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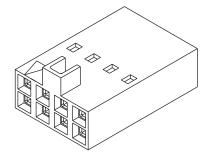
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#### Jameco Part Number 1298961

# 2.54mm (.100") Pitch SL<sup>™</sup> Crimp Housing

#### 70450

Dual Row Version B, Polarized



#### Features and Benefits

Sizes 4 to 50 circuits

Polarized to mate with dual row, low profile shrouded headers

#### **Reference Information**

Product Specification: PS-70400 Packaging: Bag UL File No.: E29179 CSA File No.: LR19980 Mates With: 70246, 70247, 87256 and 87257 Use With: 70058 and 71851 crimp terminals Designed In: Inches

#### Physical

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

> Delivered on a carrier with 20 pieces per strip. Actual Size JUNIVERSAL Polarizing Pin 40713-1 Order No. 15-04-0292

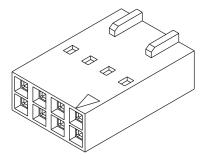
Not For Use With C-Grid III<sup>™</sup> Components

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
4	<u>22-55-2042</u>	20	<u>22-55-2202</u>	36	<u>22-55-2362</u>
6	<u>22-55-2062</u>	22	<u>22-55-2222</u>	38	<u>22-55-2382</u>
8	<u>22-55-2082</u>	24	<u>22-55-2242</u>	40	<u>22-55-2402</u>
10	<u>22-55-2102</u>	26	<u>22-55-2262</u>	42	<u>22-55-2422</u>
12	<u>22-55-2122</u>	28	<u>22-55-2282</u>	44	<u>22-55-2442</u>
14	<u>22-55-2142</u>	30	<u>22-55-2302</u>	46	<u>22-55-2462</u>
16	<u>22-55-2162</u>	32	<u>22-55-2322</u>	48	<u>22-55-2482</u>
18	<u>22-55-2182</u>	34	<u>22-55-2342</u>	50	<u>22-55-2502</u>

# 2.54mm (.100") Pitch SL™ Crimp Housing

## 70450

Dual Row Version C, Back Ribs



#### Features and Benefits

- Sizes 4 to 50 circuits
- Designed to be used within 70013 dual row interim clip as a female connector assembly or 70022 dual row panel mount as a male pin assembly
- End-to-end stackable
- Back ribs maintain position of connector housings in interim clip and panel mount

#### **Reference Information**

Product Specification: PS-70400 Packaging: Bag UL File No.: E29179 CSA File No.: LR19980 Accessories: 70013 and 70022 Use With: 70021, 70058 and 71851 crimp terminals Designed In: Inches

#### Physical

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

Delivered o	on a carrier with 20 pieces per strip.
Actual Size	Universal Polarizing Pin 40713-1 Order No. 15-04-0292

#### Not For Use With C-Grid III<sup>™</sup> Components

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
4	<u>22-55-2043</u>	20	<u>22-55-2203</u>	36	<u>22-55-2363</u>
6	<u>22-55-2063</u>	22	<u>22-55-2223</u>	38	<u>22-55-2383</u>
8	<u>22-55-2083</u>	24	<u>22-55-2243</u>	40	<u>22-55-2403</u>
10	<u>22-55-2103</u>	26	<u>22-55-2263</u>	42	<u>22-55-2423</u>
12	<u>22-55-2123</u>	28	<u>22-55-2283</u>	44	<u>22-55-2443</u>
14	<u>22-55-2143</u>	30	<u>22-55-2303</u>	46	<u>22-55-2463</u>
16	<u>22-55-2163</u>	32	<u>22-55-2323</u>	48	<u>22-55-2483</u>
18	<u>22-55-2183</u>	34	<u>22-55-2343</u>	50	<u>22-55-2503</u>







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## <u>PARAGRAPH</u>

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	REV							
	SHT							
	F	REVISE ON PC O	NLY	TITLE	PROD	DUCT SPE	CIFICATIO	N
	F	ADD PRO TEMPERA UDT2002	TURE -1016	LI	SINGL	E ROW –	STACKAB ECTOR SY	LE
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### 1.0 <u>SCOPE</u>

