【1.適用範圍 SCOPE】

此種規格包括 AMP2.00mm Pitch SMT & DIP 連接器系列

This Specification Covers the AMP2.00mm Pitch DIP & SMT Connector Series.

【2.规格与料号 Spec and Part number】

规格内容 / Specification		产品料号/ Production No.
端子/Terminal		A2007-XXX
胶壳/Housing		A2007H-NP
針座/Wafer	90 度/Right Angle	A2007WR/WV-NP
	180 度/Straight	

【3.材质与表面处理 Disposal of Material and surface】

规格内容 / Specification		材 质 / Materials	表面处理 / Disposal of Surface
端子/Terminal		磷铜/Phosphor Bronze	Tin Nickel Gold
胶壳/Housing		尼龙 66 / Nylon 66	UL 94V-0
針座/Wafer	Base	PA 66	UL 94V-0
	PIN	黄铜/Brass	Tin Nickel

（上述参数请以工程图为准/Please Refer to the Project drawing for the above Specification）

【4. 额定等級 Ratings and applicable wires】

項 目【Item】	規 格【Standard】	
额定電壓 Rated Voltage (Max.)	100V	[AC/DC]
额定電流 Rated Current (Max.)	1A	
使用溫度範圍 Ambient temperature Range	-40℃~+105℃	
适用线径 Applicable wire insulation O.D	AWG 22#、24#、26# Insulation O.D. 1.60mm(Max.)	

*升溫時含端子.Including terminal temperature rise.

【5.性能 PERFORMANCE】

5-1. 電氣的性能 Electrical Performance.

項 目 【Item】		條 件 【Test Condition】	規 格 【Requirement】
5-1-1	接觸阻抗 Contact Resistance	公母配合,開放電壓 20mV 以下,電流 10mA 檢測連接 器 .Mate connectors, measure by dry circuit, 20mV MAX, 10mA.(Based upon EIA-364-06A).	20 milliohms Max.
5-1-2	絕緣阻抗 Insulation Resistance	公母配合,在相鄰端子,端子與地片之間,使用 500V 的直流電,檢測連接器.Mate connectors, apply 500V DC between adjacent terminal or ground.(Based upon EIA-364-21B / MIL-STD-202 Method 302 Cond.B)	500 Megohms Min.
5-1-3	耐電壓 Dielectric Strength	公母配合,在相鄰端子,端子與地片之間,使用 500V 的交流電 1 分鍾,檢測連接器. Mate connectors, apply 500V AC for 1 minute between adjacent terminal or ground. (Based upon EIA-364-20A / MIL-STD-202 Method 301)	不出現中斷等情況 No Breakdown and Flashover
5-1-4	铆线后端子接觸阻抗 Contact resistance on crimped portion	铆线后之端子,開放電壓 20mV 以下,電流 10mA 檢測連接器.Crimp the applicable wire on to the terminal measure by dry circuit 20mV MAX, 10mA.	10 milliohms Max.

項　目 【Item】		條　　件 【Test Condition】	規　　格 【Requirement】
5-2-1	插拔力 Insertion and Withdrawal Force	以每分鍾 25±3mm 的速率插入和拔出. Insert and withdraw connectors at the speed rate of 25±3mm/minute.	參照第 6 項 Refer to paragraph 6
5-2-2	端子保持力 Terminal/ Housing Retention Force	以每分 25±3mm 的速率，將端子從 Housing 內軸向拔出的力量. Apply axial pull out force at the speed rate of 25±3mm/minute on the terminal assembled in the housing.	9.8N {1.0kgf} Min.
5-2-3	端子插入力 Terminal Insertion Force	铆线后之端子插入 Housing 所需最大力量. Insert the crimped terminal into the housing.	9.8N {1.0kgf} Max.

5-2. 機械的性能 Mechanical Performance.

5-2-4	SMT Pin 针保持力 SMT Pin Retention Force	以每分 25±3mm 的速率,將 PIN 针從 Wafer 內軸向拔出的力量. Apply axial push force at the speed rate of 25±mm/minute.	4.9N {0.5kgf} Min.
	DIP Pin 针保持力 DIP Pin Retention Force	以每分 25±3mm 的速率,將 PIN 针從 Wafer 內軸向拔出的力量. Apply axial push force at the speed rate of 25±mm/minute.	5.88N {0.6kgf} Min.
5-2-5	端子压着强度 Tensile strength (Crimped connections)	固定铆线后的端子，使电线与端子分离时所需的最小力量. Fix the crimped terminal, apply axial pull out force on the wire. (Do not crimp insulation part).	AWG# #26 #24 #22 Spec. kgf Min. 2.0 3.0 4.0 Note> As for unspecified wire sizes in this specification define values with clients

5-3. 環境性能及其它 Environmental Performance and Others.

