



PRODUCT SPECIFICATION

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1.SCOPE:

This specification covers the requirements for product performance of 1.27 mm pitch wire to board connector series.

2.PART NAME & PART NUMBERS

Part name	Part number
Housing	D1272H
Wafer	D1272WV

3. CONSTRUCTION. DIMENSIONS . MATERIAL & SURFACE FINISH

Construction and dimensions shall be in accordance with the referenced drawings.
Material and surface finish shall be as specified below.

Part name		Material	Surface finish
Housing	Terminal	Phosphor Bronze	Tin-Plated 70μ" ; Nickel: Over 30μ"
	Base	PBT	UL94V-0
Wafer	Base	High Temp Plastic	UL94V-0
	PIN	Phosphor Bronze	Tin-Plated 70μ" ; Nickel: Over 30μ"

4. RATINGS & APPLICABLE WIRES

Item	Standard	
Rated Voltage (Max.) Rated Current (Max.)	250V AC DC	Insulation O.D. 1.27mm Max.
	1.2A	
Ambient Temperature Range	-40℃~105℃*	

Note: Do not branch in parallel current which exceeds the rated current

*: Including terminal temperature rise

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5. PERFORMANCE

5.1 ELECTRICAL PERFORMANCE

Test Description		Procedure	Requirement
5-1-1	Contact Resistance	Mate connectors, measure by dry circuit, 20mV max.,10mA.	15 mΩ Max
5-1-2	Insulation Resistance	Mate connectors, apply 500V DC between adjacent terminal or ground.	1000MΩ Min.
5-1-3	Dielectric Withstanding Voltage	Mate connectors, apply 750V AC (rms) for 1 minute between adjacent terminal or ground.	No Breakdown and Flashover

5.2 MECHANICAL PERFORMANCE

Test Description		Procedure	Requirement		
5-2-1	Insertion & Withdrawal Force	Insert and withdraw connectors at the speed rate of 25 ± 3 mm/minute.	Per PIN Mating Force: 0.33kgf Max.(4~20P) 0.25kgf Max.(22~26P) Unmating Force: 0.03 Kgf Min.		
5-2-2	Pin Retention Force	Apply axial push force at the speed rate of 25 ± 3 mm/minute	0.7 kgf Min.		
5-2-3	Locking Strength (unit:kgf,Min.)	A socket housing and a header (A plug housing and receptacle housing) shall be mated. A load shall be applied between them.The load to come them off etch other shall be measured. Testing speed: 25 ± 3 mm/minute.	Circuit	Vertical	Right-Angle
			4P	3.1	3.1
			5P~14P	5.6	11.7
			15P~26P	6.6	17.9
5-2-4	Durability	When mated up to 30 cycles repeatedly by the rate of 10 cycles per minute.	Contact Resistance	30mΩ Max.	
5-2-5	Vibration	Amplitude: 0.35mm or 5g Sweep time: 10~55~10 HZ in 1 minute Duration: 2 hours in each X.Y.Z	Contact Resistance	25mΩ max.	
			Discontinuity	1μsec. max.	
5-2-6	Mechanical Shock	Acceleration = 50g Duration = 11 milliseconds Per IEC 512-4, test condition 6c	Appearance	No Damage	
			Contact Resistance	25mΩ max.	
			Discontinuity	1μsec. max.	



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5.3 ENVIRONMENTAL PERFORMANCE AND OTHERS

5-3-1	Heat Resistance	105 ± 2°C, 240 hours	Appearance	No Damage
			Contact Resistance	30mΩ max.
5-3-2	Cold Resistance	Temperature:-40 ± 5°C Duration:96 hours	Appearance	No Damage
			Contact Resistance	30mΩ max.
5-3-3	Salt Spray	24±1 hours exposure to a salt spray from the 5±1% solution at 35±2°C.	Appearance	No Damage
			Contact Resistance	30mΩ max.
5-3-4	Solderability	Soldering Time: 3±0.5 sec. Solder Temperature: 245 ±0. 5°C	Solder Wetting	95% of immersed area must show no voids, pin holes
5-3-5	Resistance to Soldering Heat	Soldering Time: 3~5 sec. Solder Temperature: 255 ± 5°C	Appearance	No Damage