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, dual row, crimp housing 70400, female, single row, insulation displacement, connector assembly 70475 & 71178, male, single row, insulation displacement, connector assembly 70543, single row, .120" pocket, wire-to-board, shrouded header, vertical 70541, single row, 120" pocket, wire-to-board, shrouded header, vertical, split peg 70545, single row, 120" pocket, wire-to-board, shrouded header, vertical, tri-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 70563, single row, .180" pocket, wire-to-board, shrouded header, vertical 70565, single row, 180" pocket, wire-to-board, shrouded header, vertical, tri-peg 70573, single row, 180" pocket, wire-to-board, shrouded header, right angle 70575, single row, 180" pocket, wire-to-board, shrouded header, right angle, tri-peg **REVISE ON PC ONLY** TITLE PRODUCT SPECIFICATION ADD PROCESS SINGLE ROW – STACKABLE TEMPERATURE F LINEAR (SL) CONNECTOR SYSTEM UDT2002-1016 RSFOX 2/13/02 THIS DOCUMENT CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION REV DESCRIPTION DOCUMENT NO. SHEET FILE NAME **PS - 70400** 2 BORDER TEMPLATE: ES-40000-3996 REV. A SHEET 3 95/MAR/10 EC U5-0926 DCBRD03.LWP





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2.2 <u>DIN</u>	IENSIONS, MATERIALS AN	ID SPECIF	ICATIONS:				
	2.2.1 Mating Pin Heig	ght					
			g pin height: .320" pin height: .200" (				
	2.2.2 Centerline spa	acing (pitc	h): .100" (2.54 mm	)			
	2.2.3 Wire Sizes: #22		'G stranded wire, v mm) max.	vith an ins	sulation	diameter	<sup>-</sup> of .053"
	2.2.4 Molex cable: 73	807, 7767,	8996, 8997, 2422	6, 24241,	24369	and 2438	39.
	2.2.5 Termination Me	ethod:					
	<b>2.2.5.1</b> Crimp <b>2.2.5.2</b> IDT (7	· ·	,				
	2.2.6 Housings: (700	66, 70450	, 70107): Black Gla	ass Filled	Polyest	er, UL 94:	₩-0
	<b>2.2.7</b> Terminals: (700	21, 70058	): Phosphor Bronz	e			
	2.2.7 Plating: Gold a	nd tin/Lead	ł				
			in. Gold in select a in select area over			verall wit	h 75 μ-in.
		Tin/Lead	n. Gold in select a in select area over n. Tin/Lead over N	· Nickel ov	/erall	verall with	h 75 μ-in.
	e the appropriate Sales Draw d markings.	ing(s) for a	additional informati	on on dim	nension	s, materia	als, platings
	REVISE ON PC ONLY	TITLE	PRODUC				N
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### 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

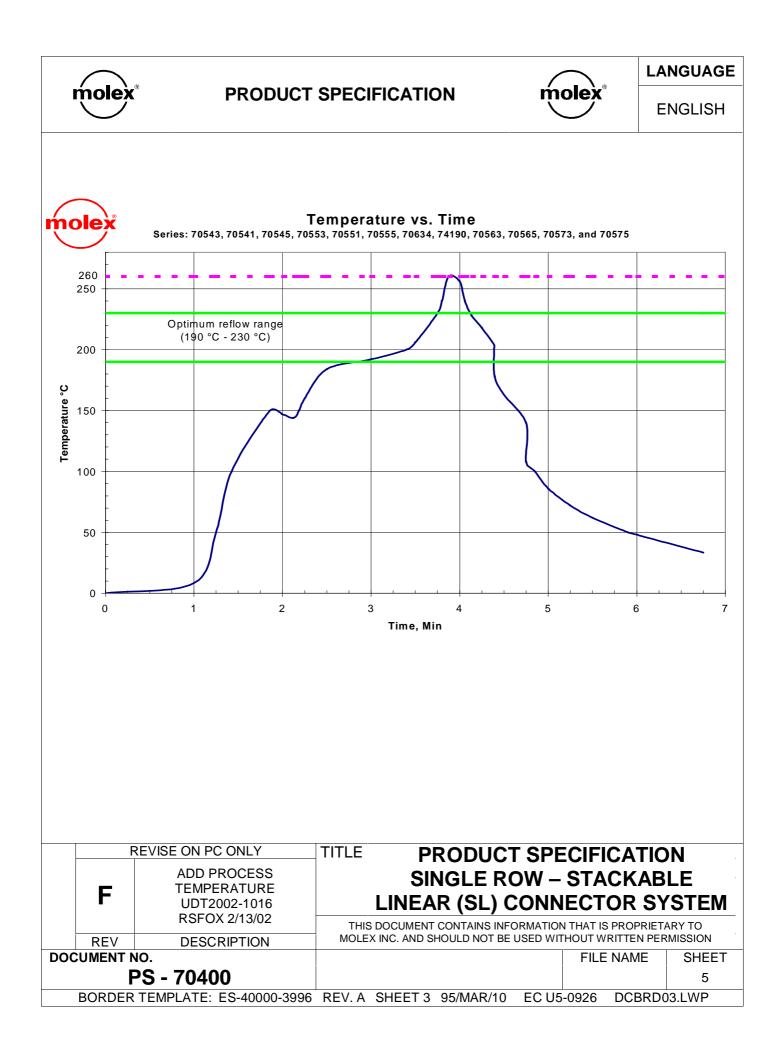
#### 4.2 CURRENT:

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 °CProcessing:See chart on next page.

