# <u>TX GA</u>

# Wafer Connector pitch 1.25mm series

#### 1. Scope

Wafer Connector pitch 1.25mm series This specification covers the Wafer Connector FWF12506/FWF12507 Series

## 2. Ordering information

Refer to the drawing.

## 3. Connector dimensions

Refer to the drawing.

## 4. Material

Housing: PA46 (UL 94V-0) Color: Natural Terminal: Brass Plating: Tin plated

## 5. Accommodated P.C.B layout

Refer to the drawing.

## 6. Rating

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

## 7. Performance

Test item	Requirement	Test Condition					
Electrical Performance							
Contact Resistance	20mΩ Max.	Mate connectors,measure by dry circuit.					
Insulation Resistance	100 MΩ Min.	Mate connectors,apple 250V DC between ad jacent terminal or ground.					
Dielectric Strength	No breakdown and flashove	Mate connectors,apply 250V AC for 1min between ad jacent terminal or ground.					



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Test item	Requirement		Test Condition
	•	Mechanical P	erformance
Insertion force and	Insertion (Max.): 8N Max. * Circuit		Insertion and withdrawal connectors at the speed rate of 1mm/s~5mm/s
withdrawal force	Withdrawal (Min): 1.5N Min. * Circuit		
Terminal/Housing Retention Force	8N Max.		Apply axial pull out force at the speed rate of not more 25mm/min on the pin assemble in the housing.
Crimping pull out Force	28# :10N (Min) 30# :8N (Min) 32# :6N (Min)		Fix the crimped terminal,apply axial pull out force on the wire at the speed rate of not more 25mm/min.
Pin retentive Force	8N Max.		Putting the wafer on the force tester and push the pins out vertically at the speed rate of 25±5mm per minutes.
	En	vironmental Perfo	rmance and others
Heat resistance	Appearance	No Damage	Mate applicable connectors and expose to 85±2°C for 4 hours.upon completion of the exposure period the test specimens shall be conditioned at ambient room conditions
	Contact Resistance	20mΩ Max.	for 1 to 2 hours ,After which the specified measurements shall be performed.
Cold resistance	Appearance	No Damage	Mate applicable connectors and expose to -25±2°C for 4 hours ,upon completion of the exposure period,the test specimens shall be comditioned at ambient room conditions for 1 to 2 hours ,after which the specified measurements sh be performed.
	Contact Resistance	20mΩ Max.	
Humidity	Appearance	No Damage	Mated connector shall be placed in a humidity chamber on
	Dielectric Strength	800V,AC/min	the following conditions. Temperature: 40±2°C Relative humidity: 90~95%
	Insulation Resistance	500MΩ Min.	Duration : 96 hours
Vibration Resistance	Appearance	No Damage	Amplitude:±0.35mm
	Contact Resistance	20mΩ Max.	Frequency: (10~55) Hz Frequency:(>55~500)Hz Acceleration:50m/s2
	Discontinuity	1µ sec Max.	Duration:2h in each $X_{x} Y_{x} Z$ axes



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Test item	Requirement		Test Condition
Temperature cycling	Appearance	No Damage	Mated connector shall be set to temperature cycling for 5 cycles of which 1 cycle consists of: 1>25°C ~ 2 H
	Contact Resistance	20mΩ Max.	2>.+25°C ~ 1 H 3>.+85°C ~ 2 H 4>.+25°C ~ 1 H
Temperature Rise	30°C Max.		Carrying rated current load.
Repeated Insertion/ withdrawal	20mΩ Max.		When mated up to 50 cycles repeatedly by the rate of 10 cycles per minute.
Salt Spray	Appearance	No Damage	16 h exposure to a saltspray from the (5±1)% solution
Solderability	95% of immersed area must show no voids nor pin holes.		Soldering Time: 2±0.5 sec Soldering Temperature:235±5℃
Resistance to soldering heat	Appearance	No Damage	Soldering Time: 5±1sec Soldering Temperature: 260±5℃