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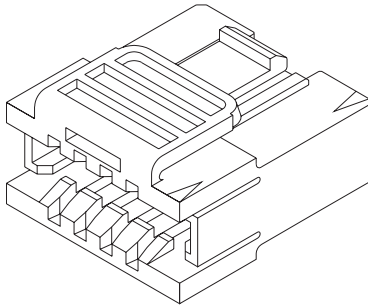
2.54mm (.100") Pitch

SL™

Interim Clip

70013

Dual Row



Not For Use With Molex C-Grid III™ Components

Circuits	Order No.	
	Version A Without Ribs	Version B With Ribs
6	15-04-5061	15-04-5064
8	15-04-5081	15-04-5084
10	15-04-5101	15-04-5104
12	15-04-5121	15-04-5124
14	15-04-5141	15-04-5144
16	15-04-5161	15-04-5164
18	15-04-5181	15-04-5184
20	15-04-5201	15-04-5204

Features and Benefits

- Sizes 6 to 50 circuits
- Positive latch retains clip to dual row panel mount or headers
- Optional front polarization rib available (version B)
- Stacks single row 70066/70400D assemblies side-to-side and end-to-end to form a larger dual row connector, accepts 70450C dual row connector to provide positive latch feature

Reference Information

Packaging: Bag
 UL File No.: E29179
 CSA File No.: LR19980
 Mates With: 70013, Version A—8724B and 70567B
 70013, Version B—70022, 70567C, 70568,
 71349 and 70229
 Use With: 70066D housing and 70021 terminals, 70450C
 housing and 70021 terminals, 70430D and 70400D
 connector assemblies
 Designed In: Inches

Physical

Housing: Black polyester, UL 94V-0
 Operating Temperature: -40 to +105°C

Circuits	Order No.	
	Version A Without Ribs	Version B With Ribs
22	15-04-5221	15-04-5224
24	15-04-5241	15-04-5244
26	15-04-5261	15-04-5264
28	15-04-5281	15-04-5284
30	15-04-5301	15-04-5304
32	15-04-5321	15-04-5324
34	15-04-5341	15-04-5344
36	15-04-5361	15-04-5364

Circuits	Order No.	
	Version A Without Ribs	Version B With Ribs
38	15-04-5381	15-04-5384
40	15-04-5401	15-04-5404
42	15-04-5421	15-04-5424
44	15-04-5441	15-04-5444
46	15-04-5461	15-04-5464
48	15-04-5481	15-04-5484
50	15-04-5501	15-04-5504

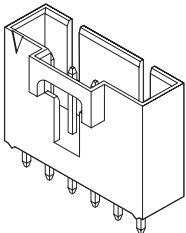
2.54mm (.100") Pitch

SL™

Wire-to-Board Shrouded Header

70543

Single Row, .120" Pocket Vertical



Not For Use With C-Grid III™ Components

Circuits	Order No.			Lead-free
	150µm Tin	15µm Gold	30µm Gold	
2	70543-0036	70543-0001	70543-0106	Yes
3	70543-0037	70543-0002	70543-0107	
4	70543-0038	70543-0003	70543-0108	
5	70543-0039	70543-0004	70543-0109	
6	70543-0040	70543-0005	70543-0110	
7	70543-0041	70543-0006	70543-0111	
8	70543-0042	70543-0007	70543-0112	
9	70543-0043	70543-0008	70543-0113	
10	70543-0044	70543-0009	70543-0114	
11	70543-0045	70543-0010	70543-0115	
12	70543-0046	70543-0011	70543-0116	
13	70543-0047	70543-0012	70543-0117	

Features and Benefits

- Sizes 2 to 25 circuits
- Locking crown secures positive latch to header
- Polarization slots guide front ribs of mating connector to prevent pin damage
- Standoffs minimize flux retention

Reference Information

Product Specification: PS-70541
 Packaging: Tube
 UL File No.: E29179
 CSA File No.: LR19980
 Mates With: 70066G, 70066N, 70400G and 70430G
 Designed In: Inches

Electrical

Voltage: 250V
 Current: 3.0A
 Contact Resistance: 15 milliohms max.
 Dielectric Withstanding Voltage: 1500V
 Insulation Resistance: 10,000 Megohms min.

Mechanical

Durability: Tin—25 cycles; Gold—50 cycles

Physical

Housing: Black polyester, UL 94V-0
 Contact: Copper Alloy
 Plating: See Table
 Operating Temperature: -40 to +105°C

Circuits	Order No.			Lead-free
	150µm Tin	15µm Gold	30µm Gold	
14	70543-0048	70543-0013	70543-0118	Yes
15	70543-0049	70543-0014	70543-0119	
16	70543-0050	70543-0015	70543-0120	
17	70543-0051	70543-0016	70543-0121	
18	70543-0052	70543-0017	70543-0122	
19	70543-0053	70543-0018	70543-0123	
20	70543-0054	70543-0019	70543-0124	
21	70543-0055	70543-0020	70543-0125	
22	70543-0056	70543-0021	70543-0126	
23	70543-0057	70543-0022	70543-0127	
24	70543-0058	70543-0023	70543-0128	
25	70543-0059	70543-0024	70543-0129	



PRODUCT SPECIFICATION

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REVISION: K	ECR/ECN INFORMATION: EC No: UCP2009-1866 DATE: 2009 / 01 / 27	TITLE: PRODUCT SPECIFICATION SINGLE ROW – STACKABLE LINEAR (SL) CONNECTOR SYSTEM	SHEET No. 1 of 13
DOCUMENT NUMBER: PS-70400	CREATED / REVISED BY: FOX/MIBARRA	CHECKED BY: STILES	APPROVED BY: BRINKMAN



PRODUCT SPECIFICATION

1.0 SCOPE

This specification is intended to define the mechanical, electrical and environmental requirements for the SL .100" (2.54) pitch modular, single row wire-to-board and wire-to-wire system.

SL is designed for high density signal applications. The system includes: low profile latching vertical and right angle headers; low profile housings for male and female crimp terminals; pre-assembled, single piece pin and receptacle connectors for Insulation Displacement Technology (IDT); panel mounts for modular wire-to-wire remote interconnections; and SL offers design flexibility and automated harness-making capabilities when combined with our tooling.