	F	REVISE ON PC ONLY	TITLE	Ρ	RODUC	T SPE	CIFI	CATIO	N
	F	ADD PROCESS TEMPERATURE UDT2002-1016 RSFOX 2/13/02		SII LINEA	NGLE R R (SL) (	OW – CONN	STA ECT	CKAB OR SY	LE STEM
	REV	DESCRIPTION	MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTI						MISSION
DOCUMENT NO.							FILE	NAME	SHEET
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	BORDER	TEMPLATE: ES-40000-3996	REV. A	SHEET 3	95/MAR/10	EC U5	-0926	DCBRD0	3.LWP







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## 5.0 PERFORMANCE:

## 5.1 ELECTRICAL PERFORMANCE:

ltem	Test Condition	Requirement
Contact Resistance	Mate Connectors with a maximum	<b>30</b> milliohm Maximum
(Low Level)	voltage of 20mV and a current of 100	Initial
	mA.	
Insulation	Mate Connectors with a voltage of 500	1000 Megohms Minimum
Resistance	VDC between adjacent terminals and	
	between terminals and ground.	
Dielectric	Mate Connectors with a voltage of	No breakdown
Withstanding	1500 VAC for 1 min. between	
Voltage	adjacent terminals and between	
	terminals and ground.	
Capacitance	Measure between adjacent terminals	Loaded: 2 picofarad max.
	at 1 MHz. (Loaded: 50 ohms	Unloaded: 0.5 picofarad
	impedance)	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 $25 \pm 6$ mm (1 $\pm$ 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 $25 \pm 6$ mm (1 $\pm 1/4$ 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

	F	REVISE ON PC ONLY	TITLE PRODUCT SPE		N			
	F	ADD PROCESS TEMPERATURE UDT2002-1016 RSFOX 2/13/02	SINGLE ROW – LINEAR (SL) CONN	ECTOR SYSTEM THAT IS PROPRIETARY TO				
	REV	DESCRIPTION	MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSI					
DOCUMENT NO.		10.		FILE NAME	SHEET			
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	BORDER	TEMPLATE: ES-40000-3996	REV. A SHEET 3 95/MAR/10 EC U5	-0926 DCBRD0	3.LWP			





