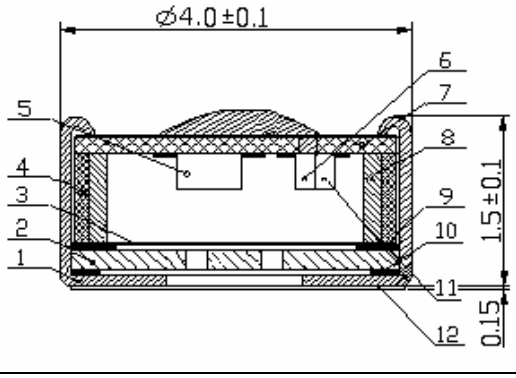


3.10 Schematic Diagram：

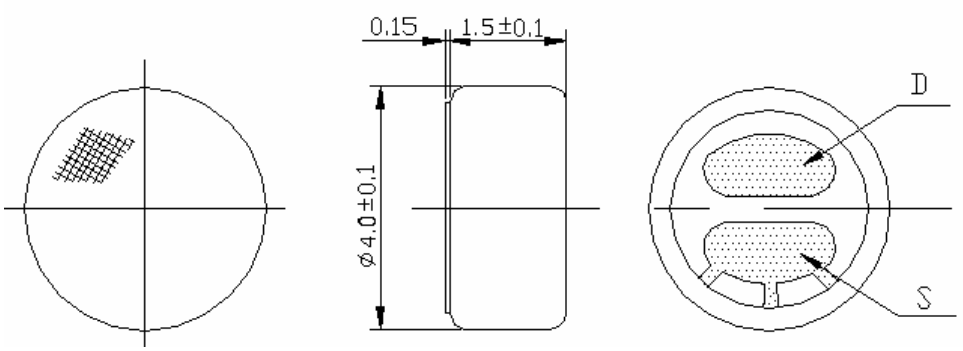
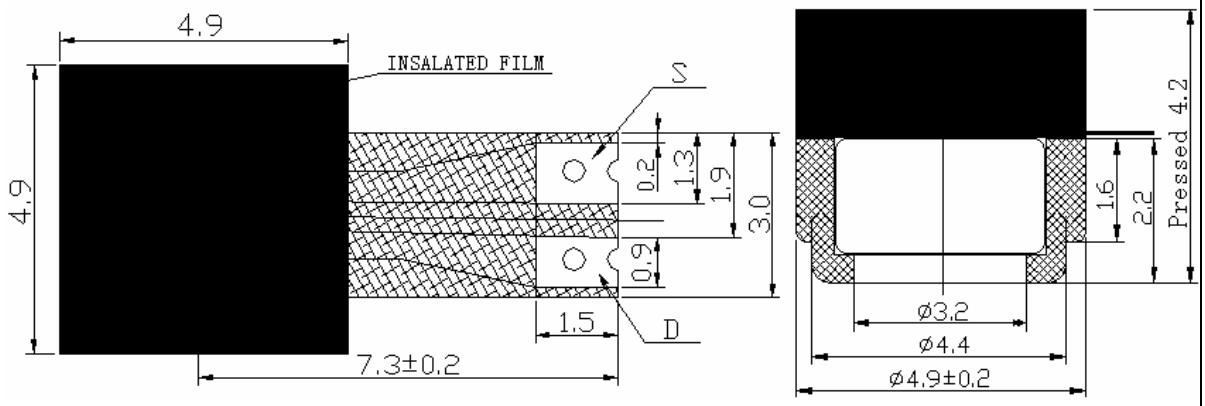


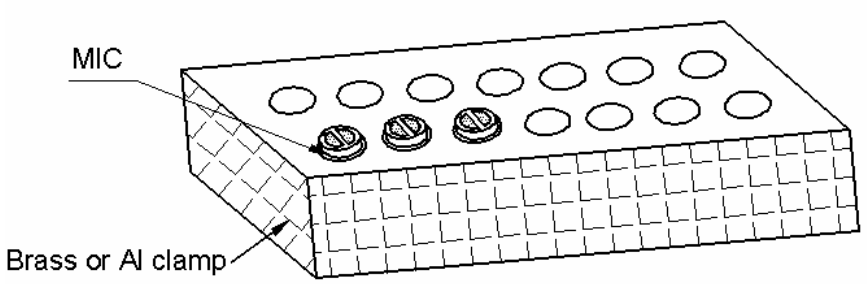
4 **Mechanical Specifications：**

4.1 Drawing



NO.	NAME	MATERAL	QTY	REMARK
12	FELT	Cotton decron textile	1	
11	CHIP-CAPACITOR		1	0201 33PF
10	SHEET COPPER	COPPER	1	
9	SPACER	Polysterfilm	1	
8	ELECTRET RING	H62	1	
7	P.C.B	Glass fiber	1	
6	CHIP-CAPACITOR		1	0201 10PF
5	F.E.T		1	TF202 (2SK3426)
4	HOUSPING CHAMBER	PBT	1	
3	POLARIZED DIAPHRAGM	Teflon	1	DUPONT
2	ELECTRET BACK	H62	1	
1	CASE	AL with Au coating	1	

	4. 2	**Dimension (mm)**	
	4.3	**Accessory Drawing of MIC：** **Unit: (mm)**	
	4.4	**Weight**	0.1g
5.**Reliability Tests**: After any following tests, the sensitivity of the microphone unit shall not change more than ±3dB from initial value, and shall keep their initial operation and appearance.			
	5.1	**Hi-Temp. Test**	The microphone unit must be subjected to +85℃ for 240 Hours, and expose to room temperature for 3 Hours.
	5.2	**Low-Temp. Test**	The microphone unit must be subjected to -40℃ for 240 Hours, and expose to room temperature for 3 Hours.
	5.3	**Humi.&Heat Test**	The microphone unit must be subjected to +70℃, 93% RH-for 240 Hours, and expose to room temp for 3 Hours .
	5.4	**Thermal Shocking Test**	The microphone unit must be subjected to a environment from –40℃ for 30 minutes to the end of +80℃ for 30 minutes, which shall be repeated 32 cycles and exposed to room temperature for 3 hours .
	5.5	**Vibration Test**	The microphone unit must be subjected to a procedure that after vibrating for two hours from each of the two directions with a frequency of 10-55Hz and a 1.52mm-high amplitude.
	5.6	**Dropping Test**	The microphone unit must be subjected to a procedure that after dropping to a slippery marble floor for 5 times from a 1-meter-high without package.
6	**Environmental Condition**:		
	6.1	**Storage condition**	-40℃~+70℃ R.H. less than 90%
	6.2	**Operation condition**	-20℃~+60℃ R.H. less than 90%

	6.3	**Arbitration condition**	Temperature ：20℃±1℃ Relative humidity：63%~67% Air pressure ：86~106Kpa
7	**Notes:**		
	7.1	All the soldering procedures upon microphones must be completed in a metallic device, the temperature of the soldering irons must be limited as 300℃± 10℃ . Soldering time should not exceed 2 seconds.	
	7.2	Operators, the solder fixture and the soldering iron must be statically grounded under each soldering process.	
	7.3	Always Avoid bringing pinholes on the soldering terminal during the operation to the omni-directional microphones. 	
8	**Packaging：**