2.0 PRODUCT DESCRIPTION:

2.1 The following Series are covered by this product specification:

- 70021, male, crimp terminal
- 70058, female box, crimp terminal
- 71851, female box, high force crimp terminal
- 70066 & 70107, single row, crimp housing
- 70450 & 74130, dual row, crimp housing
- 70400, female, single row, insulation displacement, connector assembly
- 70475 & 71178, male, single row, insulation displacement, connector assembly

Headers:

- 70541, single row, .120" pocket, wire-to-board, shrouded header, vertical, split peg
- 70543, single row, .120" pocket, wire-to-board, shrouded header, vertical
- 70545, single row, .120" pocket, wire-to-board, shrouded header, vertical, tri-peg
- 70546, single row, .120" pocket, wire-to-board, shrouded header, vertical, tri-peg
- 70551, single row, .120" pocket, wire-to-board, shrouded header, right angle, split peg
- 70553, single row, .120" pocket, wire-to-board, shrouded header, right angle
- 70555, single row, .120" pocket, wire-to-board, shrouded header, right angle, tri-peg
- 70556, single row, .120" pocket, wire-to-board, shrouded header, right angle, tri-peg
- 70563, single row, .180" pocket, wire-to-board, shrouded header, vertical
- 70564, single row, .180" pocket, wire-to-board, shrouded header, vertical
- 70566, single row, .180" pocket, wire-to-board, shrouded header, vertical, tri-peg
- 70571, single row, .180" pocket, wire-to-board, shrouded header, right angle, board snaps
- 70575, single row, .180" pocket, wire-to-board, shrouded header, right angle, tri-peg
- 70634, single row, .120" pocket, wire-to-board, shrouded header, right angle, tri-peg, SMT
- 71164, single row, .120" pocket, wire-to-board, shrouded header, voided circuits
- 74095, single row, .120" pocket, wire-to-board, shrouded header, vertical, compliant pin
- 74098, single row, .120" pocket, wire-to-board, shrouded header, right angle, split peg, SMT
- 74099, single row, .120" pocket, wire-to-board, shrouded header, vertical, SMT
- 74105, single row, .120" pocket, wire-to-board, shrouded header, right angle, SMT

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PRODUCT SPECIFICATION

2.2 DIMENSIONS, MATERIALS AND SPECIFICATIONS:

2.2.1 Mating Pin Height

2.2.1.1 Maximum mating pin height: .320" (8.13 mm)

2.2.1.2 Minimum mating pin height: .200" (5.08 mm)

2.2.2 Centerline spacing (pitch): .100" (2.54 mm)

2.2.3 Wire Sizes: #22 - #28 AWG stranded wire, with an insulation diameter of .053" (1.35 mm) max.

2.2.4 Molex cable: 7307, 7767, 8996, 8997, 24226, 24241, 24369 and 24389.

2.2.5 Termination Method:

2.2.5.1 Crimp (70021, 70058)

2.2.5.2 IDT (70400, 70475)

2.2.6 Housings: (70066, 70450, 70107, 74130): Black Glass Filled Polyester, UL 94V-0

2.2.7 Terminals: (70021, 70058, 71851): Phosphor Bronze

2.2.8 Plating: Gold and Tin

2.2.8.1 Gold: 30 microinches minimum Gold in select area over Nickel overall with 75 microinches Tin in select area over Nickel overall

or

Gold: 15 microinches minimum Gold in select area over Nickel overall with 75 microinches Tin in select area over Nickel overall

2.2.8.2 Tin: 150 microinches minimum Tin over Nickel overall.

See the appropriate Sales Drawing(s) for additional information on dimensions, materials, platings, and markings.

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PRODUCT SPECIFICATION

2.3 SAFETY AGENCY APPROVALS:

UL File Number E29179
CSA File Number LR19980

3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS:

All documents referenced shall be of the latest revision. The order of precedence shall be as follows.

- Product Drawings
- This product specification
- Reference documents

3.1 REFERENCE DOCUMENTS:

- EIA 364 Electronic Industries Association, Recommended Standard
- MIL-STD-202: Test methods for electronics and electrical component parts.
- UL-94: Tests for flammability of plastic material

4.0 RATINGS:

4.1 VOLTAGE:

250 V

4.2 CURRENT:

- 1.2 A - 28 AWG
- 1.8 A - 26 AWG
- 3.0 A - 24 AWG
- 3.0 A - 22 AWG

4.2 TEMPERATURE:

Operating: -40 °C to +105 °C
Processing: See chart on next page.

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PRODUCT SPECIFICATION

5.0 PERFORMANCE:

5.1 ELECTRICAL PERFORMANCE:

Item	Test Condition	Requirement
Contact Resistance (Low Level)	Mate Connectors with a maximum voltage of 20mV and a current of 100 mA.	30 milliohm Maximum Initial
Insulation Resistance	Mate Connectors with a voltage of 500 VDC between adjacent terminals and between terminals and ground.	1000 Megohms Minimum
Dielectric Withstanding Voltage	Mate Connectors with a voltage of 1500 VAC for 1 min. between adjacent terminals and between terminals and ground.	No breakdown
Capacitance	Measure between adjacent terminals at 1 MHz. (Loaded: 50 ohms impedance)	Loaded: 2 picofarad max. Unloaded: 0.5 picofarad max.

5.2 MECHANICAL PERFORMANCE:

Item	Test Condition	Requirement
Terminal Insertion and Withdrawal Forces	Insert and withdraw a terminal (male to female) at a rate of 25 ± 6mm (1 ± 1/4 inch) per minute.	70058 - Insertion force shall be 4.45 N (1.0 lb) max. and withdrawal 0.56 N (0.125 lb) min. 71851 - Insertion force shall be 13.34 N (3.0 lb) max. and withdrawal 1.67 N (0.375 lb) min
Terminal Retention Force (in Housing)	Axial pullout force on the terminal in the housing at a rate of 25 ± 6mm (1 ± 1/4 inch) per minute.	Contact : 17.79 N (4.0 lbs.) min.
Durability	Mate connectors up to 25 cycles for tin plating and 50 cycles for gold plating at a maximum rate of 10 cycles per minute prior to defined Environmental Tests.	Contact Resistance : 10 milliohms Maximum Change from Initial
Vibration Mil-Std-1344 Method 2005.1 Condition I	Amplitude: 1.50mm (.060 inch) peak to peak Sweep: 10-55-10 Hz in one minute Duration: 2 hours in each X-Y-Z axis. (Test module shall be per Section 7.0)	Contact Resistance: 10 milliohms Maximum Change from Initial Discontinuity: not greater than one microsecond

