



HITPOINT

SPECIFICATION

PRODUCT TYPE: **PMOF-9745S-42KDO**

(RoHS)

DATE:2021/08/09

VER :.0

DSND BY		
CHKD BY		
APVD BY		

光 键 股 份 有 限 公 司

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1	Name: Omni-directional Electret Condenser Microphone (Foil Electret Type)	
2	TYPE: PMOF-9745S-42KDQ	
3	Electrical Specifications:	
3.1	Sensitivity Range	$-42 \pm 3 \text{dB}$ $R_L = 2.2 \text{K} \Omega$ $V_s = 3.0 \text{V}$ ($f = 1 \text{kHz}$, $0 \text{dB} = 1 \text{V/Pa}$)
3.2	Impedance	Max $2.2 \text{K} \Omega$ $f = 1 \text{kHz}$, $P_{in} = 1 \text{Pa}$
3.3	Current Consumption	Max 0.5mA
3.4	Operation Voltage Range	$1.0 \text{V} - 10 \text{V}$
3.5	Distortion	Max 3% $f = 1 \text{kHz}$, $P_{in} = 110 \text{dB}$
3.6	S/N Ratio	More than 58dB
3.7	Decreasing Voltage Characteristic	$3.0 \text{V} - 1.5 \text{V}$ Sensitivity Variation less than 3dB
3.8		
3.10	Schematic Diagram:	
4	Mechanical Characteristics:	
4.1	Drawing	
4.3	Weight	0.8g
5. Reliability Tests:		

	5.1	Vibration Test	To be no interference in operation after vibrations,10Hz to 55 Hz for 1 minute full amplitude 1.52mm,for 2 hours at three axes in state of standard packing, sensitivity to be within ± 3 dB from initial sensitivity.
	5.2	Drop Test	To be no interference in operation after dropped to concrete floor each one time from 1 meter height at three directions in state of Outer packing, sensitivity to be within ± 3 dB from initial sensitivity.
	5.3	Temperature Test	a) After exposure at $+70^{\circ}\text{C}$ for 200 hours, sensitivity to be within ± 3 dB from initial sensitivity. b) After exposure at -25°C for 200 hours, sensitivity to be within ± 3 dB from initial sensitivity.
	5.4	Humidity Test	After exposure at $+50^{\circ}\text{C}$ and 95% relative humidity for 120 hours, sensitivity to be within ± 3 dB from initial sensitivity.
	5.5	Temperature Cycle Test	After exposure at -25°C for 30 minutes, at 20°C for 10 minutes, at $+70^{\circ}\text{C}$ for 30 minutes, at 20°C for 10 minutes,5 cycles, sensitivity to be within ± 3 dB from initial sensitivity.
	5.6	Soldering Heat Shock	The temperature of the high-frequency electric welding machine is established as 330°C ,5 seconds, sensitivity to be within ± 3 dB from initial sensitivity.
	5.7	Temperature Shock Test	After exposure at -25°C for 30 minutes, at $+70^{\circ}\text{C}$ for 30 minutes(change time 20 seconds), 32 cycles ,sensitivity to be within ± 3 dB from initial sensitivity.
	5.8	ESD Shock Test	Under $C=150\text{pF}$, $R=330\text{ohm}$, 15kV "+", "-"charge air discharge,5 times, sensitivity to be within ± 3 dB from initial sensitivity. Under $C=150\text{pF}$, $R=330\text{ohm}$, 8kV "+", "-"charge contact discharge,5 times, sensitivity to be within ± 3 dB from initial sensitivity.
6	Environmental Condition:		
	6.1	Storage condition	$-25^{\circ}\text{C}\sim+70^{\circ}\text{C}$ R.H. less than 75%
	6.2	Operation condition	$-20^{\circ}\text{C}\sim+60^{\circ}\text{C}$ R.H. less than 75%
	6.3	Arbitration condition	Temperature : $20^{\circ}\text{C}\pm 2^{\circ}\text{C}$ Relative humidity: 60%~67% Air pressure : 86~106Kpa
7	Notices:		
	7.1	The temperature of the high-frequency electric welding machine is established as $320^{\circ}\text{C}\pm 10^{\circ}\text{C}$ for 0.5 seconds. Not for the reflow soldering.	
	7.2	Operators, the solder fixtures and the soldering irons must be statically grounded under each soldering process.	
8.PACKING:			
Small packing 100 PCS, 1800 PCS in the white box, and Total 10 boxes for a big box of 18000PCS.			
Volume: $L*W*H=520*335*290\text{mm}$			
N . W . : 14.4KGS; G . W . : 15.6KGS			