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1.SCOPE:

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

2.PART NAME & PART NUMBERS

Part name Part number	
Wafer	B1271WV-S-F-2xXP
water	B1271HWV-S-F-2xXP

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
Wafer	Post	Phophor Bronze	Tin over Nickel
	Body	LCP	UL94V-0

4. PERFORMANCE

4.1 ELECTRICAL PERFORMANCE

Test Description		Procedure	Requirement
4-1-1	Contact Resistance	Mate connectors, measure by dry circuit, 100mV max. 20mA. (Based upon EIA 364-23)	25m $Ω$ max.
4-1-2	Insulation Resistance	Mate connectors, apply 500V DC for 1 minute between adjacent terminal or ground. (Based upon JISEIA364-21or IEC60512-3-1)	10000MΩ min.
4-1-3	Dielectric Withstanding Voltage	Mate connectors, apply 500V AC (rms) for 1 minute between adjacent terminal or ground. (Based upon JIS EIA 364-20 or IEC60512-4-1or MIL-STD-1344,)	No Breakdown



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4.2 MECHANICAL PERFORMANCE

Test Description		Procedure		Requirement
4-2-1	Insertion & Withdrawal Force	Insert and withdraw connectors at the speed rate of 25 ± 3 mm/minute.		Mating force Max: 50gf (per pin) UnmatingforceMi n: 10gf (per pin)
4-2-2	Pin Retention Force	Apply axial push force at the speed rate of 25 ± 3 mm/minute.		0.50kgf min.
4-2-3	Durability	Mate contact at 25.4mm/minute for 500 cycles. (Based upon JIS EIA 364-09 or IEC60512-9-1or EIA 364-09 or IEC60512-9-1or	Contact Resistance	25m $Ω$ max.
	Vibration	Frequency: 50 ~ 2000 Hz PSD value: 5.35 Grms minimum Duration: 15 minutes/axis X.Y.Z. axes (Based upon EIA 364-28F or	Appearance	No Damage
4-2-4			Contact Resistance	25m $Ω$ max.
		IEC60512-6-4 or IEC60068-2-6Fc)	Discontinuit y	1μsec. max.
	Physical Shock	Wave form: Half-sine Peak acceleration: 100 G's Duration: 6 ms 3 shocks in each direction applied along three mutually perpendicular planes, total 18 shocks. (Based upon EIA 364-27C or	Appearance	No Damage
4-2-5			Contact Resistance	25mΩ max.
			Discontinuit y	1μsec. max.



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4.3 ENVIRONMENTAL PERFORMANCE AND OTHERS

Test	Description	Procedure		Requirement
		Temperature : -55~ 125°C	Appearance	No Damage
4-3-1	Thermal Shock	Cycles: 5 Exposure time at temperature extremes: 25 minutes (Based upon JIS EIA 364-32 or IEC60512-11-4)	Contact Resistance	25m $Ω$ max.
		Temperature: 125±2°C, 96 hours	Appearance	No Damage
4-3-2	Temperature Life	(Based upon EIA 364-17 or IEC60512-9-2)	Contact Resistance	25m $Ω$ max.
	Humidity	Temperature: 25 ~ 65°C Relative Humidity: 90 ~ 95% Duration: 96 hours (Based upon JIS EIA 364-31 or IEC60512-11-3)	Appearance	No Damage
			Contact Resistance	$25 \mathrm{m}\Omega$ max.
4-3-3			Insulation Resistance	10000MΩ min.
			Dielectric Withstandin	Must meet 4-1-3
		24 hours exposure to a salt spray from	Appearance	No Damage
4-3-4	Salt Spray	the 5 % solution at 35 ± 2 °C. (Based upon EIA 364-26 or IEC60512-11-6)	Contact Resistance	$25 \text{m}\Omega$ max.
4-3-5	Solderability	Soldering Time: 3~5 sec. Solder Temperature: 240 ± 5°C	Solder Wetting	95% of immersed area must show no voids, pin holes
4-3-6	Resistance to Soldering Heat	High temperature resistant materials Soldering Time:3~5 sec. Solder Temperature: 260 ± 5°C	Appearance	No Damage