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PRODUCT SPECIFICATION

Item	Test Condition	Requirement
Mechanical Shock Mil-Std-1344 Method 2004.1 Condition A	50 g's with three 1/2 sine wave form shocks in each X-Y-Z axis. (Test module shall be per Section 8.2)	Contact Resistance: 10 milliohms Maximum Change from Initial Discontinuity: not greater than one microsecond
Wire Pullout Force (Axial)	Apply an axial pullout force on the wire at a rate of 25 ± 6mm (1 ± 1/4 inch) per minute.	Pullout force - 75% tensile strength of wire, minimum.
Wire Pullout Force (Right Angle)	Apply a right angle pullout force on the wire at a rate of 25 ± 6mm (1 ± 1/4 inch) per minute.	Pullout force - 75% tensile strength of wire, minimum. 20 Newton's and below - no plastic deformation / no electrical discontinuity Above 20 and below 60 Newton's - slight non-functional plastic deformation / no electrical discontinuity.
Terminal Insertion Force (into Housing)	Apply an axial insertion force on the terminal at a rate of 25 ± 6mm (1 ± 1/4 inch) per minute.	13.34 N (3.0 lbs) maximum insertion force.
Wire Flex	Flex cable 180° for 500 cycles.	Contact resistance: 10 milliohms Maximum Change from Initial. Appearance: No Damage
Normal Force	Apply a perpendicular force at a rate of 25 ± 6mm (1 ± 1/4 inch) per minute on the contacts in a manner simulating actual use.	0.49 N (50 grams) minimum end of life, for gold plating 0.98 N (100 grams) minimum end of life, for tin plating.
Connector Retention	Apply a perpendicular force of 45 N to the wire harness using a free hanging weight.	No deformation or Terminal separation

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PRODUCT SPECIFICATION

5.3 ENVIRONMENTAL PERFORMANCE

Item	Test Condition	Requirement												
Thermal Shock Mil-Std-202F Method 107 E	Mate connectors exposed to 10 cycles of: <table border="1"> <thead> <tr> <th>Temperature °C</th> <th>Duration (Min)</th> </tr> </thead> <tbody> <tr> <td>-40 +0/-3</td> <td>30</td> </tr> <tr> <td>+25 +/-10</td> <td>5 Max</td> </tr> <tr> <td>+105 +3/-0</td> <td>30</td> </tr> <tr> <td>+25 +/-10</td> <td>5 Max</td> </tr> <tr> <td>-40 +0/-3</td> <td>30</td> </tr> </tbody> </table>	Temperature °C	Duration (Min)	-40 +0/-3	30	+25 +/-10	5 Max	+105 +3/-0	30	+25 +/-10	5 Max	-40 +0/-3	30	Appearance: No Damage Contact Resistance: 10 milliohms maximum change from initial
Temperature °C	Duration (Min)													
-40 +0/-3	30													
+25 +/-10	5 Max													
+105 +3/-0	30													
+25 +/-10	5 Max													
-40 +0/-3	30													
Thermal Aging Mil-Std-202F Method 108	Mate connectors; expose to 240 hours at 105 ± 3° C	Appearance: No Damage Contact Resistance: 10 milliohms maximum change from initial												
Humidity (Steady State) Mil-Std-202F Method 103	Mate connectors; expose to a temperature of : 85 ± 2° C with a Relative Humidity of 92 ± 3% for 96 hours. Note: Remove surface moisture and air dry for 1 hour prior to measurements.	Appearance: No Damage Contact Resistance: 10 milliohms maximum change from initial. Dielectric Withstanding Voltage: No Breakdown Insulation Resistance: 1000 Megohms Minimum												
Humidity (Cyclic) Mil-Std-202 Method 105	Mate connectors; expose for 10 cycles at 90-98% relative humidity with a transition time of 2.5 hours between extremes: <table border="1"> <thead> <tr> <th>Temperature °C</th> <th>Duration (Min)</th> </tr> </thead> <tbody> <tr> <td>+25 ± 10</td> <td>5 maximum</td> </tr> <tr> <td>+65 +3/-0</td> <td>15 maximum</td> </tr> </tbody> </table> Note: Remove surface moisture and air dry for one hour prior to measurements.	Temperature °C	Duration (Min)	+25 ± 10	5 maximum	+65 +3/-0	15 maximum	Appearance: No Damage Contact Resistance: 10 milliohms maximum change from initial. Dielectric Withstanding Voltage: No Breakdown Insulation Resistance: 1000 Megohms Minimum						
Temperature °C	Duration (Min)													
+25 ± 10	5 maximum													
+65 +3/-0	15 maximum													
Temperature Rise and Current Cycling	Temperature Rise: Mate the connectors; and measure the temperature rise at the rated current after 96 hours. Current Cycling: Mate connectors; measure the temperature rise at the rated current after 500 hours (45 minutes ON and 15 minutes OFF per hour).	Temperature Rise: 30°C above ambient maximum Temperature Rise: 30°C above ambient maximum												

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PRODUCT SPECIFICATION

Item	Test Condition	Requirement
Solderability Molex SMES-152	Steam age 1 hr. Solder time 5 ± 0.5 seconds. Solder temperature: $245 \pm 5^\circ\text{C}$ Non activated flux.	95% of the immersed area must show no voids, pin holes
Flowing Mixed Gas (FMG)	Battelle Class II, 10 ppm Cl_2 , 10 ppm H_2S , 100 ppm NO_2 , $70 \pm 1\%$ R.H., 25 deg. C. 50-60 CFM. 10 days mated and 7 days unmated exposure.	Contact Resistance: 10 milliohms Maximum change from Initial
Resistance to Solder Heats	Solder Time 3 ± 0.5 seconds Solder Temperature: $260 \pm 5^\circ\text{C}$ Immerse leads to a depth of 1.57mm (.062 in.) from connector body.	Appearance: No damage or discoloration of connector materials.

6.0 PACKAGING:

Parts are packaged in trays, tubes or bulk packed, refer to appropriate Sales Drawing for specific information.

7.0 QUALITY ASSURANCE PROVISIONS:

7.1 MATERIAL INSPECTION:

Shall consist of certification supported by verifying data.

7.2 ACCEPTANCE INSPECTION:

Acceptance of ongoing production product shall be determined by inspection according to Molex approved quality plans and required PPM levels for critical characteristics.

7.3 CONFORMANCE TESTING:

Shall be performed on production quality manufactured products. Sample size shall be per 8.1.

7.4 Gages:

Terminal insertion/withdrawal testing should be performed with the gage pin detailed below.

