



# HITPOINT

## SPECIFICATION

**PRODUCT TYPE: PMO-4015SN-42UQ**

(RoHS)

DSND BY		
CHKD BY		
APVD BY		

光 键 股 份 有 限 公 司

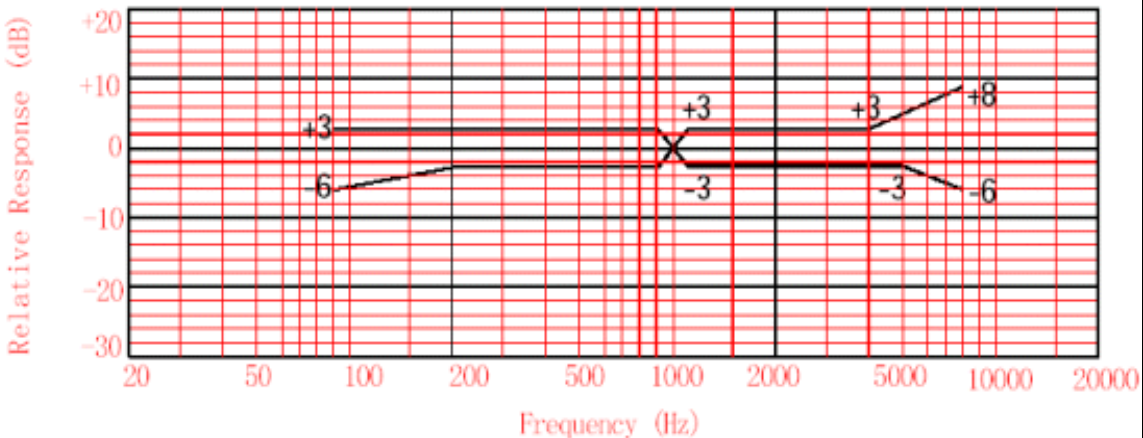
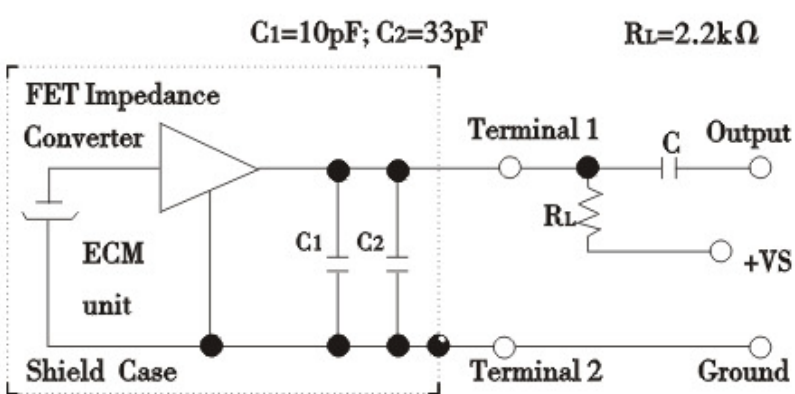
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1	<b>Name: Omnidirectional Electret Condenser Microphone (BACK Electret Type)</b>	
2	<b>TYPE: PMO-4015SN-42U</b>	
3	<b>Electrical Specifications:</b>	
3.1	Sensitivity Range	$-42\pm 3\text{dB}$ $R_L=2.2\text{K}\Omega$ $V_S=2.0\text{V}$ (1KHz 0dB=1V/Pa)
3.2	Impedance	Max $.2.2\text{K}\Omega$ 1KHz ( $R_L=2.2\text{K}\Omega$ )
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	120dB 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	<b>Typical Frequency Response Curve:</b> 	
3.10	<b>Schematic</b> 	<b>Diagram</b> :

<b>4 Mechanical Specifications:</b>			
	<b>4.1</b>	<b>Drawing</b>	 <p>Filter</p> <p>1.5±0.20</p> <p>Term.1</p> <p>Term.2</p> <p>ø4±0.10</p> <p>0.2±0.05</p>
	<b>4.2</b>	<b>Weight</b>	0.2g
<b>5. Reliability Tests:</b> After any following tests, the sensitivity of the microphone unit shall not change more than $\pm 3\text{dB}$ from initial value, and shall keep their initial operation and appearance.			
	<b>5.1</b>	<b>Hi-Temp. Test</b>	To be no interference in operation after high temperature test $70\pm 3^\circ\text{C}$ for 48 hours The sensitivity to be within $\pm 3\text{dB}$ from initial sensitivity.
	<b>5.2</b>	<b>Low-Temp. Test</b>	To be no interference in operation after Low temperature test $-20\pm 3^\circ\text{C}$ for 48 hours, the sensitivity to be within $\pm 3\text{dB}$ from initial sensitivity.
	<b>5.3</b>	<b>Isotherm&amp; ISO-humidity Test</b>	To be no interference in operation after storage test at temperature $40\pm 3^\circ\text{C}$ and relative humidity $(93\pm 3\%)$ for 48 hours. The sensitivity to be within $\pm 3\text{dB}$ from initial sensitivity. the test is performed at temperature $20^\circ\text{C}$ after operation for 6 hours.
	<b>5.4</b>	<b>Temperature Cycle Test</b>	After exposure at $+55\pm 2^\circ\text{C}$ for 1 hour, at $20\pm 2^\circ\text{C}$ for 1 hour, at $-10\pm 2^\circ\text{C}$ for 1 hour, at $20\pm 2^\circ\text{C}$ for 1 hour, with 5 cycles. Change of sensitivity within $\pm 3\text{dB}$ from initial measuring should be done after 2 hours exposed to $20\pm 2^\circ\text{C}$ .
	<b>5.5</b>	<b>Vibration Test</b>	To be no interference in operation after vibration of full amplitude 2mm for 30 minutes at three axis, the sensitivity to be within $\pm 3\text{dB}$ from initial sensitivity.
	<b>5.6</b>	<b>Dropping Test</b>	To be no interference in operation after dropped to concrete floor each time from 1- meter height of three directions in state of packing, the sensitivity to be within $\pm 3\text{dB}$ from initial sensitivity..
<b>6 Environmental Condition:</b>			
	<b>6.1</b>	<b>Storage condition</b>	$-20^\circ\text{C}\sim +60^\circ\text{C}$ R.H. less than 45%~75%
	<b>6.2</b>	<b>Operation condition</b>	$-10^\circ\text{C}\sim +45^\circ\text{C}$ R.H. less than 85%
	<b>6.3</b>	<b>Arbitration condition</b>	Temperature : $20^\circ\text{C}\pm 1^\circ\text{C}$ Relative humidity: 63%~67% Air pressure : 86~106Kpa
<b>7 Notices:</b>			
	<b>7.1</b>	All the soldering procedures upon microphones must be completed in a metallic device, the temperature of the soldering iron must be limited as $310^\circ\text{C}\pm 20^\circ\text{C}$ .	
	<b>7.2</b>	Operators, the solder fixtures and the soldering irons must be statically grounded under each soldering process.	