1. **Scope**

Wafer Connector FWF12511 Series

This specification covers the Wafer Connector FWF12511 Series

2. **Connector Dimensions**

Refer to the drawing.

3. **Material**

Housing:PA9T UL94V-0

Color :White

Contacts Terminal:Brass

Plating:Gold Plated

4. **Accommodated P.C.B Layout**

Refer to the drawing.

5. **Rating**

Operating Voltage(Max.)	125V AC/DC
Current Rating(Max.)	1.0A DC/AC
Operating Temperature	-25°C -- +85°C(Including terminal temperature rese)

6. **Performance**

Electrical Performance

Contact Resistance	20mΩ Max	Mate connectors,Measure by dry circuit.20mV Max. 10mA
Insulation Resistance	100MΩ Min	Mate applicable connectors and apply 500V DC between adjacent terminal or ground.
Dielectric Strength	No breakdown and flashover	Mate applicable connectors,apply 250V AC(rms)for 1 minute between adjacent terminal or ground.

Mechanical Performance

Insertion force	Circuit No. x 0.25kgf (Max)	Insert the line into the connector at the speed rate of 25±3mm/minute.
Withdrawal force	Circuit No. x 0.07kgf (Min)	Apply axial pull out force at the speed rate of 25±3mm/minute on the line assembled in the connector.
Terminal retention force	0.8kgf Min	Apply axial pull out force at the speed rate of 25±3mm/minute on the terminal assembled in the connector.

Environmental Performance and others

Heat Resistance	Mated connector shall be placed in a oven for 96±4 hours at +85±3°C (Based upon JIS C5402 7.8)	Appearance	No Damage
		Contact Resistance	40mΩ Max
Cold Resistance	Mated connector shall be placed in a temperature chamber for 96±4 hours at -25±3°C (Based upon JIS C5402 7.9)	Appearance	No Damage
		Contact Resistance	40mΩ Max
Humidity	Mated connector shall be placed in a humidity chamber on the following conditions . Temperature:40±2°C Relative humidity:90~95% Duration:96 Hours (Based upon MIL-STD-202 Method 103 conditions A)	Appearance	No Damage
		Contact Resistance	40mΩ Max
		Dielectric strength	No Breakdown

Temperature Cycling	Mated connector shall be set to temperature cycling for 5 cycles of which 1cycle consists of : 1.-25°C---------3minutes 2.+85°C---------30minutes 3.-25°C---------3minutes 4.+65°C---------30minutes (Based upon JIS C5402 7.2)	Appearance	No Damage
		Contact Resistance	40mΩ Max
		Dielectric strength	No Breakdown

Salt Spray	Mated connector shall be placed in a salt spray chamber on the following conditions. Salt solution density: 5±1% Temperature: 35±2°C Duration: 12 Hours	Appearance	No Damage
		Contact Resistance	40mΩ Max

Solderability	Tip of solder tails and fitting nails into the molten solder (held at 250±5°C) up to 0.1mm form the bottom of the housing for 3 ±0.5 seconds.	Solder Wetting	95% of immersed area must show no voids nor pin holes

Resistance to Soldering Heat	Mated connector shall be dipped on solder bath for 5±0.5sec temperature :265±5°C	Appearance	No Damage