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PRODUCT SPECIFICATION

8.0 QUALIFICATION REQUIREMENTS:

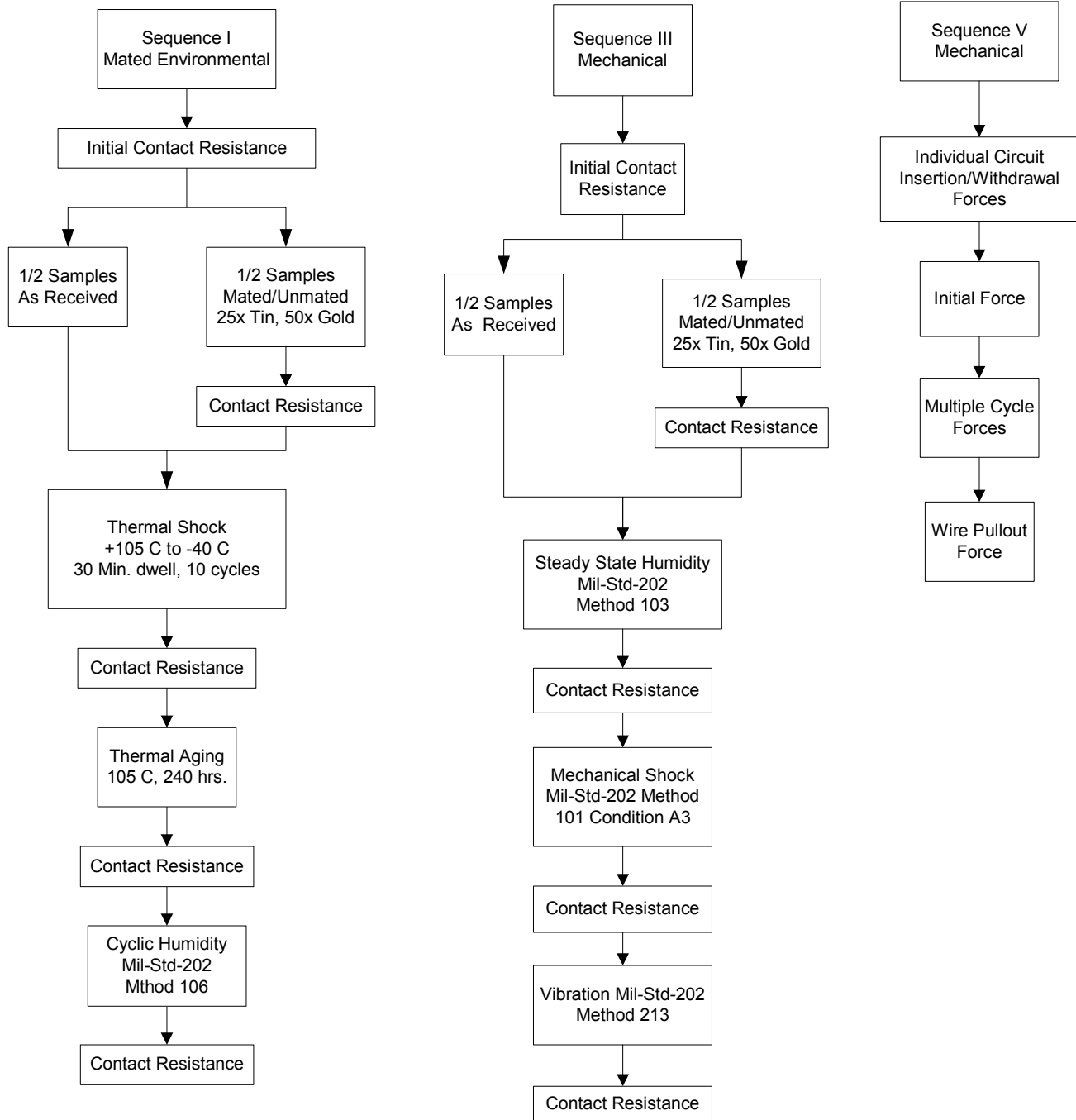
8.1 QUALIFICATION TESTING:

1. Samples for testing shall be representative of normal production lots.
2. Sample groups shall consist of a minimum (5) mated pairs of headers and receptacles. 30 minimum data points per group shall be measured. Measurements shall be taken from the middle and ends of the connectors as a minimum.

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PRODUCT SPECIFICATION



9.0 TEST SUMMARY:

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PRODUCT SPECIFICATION

9.1 SEQUENCE I - MATED ENVIRONMENTAL:

TEST CONDITION	TREATMENT	REQUIREMENT	UNITS	MEAN	MINIMUM	MAXIMUM
Contact Resistance	Initial	30 max.	milliohms	14.47	13.77	15.08
	After Durability	10 max. Change from initial	Δ - milliohms	.09	-0.82	1.40
	After Shock (Thermal)	10 max. Change from initial	Δ - milliohms	.02	-1.15	1.32
	After Thermal Aging	10 max. Change from initial	Δ - milliohms	.00	-1.06	1.18
	After Humidity (Cyclic)	10 max. Change from initial	Δ - milliohms	.25	-1.00	1.78

9.2 SEQUENCE III - MECHANICAL:

TEST CONDITION	TREATMENT	REQUIREMENT	UNITS	MEAN	MINIMUM	MAXIMUM
Contact Resistance	Initial	30 max.	milliohms	8.6	8.0	9.4
	After Humidity (Steady State)	10 max. Change from initial	Δ - milliohms	8.6	8.0	9.6
	After Shock (Mechanical)	10 max. Change from initial	Δ - milliohms	8.7	8.1	9.9
	After Vibration	10 max. Change from initial	Δ - milliohms	8.7	8.1	9.4

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PRODUCT SPECIFICATION

9.3 ENVIRONMENTAL PERFORMANCE:

TEST CONDITION	TREATMENT	REQUIREMENT	UNITS	MAXIMUM
Temperature Rise and Current Cycling (+30°C)	22 AWG	**** Minimum	Amps	3
	24 AWG	**** Minimum	Amps	3
	26 AWG	**** Minimum	Amps	1.8
	28 AWG	**** Minimum	Amps	1.2
	30 AWG	**** Minimum	Amps	0.70
	32 AWG	**** Minimum	Amps	0.45
	34 AWG	**** Minimum	Amps	0.32
	36 AWG	**** Minimum	Amps	0.21

