



HITPOINT

SPECIFICATION

PRODUCT TYPE: PMO-4015PN-42UQ

(RoHS)

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| DSND BY | | |
| CHKD BY | | |
| APVD BY | | |

光 键 股 份 有 限 公 司

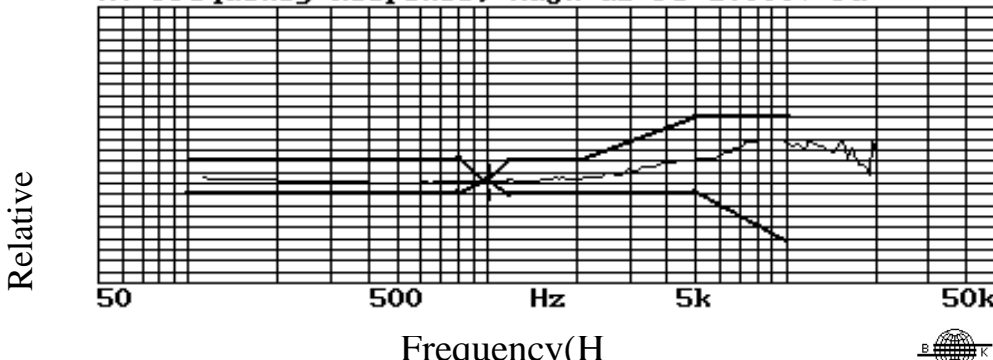
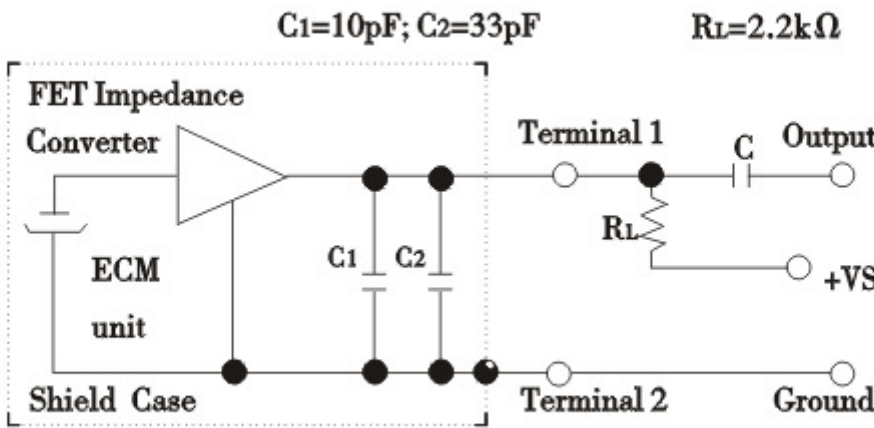
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| 1 | Name: Omnidirectional Electret Condenser Microphone (BACK Electret Type) | |
| 2 | TYPE: PMO-4015PN-42U | |
| 3 | Electrical Specifications: | |
| 3.1 | Sensitivity Range | $-42 \pm 3\text{dB}$ $R_L = 2.2\text{K}\Omega$ $V_{CC} = 2.0\text{V}$ (1KHz 0dB=1V/Pa) |
| 3.2 | Impedance | Max $2.2\text{K}\Omega$ 1KHz ($R_L = 2.2\text{K}\Omega$) |
| 3.3 | Frequency | 20-16000 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 | Typical Frequency Response Curve: A: Frequency Response, Magn dB re 1.000V/Pa  | |
| 3.10 | Schematic Diagram:  | |
| 4 | Mechanical Specifications: | |

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|---|---------------------------------|--|--|
| | 4.1 | Drawing  | |
| | 4.2 | Weight | 0.2g |
| 5. Reliability Tests: 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. | | | |
| | 5.1 | Hi-Temp. Test | 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. |
| | 5.2 | Low-Temp. Test | 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. |
| | 5.3 | Isotherm& ISO-humidity Test | 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°C after operation for 6 hours. |
| | 5.4 | Temperature Cycle Test | 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 $20\pm 2^\circ\text{C}$. |
| | 5.5 | Vibration Test | 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. |
| | 5.6 | Dropping Test | 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.. |
| 6 | Environmental Condition: | | |
| | 6.1 | Storage condition | $-20^\circ\text{C}\sim +60^\circ\text{C}$ R.H. less than 45%~75% |
| | 6.2 | Operation condition | $-10^\circ\text{C}\sim +45^\circ\text{C}$ R.H. less than 85% |
| | 6.3 | Arbitration condition | Temperature : $20^\circ\text{C}\pm 1^\circ\text{C}$ Relative humidity: 63%~67% Air pressure : 86~106Kpa |
| 7 | Notices: | | |
| ` | 7.1 | All the soldering procedures upon microphones must be completed in a metallic device, the temperature of the soldering iron must be limited as $310^\circ\text{C}\pm 20^\circ\text{C}$. | |
| | 7.2 | Operators, the solder fixtures and the soldering irons must be statically grounded under each soldering process. | |