TEST SUMMARY

SL 70058 TERMINAL

1.0 SCOPE

1.1 This Test Summary covers the 2.54 mm (.100 inch) centerline (pitch) 70066 SL connector housing and 70058 SL crimp terminal terminated with 24 AWG wire using Crimp technology with Pd/Ni plating.

1.2 To evaluate the performance of components after multiple cycling when plated with gold flash over palladium nickel.

2.0 PRODUCT DESCRIPTION

2.1 PRODUCT NAME AND PART NUMBER(S)

2.1.1 Housing: 70066 series, 4 circuit, single row, .100" center
2.1.2 Terminal: 70058 series 24-30 AWG
2.1.2.1 Plating: Au flash (3-5 µ") over Pd/Ni (30 µ" min.) over Ni (50 µ" min.)
2.1.3 Wafer assembly: 70221 series, 40 circuit, single row, .025" square pin.
2.1.3.1 Plating: Au flash (3-5 µ") over Pd/Ni (30 µ" min.) over Ni (50 µ" min.)
2.1.4 Cable: 0.5 mm round solid tinned, insulation diameter 1.0mm

2.2 PRODUCT SPECIFICATION TITLE AND DOCUMENT NUMBER

2.2.1 PS-70400, Product spec for single row stackable linear (SL) connector system
2.2.2 PS-70058, Product specification for SL crimp terminal, series 70058
2.2.3 PS-70221, Product specification for C-Grid wafer assembly, series 70221

3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS

3.1 TESTING PROCEDURES AND SEQUENCES

3.1.1 Testing was performed by Molex Europe, see section 5.1 for tests and sequence (Molex World Wide Test Sequence 1)

4.0 QUALIFICATION

4.1 Laboratory conditions and sample selection are in accordance with **EIA-364**.

TEST SUMMARY

5.0 PERFORMANCE

5.1 ELECTRICAL PERFORMANCE RESULTS: Contact Resistance (Low Level)

DESCRIPTION	TREATMENT	REQUIREMENT	MEAN	MINIMUM	MAXIMUM
Contact Resistance	Initial	30 milliohms MAXIMUM	**12.5** mΩ	**11.5** mΩ	**13.5** mΩ
Durability	After 3,000 Cycles	10 milliohms MAXIMUM*	**12.5** mΩ	**12.2** mΩ	**12.9** mΩ
	After 6,000 Cycles	10 milliohms MAXIMUM*	**12.8** mΩ	**12.0** mΩ	**14.0** mΩ
	After 10,000 Cycles	10 milliohms MAXIMUM*	**12.5** mΩ	**11.6** mΩ	**13.1** mΩ
Thermal Shock Per IEC-68-2-14 -40 ℃ to +105 ℃ 10 cycles 30 minutes dwell	Uncycled	10 milliohms MAXIMUM*	**12.6** mΩ	**11.8** mΩ	**13.5** mΩ
	3,000 Cycles	10 milliohms MAXIMUM*	**13.0** mΩ	**12.6** mΩ	**13.9** mΩ
	6,000 Cycles	10 milliohms MAXIMUM*	**13.2** mΩ	**12.0** mΩ	**14.7** mΩ
	10,000 Cycles	10 milliohms MAXIMUM*	**13.6** mΩ	**12.4** mΩ	**18.2** mΩ
Thermal Aging Per MIL-STD 202F Method 108A 10 days at 105 ℃	Uncycled	10 milliohms MAXIMUM*	**12.7** mΩ	**12.0** mΩ	**13.5** mΩ
	3,000 Cycles	10 milliohms MAXIMUM*	**13.4** mΩ	**12.6** mΩ	**14.4** mΩ
	6,000 Cycles	10 milliohms MAXIMUM*	**13.5** mΩ	**12.7** mΩ	**14.4** mΩ
	10,000 Cycles	10 milliohms MAXIMUM*	**14.1** mΩ	**12.3** mΩ	**21.5** mΩ
Cyclic Humidity Per MIL-STD 202, Method 106D 25 ℃ to 65 ℃ 24 Hr, 90-98% RH	Uncycled	10 milliohms MAXIMUM*	**13.0** mΩ	**12.1** mΩ	**14.8** mΩ
	3,000 Cycles	10 milliohms MAXIMUM*	**13.5** mΩ	**12.5** mΩ	**14.5** mΩ
	6,000 Cycles	10 milliohms MAXIMUM*	**13.6** mΩ	**12.8** mΩ	**14.3** mΩ
	10,000 Cycles	10 milliohms MAXIMUM*	**14.7** mΩ	**12.8** mΩ	**20.6** mΩ
Flowers of Sulfur 17 hours at 65 ℃	Uncycled	10 milliohms MAXIMUM*	**13.0** mΩ	**12.2** mΩ	**14.8** mΩ
	3,000 Cycles	10 milliohms MAXIMUM*	**13.7** mΩ	**12.7** mΩ	**14.5** mΩ
	6,000 Cycles	10 milliohms MAXIMUM*	**13.9** mΩ	**13.0** mΩ	**15.5** mΩ
	10,000 Cycles	10 milliohms MAXIMUM*	**14.9** mΩ	**13.3** mΩ	**20.5** mΩ

* change from initial