9.4 SEQUENCE V - MECHANICAL:

70058 - MATING FORCE SEQUENCE 5.3

TEST CONDITION	TREATMENT	PLATING	UNITS	MEAN	MINIMUM	MAXIMUM
Insertion Force	Initial	Tin	LB/(N)	0.73/(3.24)	0.62/(2.74)	0.82/(3.63)
		Gold	LB/(N)	0.39/(1.75)	0.28/(1.25)	0.59/(2.62)
	After 25 Cycles	Tin	LB/(N)	0.75/(3.32)	0.64/(2.83)	0.89/(3.94)
	After 50 Cycles	Gold	LB/(N)	0.44/(1.96)	0.27/(1.19)	0.55/(2.44)
Withdrawal Force	Initial	Tin	LB/(N)	0.97/4.31	0.79/(3.52)	1.05/(4.65)
		Gold	LB/(N)	0.29/(1.28)	0.20/(0.89)	0.44/(1.97)
	After 25 Cycles	Tin	LB/(N)	0.77/(3.43)	0.68/(3.04)	0.90/(4.02)
	After 50 Cycles	Gold	LB/(N)	0.38/(1.69)	0.29/(1.29)	0.56/(2.50)

71851 - MATING FORCE SEQUENCE 5.3

TEST CONDITION	TREATMENT	PLATING	UNITS	MEAN	MINIMUM	MAXIMUM
Insertion Force	Initial	Tin	LB/N	2.39/10.62	2.24/9.96	2.53/11.25
		Gold	LB/N	0.99/4.39	0.91/4.05	1.05/4.67
	After 25 Cycles	Tin	LB/N	2.18/9.71	1.60/7.12	2.82/12.54
	After 50 Cycles	Gold	LB/N	1.01/4.48	0.86/3.83	1.17/5.20
Withdrawal Force	Initial	Tin	LB/N	2.68/11.92	2.28/10.14	3.18/14.15
		Gold	LB/N	0.69/3.07	0.62/2.76	0.77/3.43
	After 25 Cycles	Tin	LB/N	2.70/12.02	1.79/7.96	4.23/18.82
	After 50 Cycles	Gold	LB/N	1.07/4.76	0.84/3.74	1.25/5.56

TEST CONDITION	TREATMENT	PLATING	UNITS	MEAN	MINIMUM	MAXIMUM
Wire Pullout Force (Axial)	22 AWG with strain relief	**** Minimum	N/LB	65.3/14.67	56.2/12.63	72.4/16.28

REVISION: K	ECR/ECN INFORMATION: EC No: UCP2009-1866 DATE: 2009 / 01 / 27	TITLE: PRODUCT SPECIFICATION SINGLE ROW – STACKABLE LINEAR (SL) CONNECTOR SYSTEM	SHEET No. 12 of 13
DOCUMENT NUMBER: PS-70400	CREATED / REVISED BY: FOX/MIBARRA	CHECKED BY: STILES	APPROVED BY: BRINKMAN



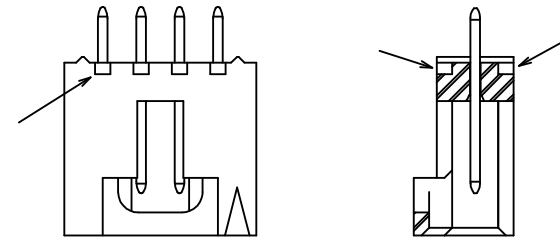
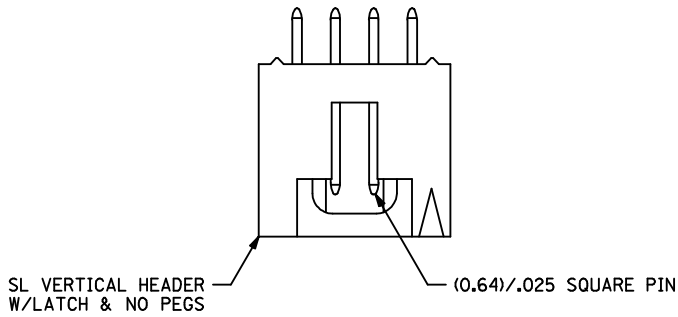
PRODUCT SPECIFICATION

	22 AWG w/o strain relief	**** Minimum	N/LB	48.0/10.78	39.2/8.81	54.5/12.24
	24 AWG	**** Minimum	N/LB	37.0/8.32	28.5/6.40	44.9/10.10
	26 AWG	**** Minimum	N/LB			
	28 AWG	**** Minimum	N/LB			
	30 AWG	**** Minimum	N/LB			
	32 AWG	**** Minimum	N/LB			
	34 AWG	**** Minimum	N/LB			
	36 AWG	**** Minimum	N/LB			

9.5 MISCELLANEOUS:

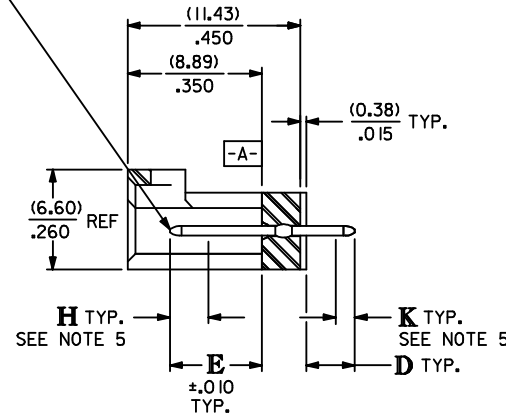
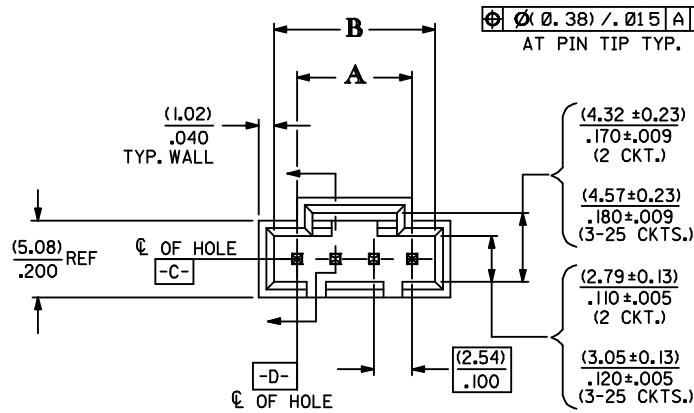
TEST CONDITION	TREATMENT	REQUIREMENT	UNITS	MEAN	MINIMUM	MAXIMUM
Terminal Retention Force (in Housing)	Initial	**** Minimum	N/LB	37.94/8.53	23.04/5.18	55.74/12.53
Insulation Resistance	Initial	1000 Min.	Megaohms	Passed		
	After Shock (Thermal)	1000 Min.	Megaohms	Passed		
	After Thermal Aging	1000 Min.	Megaohms	Passed		
	After Humidity (Steady State)	1000 Min.	Megaohms	Passed		
	After Humidity (Cyclic)	1000 Min.	Megaohms	Passed		