項　目 【Item】		條　　件 【Test Condition】	規　　格 【Requirement】	
5-3-1	重復插拔 Repeated Insertion/ Withdrawal	以每分鍾不超過 10 次的速率,將公母插拔 50 次. When mated up to 50 cycles repeatedly by the rate of 10 cycles per minute.	接觸阻抗 Contact Resistance	20 milliohms Max.
5-3-2	溫升測试 Temperature Rise	公母對插後,在通過額定電流下,所測定的溫度. Carrying rated current load. (UL 1997)	溫升測试 Temperature rise	30℃ Max.
5-3-3	耐振動性 Vibration	振幅: 1.5mm P-P 時間: 10~55~10 HZ in 1 minute 持續時間: 每軸向 2 小時 Amplitude: 1.5mm P-P Sweep time: 10~55~10 HZ in 1 minute Duration: 2 hours in each X.Y.Z axials. (Based upon EIA-364-28B/MIL-STD-202 Method 213B Cond.A)	外觀 Appearance	無異狀 No Damage
			接觸阻抗 Contact Resistance	20 milliohms Max.
			瞬斷 Discontinuity	1 micro-second Max.
5-3-4	耐沖擊性 Shock	在 X.Y.Z 上 6 個方向上,以 490m/s^2(50g 的力量)各擊下. 490m/s^2{50G}, 3 strokes in each X.Y.Z. axes. (Based upon EIA-364-27B/MIL-STD-202 Method 213B Cond.A)	外觀 Appearance	無異狀 No Damage
			接觸阻抗 Contact Resistance	20 milliohms Max.
			瞬斷 Discontinuity	1 micro-second Max.
5-3-5	耐熱性 Heat Resistance	85±2℃,96 hours. (Based upon MIL-STD-202 Method 108A Cond.A)	外觀 Appearance	無異狀 No Damage
			接觸阻抗 Contact Resistance	20 milliohms Max.

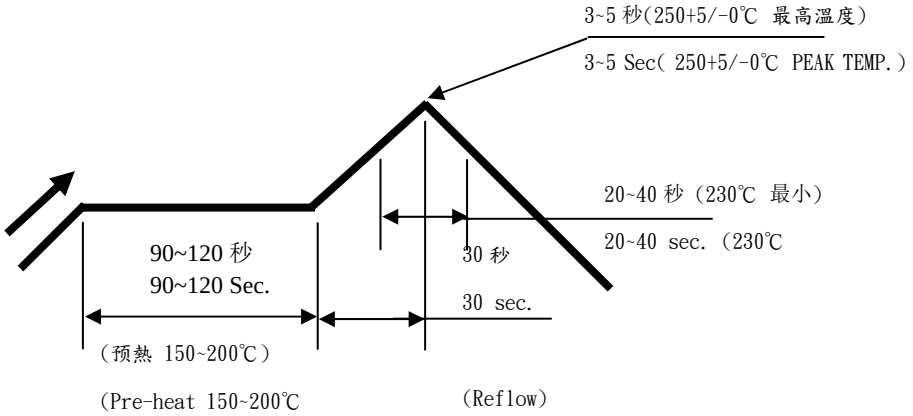
項　目 【Item】		條　　件 【Test Condition】	規　　格 【Requirement】	
5-3-6	耐寒性 Cold Resistance	-25 ± 5 ℃ ,96 hours.(Based upon EIA-364-105)	外觀 Appearance	無異狀 No Damage
			接觸阻抗 Contact Resistance	20 milliohms Max.
5-3-7	耐濕性 Humidity	溫度: 40±2℃ 濕度: 90~95%(RH) 持續時間: 96 hours Temperature: 40±2℃ Relative Humidity: 90~95% Duration:96 hours (Based upon EIA-364-31A/MIL-STD-202 Method 103B Cond.B)	外觀 Appearance	無異狀 No Damage
			接觸阻抗 Contact Resistance	20 milliohms Max.
			耐電壓 Dielectric Strength	Must meet 5-1-3
			絕緣阻抗 Insulation Resistance	100 Megohms MIN
5-3-8	溫度變化 Temperature Cycling	從-55℃持續 30 分鍾升至+85℃持續 30 分鍾,循環 5 次. 5 cycles of: a) -55℃ 30 minutes. b) +85℃ 30 minutes. (Based upon EIA-364-32B)	外觀 Appearance	無異狀 No Damage
			接觸阻抗 Contact Resistance	20 milliohms Max.
5-3-9	鹽水噴霧 Salt Spray	在溫度 35±2℃,鹽水濃度 5±1%下,鹽水噴霧 8±1 小時. 8±1 hours exposure to a salt spray from the 5±1% solution at 35±2℃.(Based upon EIA-364-26A/MIL-STD-202 Method 101D Cond.B).	外觀 Appearance	無異狀 No Damage
			接觸阻抗 Contact Resistance	20 milliohms Max.
5-3-10	焊錫附著性 Solder-ability	焊接時間: 3±0.5秒. 焊接溫度: 245±5℃. Soldering Time: 3±0.5second. Solder Temperature: 245±5℃. (Based upon EIA-364-52)	浸漬面積需95%以上 95% of immersed area must show no Solder wetting	

【7.端子压著模具尺寸与压著规范 Dimension of die-compaction with terminal and Specification of die-compaction】

冲模规格（mm） Die Specification T ×W	压著宽度（mm）【Die-compaction width】	压著高度（mm）【Die-compaction height】		
		AWG#22	AWG#24	AWG#26
略！				

（端子压著模具尺寸与压著规范供参考用！/ Dimension of die-compaction with terminal and Specification of die-compaction Supply Referrence!）

【8. SMT 紅外線回流條件 SMT INFRARED REFLOW CONDITION】



溫度條件曲線圖/ 基板上溫度

TEMPERATURE CONDITION GRAPH/ (TEMPERATURE ON BOARD PATTERN SIDE)

注記: 由於P.C板等焊接裝置改變條件,所以請預先用自己的裝置檢查回流焊的條件.

Notes: Please check the reflow soldering condition by your own devices beforehand. Because the condition changes by the soldering devices, P.C. boards, and so on.