REVISION: K	ECR/ECN INFORMATION: EC No: UCP2009-1866 DATE: 2009 / 01 / 27	TITLE: PRODUCT SPECIFICATION SINGLE ROW – STACKABLE LINEAR (SL) CONNECTOR SYSTEM	SHEET No. 13 of 13
DOCUMENT NUMBER: PS-70400	CREATED / REVISED BY: FOX/MIBARRA	CHECKED BY: STILES	APPROVED BY: BRINKMAN



**ALTERNATIVE CORING
MANUFACTURER'S OPTION**

CKT. SIZE	DIM. "A"		DIM. "B"	
	MM	IN.	MM	IN.
2	2.54	.100	5.33	.210
3	5.08	.200	8.13	.320
4	7.62	.300	10.67	.420
5	10.16	.400	13.21	.520
6	12.70	.500	15.75	.620
7	15.24	.600	18.29	.720
8	17.78	.700	20.83	.820
9	20.32	.800	23.37	.920
10	22.86	.900	25.91	1.020
11	25.40	1.000	28.45	1.120
12	27.94	1.100	30.99	1.220
13	30.48	1.200	33.53	1.320
14	33.02	1.300	36.07	1.420
15	35.56	1.400	38.61	1.520
16	38.10	1.500	41.15	1.620
17	40.64	1.600	43.69	1.720
18	43.18	1.700	46.23	1.820
19	45.72	1.800	48.77	1.920
20	48.26	1.900	51.31	2.020
21	50.80	2.000	53.85	2.120
22	53.34	2.100	56.39	2.220
23	55.88	2.200	58.93	2.320
24	58.42	2.300	61.47	2.420
25	60.96	2.400	64.01	2.520

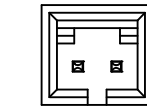
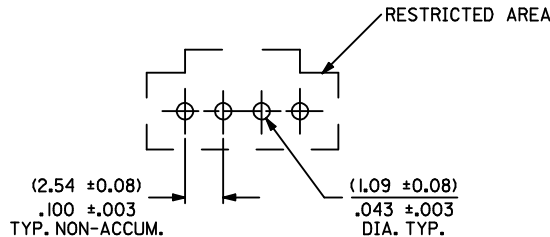


NOTES:

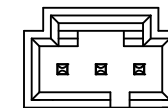
1. HEADER MATERIAL: GLASS FILLED POLYESTER; UL94V-0; COLOR: BLACK
PIN MATERIAL: PHOSPHOR BRONZE
2. HEADER TO BE USED WITH OPTION 'G' 70400 AND 70430 SERIES SL CONNECTORS.
3. REFER TO MOLEX PRODUCT SPECIFICATION PS-70541.
4. STANDARD PACKAGING PER PK-70873-0014.
5. MEASURE POINT FOR PLATING THICKNESS.

PLATING:

- TIN - 3.81 MICROMETERS/150 MICROINCHES MINIMUM BRIGHT TIN PLATE OVER 1.27 MICROMETERS/50 MICROINCHES MINIMUM NICKEL PLATE
- 15 GOLD - 0.38 MICROMETERS/15 MICROINCHES MINIMUM GOLD PLATE IN SELECT AREA
1.91 MICROMETERS/75 MICROINCHES MINIMUM MATTE TIN PLATE IN SELECT AREA OVER 1.27 MICROMETERS/50 MICROINCHES MINIMUM NICKEL PLATE OVERALL
- 30 GOLD - 0.76 MICROMETERS/15 MICROINCHES MINIMUM GOLD PLATE IN SELECT AREA
1.91 MICROMETERS/75 MICROINCHES MINIMUM MATTE TIN PLATE IN SELECT AREA OVER 1.27 MICROMETERS/50 MICROINCHES MINIMUM NICKEL PLATE OVERALL



2 CIRCUIT



3 CIRCUIT

RECOMMENDED PC BOARD LAYOUT

(FOR USE WITH (1.57)/.062 THICK BOARD)

ADD PLATING FINISH EC NO: UCP2009-1566 DRWN:MS BARRA 2008/12/17 CHKD:DMORGAN 2008/12/17 APPR:SMILLER 2008/12/18	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM/IN	SCALE 4:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION
		mm INCH	DRAWN BY DATE AAB 1987/09/22	TITLE SALES ASSY, SL VERTICAL HEADER W/LATCH & NO PEGS (2.54)/.100 CENTERS			
		4 PLACES ± --- ± --- 3 PLACES ± --- ± .005 2 PLACES ± 0.13 ± .010 1 PLACE ± 0.25 ± --- ANGULAR ± 1/2°	CHECKED BY DATE MJM 1987/09/22	MOLEX MOLEX INCORPORATED			
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	APPROVED BY DATE WAZ 1987/09/22	MATERIAL NO. SEE TABLE	DOCUMENT NO. SDA-70543-****	SHEET NO. 1 OF 2	
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							

CIRCUIT SIZE	ASSEMBLY ITEM NUMBER 70543	MANUFACTURE RELEASE STATUS	D REF.	E ± .010	CONNECTOR END PLATING			P.C. BOARD END PLATING		
					TYPE	H MEAS.		TYPE	FINISH	K MEAS.
2-25	-0001-0024	R.F.M.	(3.30) .130	(6.10) .240	15 GOLD	(2.54) .100		TIN	MATTE	(1.27) .050
2-25	-0036-0059	R.F.M.	(3.30) .130	(6.10) .240	TIN	(2.54) .100		TIN	BRIGHT	(1.27) .050
2-25	-0071-0094	R.F.M.	(3.81) .150	(6.10) .240	TIN	(2.54) .100		TIN	BRIGHT	(1.27) .050
2-25	-0106-0129	R.F.M.	(3.30) .130	(6.10) .240	30 GOLD	(2.54) .100		TIN	MATTE	(1.27) .050
2-25	-0141-0164	R.F.M.	(2.54) .100	(6.10) .240	15 GOLD	(3.94) .155		TIN	MATTE	(1.27) .050
2-25	-0165-0188	R.F.M.	(3.81) .150	(6.10) .240	30 GOLD	(2.54) .100		TIN	MATTE	(1.27) .050
2-25	-0200-0223	R.F.M.	(3.81) .150	(6.10) .240	15 GOLD	(2.54) .100		TIN	MATTE	(1.27) .050
2-25	-0248-0271	R.F.M.	(4.06) .160	(6.10) .240	TIN	(2.54) .100		TIN	BRIGHT	(1.27) .050
2-25	-0272-0295	R.F.M.	(4.06) .160	(6.10) .240	15 GOLD	(2.54) .100		TIN	MATTE	(1.27) .050
2-25	-0296-0319	R.F.M.	(4.06) .160	(6.10) .240	30 GOLD	(2.54) .100		TIN	MATTE	(1.27) .050

CIRCUIT SIZE	ASSEMBLY ITEM NUMBER	ASSEMBLY ITEM NUMBER	ASSEMBLY ITEM NUMBER	ASSEMBLY ITEM NUMBER	ASSEMBLY ITEM NUMBER	ASSEMBLY ITEM NUMBER	ASSEMBLY ITEM NUMBER	ASSEMBLY ITEM NUMBER	ASSEMBLY ITEM NUMBER	ASSEMBLY ITEM NUMBER	ASSEMBLY ITEM NUMBER	CIRCUIT SIZE
2	70543-0001	70543-0036	70543-0071	70543-0106	70543-0141	70543-0165	70543-0200	70543-0248	70543-0272	70543-0296	2	
3	70543-0002	70543-0037	70543-0072	70543-0107	70543-0142	70543-0166	70543-0201	70543-0249	70543-0273	70543-0297	3	
4	70543-0003	70543-0038	70543-0073	70543-0108	70543-0143	70543-0167	70543-0202	70543-0250	70543-0274	70543-0298	4	
5	70543-0004	70543-0039	70543-0074	70543-0109	70543-0144	70543-0168	70543-0203	70543-0251	70543-0275	70543-0299	5	
6	70543-0005	70543-0040	70543-0075	70543-0110	70543-0145	70543-0169	70543-0204	70543-0252	70543-0276	70543-0300	6	
7	70543-0006	70543-0041	70543-0076	70543-0111	70543-0146	70543-0170	70543-0205	70543-0253	70543-0277	70543-0301	7	
8	70543-0007	70543-0042	70543-0077	70543-0112	70543-0147	70543-0171	70543-0206	70543-0254	70543-0278	70543-0302	8	
9	70543-0008	70543-0043	70543-0078	70543-0113	70543-0148	70543-0172	70543-0207	70543-0255	70543-0279	70543-0303	9	
10	70543-0009	70543-0044	70543-0079	70543-0114	70543-0149	70543-0173	70543-0208	70543-0256	70543-0280	70543-0304	10	
11	70543-0010	70543-0045	70543-0080	70543-0115	70543-0150	70543-0174	70543-0209	70543-0257	70543-0281	70543-0305	11	
12	70543-0011	70543-0046	70543-0081	70543-0116	70543-0151	70543-0175	70543-0210	70543-0258	70543-0282	70543-0306	12	
13	70543-0012	70543-0047	70543-0082	70543-0117	70543-0152	70543-0176	70543-0211	70543-0259	70543-0283	70543-0307	13	
14	70543-0013	70543-0048	70543-0083	70543-0118	70543-0153	70543-0177	70543-0212	70543-0260	70543-0284	70543-0308	14	
15	70543-0014	70543-0049	70543-0084	70543-0119	70543-0154	70543-0178	70543-0213	70543-0261	70543-0285	70543-0309	15	
16	70543-0015	70543-0050	70543-0085	70543-0120	70543-0155	70543-0179	70543-0214	70543-0262	70543-0286	70543-0310	16	
17	70543-0016	70543-0051	70543-0086	70543-0121	70543-0156	70543-0180	70543-0215	70543-0263	70543-0287	70543-0311	17	
18	70543-0017	70543-0052	70543-0087	70543-0122	70543-0157	70543-0181	70543-0216	70543-0264	70543-0288	70543-0312	18	
19	70543-0018	70543-0053	70543-0088	70543-0123	70543-0158	70543-0182	70543-0217	70543-0265	70543-0289	70543-0313	19	
20	70543-0019	70543-0054	70543-0089	70543-0124	70543-0159	70543-0183	70543-0218	70543-0266	70543-0290	70543-0314	20	
21	70543-0020	70543-0055	70543-0090	70543-0125	70543-0160	70543-0184	70543-0219	70543-0267	70543-0291	70543-0315	21	
22	70543-0021	70543-0056	70543-0091	70543-0126	70543-0161	70543-0185	70543-0220	70543-0268	70543-0292	70543-0316	22	
23	70543-0022	70543-0057	70543-0092	70543-0127	70543-0162	70543-0186	70543-0221	70543-0269	70543-0293	70543-0317	23	
24	70543-0023	70543-0058	70543-0093	70543-0128	70543-0163	70543-0187	70543-0222	70543-0270	70543-0294	70543-0318	24	
25	70543-0024	70543-0059	70543-0094	70543-0129	70543-0164	70543-0188	70543-0223	70543-0271	70543-0295	70543-0319	25	

X IN COLUMN UNDER *ASSEMBLY ITEM NUMBER* HEADING DENOTES TOOLING NOT AVAILABLE

ADD PLATING FINISH EC NO: UCP2009-1566 DRWINMS BARRA 2008/12/17 CHKDD: MORGAN 2008/12/17 APPR: MILLER 2008/12/18 DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	▽=0	mm INCH	MM/IN	4:1	INCH	
	▽=0	4 PLACES ± --- ± ---	DRAWN BY DATE			SALES ASSY, SL VERTICAL HEADER W/LATCH & NO PEGS (2.54)/.100 CENTERS
		3 PLACES ± --- ± .005	AAB 1987/09/22			
	2 PLACES ± 0.13 ± .010	CHECKED BY DATE			MOLEX INCORPORATED	
	1 PLACE ± 0.25 ± ---	MJM 1987/09/22				
	ANGULAR ± 1/2°	APPROVED BY DATE				
		WAZ 1987/09/22				
		MATERIAL NO.	SEE TABLE	DOCUMENT NO.		SHEET NO.
				SDA-70543-****		2 OF 2
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				

CIRCUIT SIZE	ASSEMBLY ITEM NUMBER 70543	MANUFACTURE RELEASE STATUS	D REF.	E ± .010	CONNECTOR END PLATING			P.C. BOARD END PLATING		
					TYPE	H MEAS.		TYPE	K MEAS.	
2-25	-0001-0024	R.F.M.	(3.30) .130	(6.10) .240	15 GOLD	(2.54) .100		TIN	(1.27) .050	
2-25	-0036-0059	R.F.M.	(3.30) .130	(6.10) .240	TIN	(2.54) .100		TIN	(1.27) .050	
2-25	-0071-0094	R.F.M.	(3.81) .150	(6.10) .240	TIN	(2.54) .100		TIN	(1.27) .050	
2-25	-0106-0129	R.F.M.	(3.30) .130	(6.10) .240	30 GOLD	(2.54) .100		TIN	(1.27) .050	
2-25	-0141-0164	R.F.M.	(2.54) .100	(6.10) .240	15 GOLD	(3.94) .155		TIN	(1.27) .050	
2-25	-0165-0188	R.F.M.	(3.81) .150	(6.10) .240	30 GOLD	(2.54) .100		TIN	(1.27) .050	
2-25	-0200-0223	R.F.M.	(3.81) .150	(6.10) .240	15 GOLD	(2.54) .100		TIN	(1.27) .050	
2-25	-0248-0271	R.F.M.	(4.06) .160	(6.10) .240	TIN	(2.54) .100		TIN	(1.27) .050	
2-25	-0272-0295	R.F.M.	(4.06) .160	(6.10) .240	15 GOLD	(2.54) .100		TIN	(1.27) .050	
2-25	-0296-0319	R.F.M.	(4.06) .160	(6.10) .240	30 GOLD	(2.54) .100		TIN	(1.27) .050	

CIRCUIT SIZE	ASSEMBLY ITEM NUMBER	ASSEMBLY ITEM NUMBER	ASSEMBLY ITEM NUMBER	ASSEMBLY ITEM NUMBER	ASSEMBLY ITEM NUMBER	ASSEMBLY ITEM NUMBER	ASSEMBLY ITEM NUMBER	ASSEMBLY ITEM NUMBER	ASSEMBLY ITEM NUMBER	ASSEMBLY ITEM NUMBER	ASSEMBLY ITEM NUMBER	CIRCUIT SIZE
2	70543-0001	70543-0036	70543-0071	70543-0106	70543-0141	70543-0165	70543-0200	70543-0248	70543-0272	70543-0296	2	
3	70543-0002	70543-0037	70543-0072	70543-0107	70543-0142	70543-0166	70543-0201	70543-0249	70543-0273	70543-0297	3	
4	70543-0003	70543-0038	70543-0073	70543-0108	70543-0143	70543-0167	70543-0202	70543-0250	70543-0274	70543-0298	4	
5	70543-0004	70543-0039	70543-0074	70543-0109	70543-0144	70543-0168	70543-0203	70543-0251	70543-0275	70543-0299	5	
6	70543-0005	70543-0040	70543-0075	70543-0110	70543-0145	70543-0169	70543-0204	70543-0252	70543-0276	70543-0300	6	
7	70543-0006	70543-0041	70543-0076	70543-0111	70543-0146	70543-0170	70543-0205	70543-0253	70543-0277	70543-0301	7	
8	70543-0007	70543-0042	70543-0077	70543-0112	70543-0147	70543-0171	70543-0206	70543-0254	70543-0278	70543-0302	8	
9	70543-0008	70543-0043	70543-0078	70543-0113	70543-0148	70543-0172	70543-0207	70543-0255	70543-0279	70543-0303	9	
10	70543-0009	70543-0044	70543-0079	70543-0114	70543-0149	70543-0173	70543-0208	70543-0256	70543-0280	70543-0304	10	
11	70543-0010	70543-0045	70543-0080	70543-0115	70543-0150	70543-0174	70543-0209	70543-0257	70543-0281	70543-0305	11	
12	70543-0011	70543-0046	70543-0081	70543-0116	70543-0151	70543-0175	70543-0210	70543-0258	70543-0282	70543-0306	12	
13	70543-0012	70543-0047	70543-0082	70543-0117	70543-0152	70543-0176	70543-0211	70543-0259	70543-0283	70543-0307	13	
14	70543-0013	70543-0048	70543-0083	70543-0118	70543-0153	70543-0177	70543-0212	70543-0260	70543-0284	70543-0308	14	
15	70543-0014	70543-0049	70543-0084	70543-0119	70543-0154	70543-0178	70543-0213	70543-0261	70543-0285	70543-0309	15	
16	70543-0015	70543-0050	70543-0085	70543-0120	70543-0155	70543-0179	70543-0214	70543-0262	70543-0286	70543-0310	16	
17	70543-0016	70543-0051	70543-0086	70543-0121	70543-0156	70543-0180	70543-0215	70543-0263	70543-0287	70543-0311	17	
18	70543-0017	70543-0052	70543-0087	70543-0122	70543-0157	70543-0181	70543-0216	70543-0264	70543-0288	70543-0312	18	
19	70543-0018	70543-0053	70543-0088	70543-0123	70543-0158	70543-0182	70543-0217	70543-0265	70543-0289	70543-0313	19	
20	70543-0019	70543-0054	70543-0089	70543-0124	70543-0159	70543-0183	70543-0218	70543-0266	70543-0290	70543-0314	20	
21	70543-0020	70543-0055	70543-0090	70543-0125	70543-0160	70543-0184	70543-0219	70543-0267	70543-0291	70543-0315	21	
22	70543-0021	70543-0056	70543-0091	70543-0126	70543-0161	70543-0185	70543-0220	70543-0268	70543-0292	70543-0316	22	
23	70543-0022	70543-0057	70543-0092	70543-0127	70543-0162	70543-0186	70543-0221	70543-0269	70543-0293	70543-0317	23	
24	70543-0023	70543-0058	70543-0093	70543-0128	70543-0163	70543-0187	70543-0222	70543-0270	70543-0294	70543-0318	24	
25	70543-0024	70543-0059	70543-0094	70543-0129	70543-0164	70543-0188	70543-0223	70543-0271	70543-0295	70543-0319	25	

X IN COLUMN UNDER *ASSEMBLY ITEM NUMBER* HEADING DENOTES TOOLING NOT AVAILABLE

L.T.R.	REVISIONS	L.T.R.	REVISIONS	DRWG. BY: AAB	CHK'D. BY: MJM	SCALE	DIMENSIONS SHOWN (METRIC) INCH UNLESS OTHERWISE SPECIFIED TOLERANCES: ANGULAR ± 1/2°	▽ = 0 ▾ = 0 REVISE ONLY ON CAD SYSTEM TITLE: SALES ASSY, SL VERTICAL HEADER W/LATCH & NO PEGS (2.54)/.100 CENTERS MOLEX INCORPORATED SHEET NO. 2 DATE 09/23/87 MOLEX INCORPORATED SHEET NO. 2 DATE 09/23/87 U.S.A.
	DRWG. BY: WAZ		CHK'D. BY:					