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Mill-Std-1344 Method 2005.1 Condition ISweep: 10-55-10 Hz in one minute Duration: 2 hours in each X-Y-Z axis. (Test module shall be per Section 7.0)Change from Initial Discontinuity: not greate than one microsecondMechanical Shock Mil-Std-1344 Method 2004.1 Condition A50 g's with three 1/2 sine wave form shocks in each X-Y-Z axis. (Test module shall be per Section 7.0)Contact Resistance: 10 milliohms Maximum Change from Initial Discontinuity: not greate than one microsecondWire 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% tensi strength of wire, minimurWire Pullout Force (Right Angle)Apply an axial insertion force on the wire at a rate of 25 ± 6mm (1 ± 1/4 inch) per minute.Pullout force - 75% tensi strength of wire, minimurWire FlexFlex cable 180° for 500 cycles.Contact resistance: 10 milliohms Maximum Change from Initial Discontinuity not greate than one microsecondNormal ForceApply a perpendicular force at a rate of 25 ± 6mm (1 ± 1/4 inch) per minute on the contacts in a manner simulating actual use0.49 N (50 grams) minimum end of life, for the gold plating	ltem	Test Condition	Requirement
Mierchanical Shock Mil-Std-1344 Method 2004.1 Condition A50 g's with three 1/2 sine wave form shocks in each X-Y-Z axis. (Test module shall be per Section 8.2)10 milliohms Maximum Change from Initial Discontinuity: not greate than one microsecondWire 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% tensi strength of wire, minimurWire 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% tensi strength of wire, minimurTerminal 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) maximu insertion force.Wire FlexFlex cable 180° for 500 cycles.Contact resistance: 10 milliohms Maximum Change from Initial. Appearance: No Damag 0.49 N (50 grams) minimum end of life, for gold plating 0.98 N (100 grams) minimum end of life, for the contacts in a manner simulating actival use	Mil-Std-1344 Method 2005.1	to peak Sweep: 10-55-10 Hz in one minute Duration: 2 hours in each X-Y-Z axis.	10 milliohms Maximum Change from Initial Discontinuity: not greater than one microsecond
Wire Pullout Force (Axial)wire at a rate of 25 ± 6mm (1 ± 1/4 inch) per minute.Pullout force - 75 % tensis strength of wire, minimurWire 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 % tensis strength of wire, minimurTerminal Insertion Force (into Housing)Apply an axial insertion force on the terminal at a rate of 25 ± 6mm (1 ± 1/4 inch) per minute.Pullout force - 75 % tensis strength of wire, minimurWire FlexApply 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) maximu insertion force.Wire FlexFlex cable 180° for 500 cycles.Contact resistance: 10 milliohms Maximum Change from Initial. Appearance: No Damag 0.49 N (50 grams) 	Method 2004.1	shocks in each X-Y-Z axis. (Test module shall be per Section 8.2)	10 milliohms Maximum
Wire FlexApply an axial insertion force of 25 ± 6mm (1 ± 1/4 inch) per minute.13.34 N (3.0 lbs) maximul insertion force.Wire FlexFlex cable 180° for 500 cycles.Contact resistance: 10 milliohms Maximum 		wire at a rate of $25 \pm 6$ mm ( $1 \pm 1/4$ inch) per minute.	Pullout force - 75% tensile strength of wire, minimum
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) maximul 		wire at a rate of 25 $\pm$ 6mm (1 $\pm$ 1/4	Pullout force - 75% tensile strength of wire, minimum
Wire FlexFlex cable 180° for 500 cycles.10 milliohms Maximum Change from Initial. Appearance: No DamagNormal ForceApply a perpendicular force at a rate of 25 ± 6mm (1 ± 1/4 inch) per minute on the contacts in a manner simulating actual use0.49 N (50 grams) minimum end of life, for 0.98 N (100 grams) minimum end of life, for minimum end of life, for the contacts in a manner simulating		terminal at a rate of $25 \pm 6$ mm ( $1 \pm 1/4$	13.34 N (3.0 lbs) maximum insertion force.
Apply a perpendicular force at a rate of0.49 N (50 grams)Normal Force25 ± 6mm (1 ± 1/4 inch) per minute on the contacts in a manner simulating actual use0.98 N (100 grams) minimum end of life, for minimum end of life, for the contacts in a manner simulating	Wire Flex	Flex cable 180° for 500 cycles.	10 milliohms Maximum
plating.	Normal Force	of 25 $\pm$ 6mm (1 $\pm$ 1/4 inch) per minute on	minimum end of life, for gold plating

	F	REVISE ON PC ONLY	TITLE	F	PRODU	CT SPE	ECIFI	CATIO	N
	F	ADD PROCESS TEMPERATURE UDT2002-1016 RSFOX 2/13/02	ТНІ	S LINE	INGLE I AR (SL)	ROW – CONN	STA IECT	CKAB OR SY	LE STEM
	REV	DESCRIPTION	MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN						MISSION
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	BORDER	TEMPLATE: ES-40000-3996	REV. A	SHEET :	3 95/MAR/1	0 EC U5	-0926	DCBRDC	3.LWP





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## 5.3 ENVIRONMENTAL PERFORMANCE

ltem	Test Condition	Requirement
	Mate connectors exposed to 10 cycles of:	
Thermal Shock Mil-Std-202F Method 107 E	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
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 : $85 \pm 2^{\circ}$ C with a Relative Humidity of $92 \pm 3\%$ 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: $\frac{\text{Temperature °C}}{1 + 25 \pm 10} = \frac{\text{Duration (Min)}}{5 \text{ maximum}}$ $+65 + 3/-0 = 15 \text{ maximum}$ Note: Remove surface moisture and air dry for one 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

	F	TEMPERATURE UDT2002-1016 RSFOX 2/13/02	THIS	LINEA	CONTAINS INFO	ECT	OR SY	STEM	
	REV	DESCRIPTION	MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						
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	BORDER	TEMPLATE: ES-40000-3996	REV. A	SHEET 3	95/MAR/10	EC U5	-0926	DCBRDC	3.LWP





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Item	Test Condition	Requirement
Temperature Rise	Temperature Rise: Mate the connectors; and measure the temperature rise at the rated current after 96 hours.	Temperature Rise: 30°C above ambient maximum
and Current Cycling	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
Solderability Molex SMES-152	Steam age 1 hr. Solder time $5 \pm 0.5$ seconds. Solder temperature: 245 ± 5°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 ± 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 ± 5°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.

	F	REVISE ON PC ONLY	TITLE	Р	RODUC	T SPE				
	F	ADD PROCESS TEMPERATURE UDT2002-1016 RSFOX 2/13/02	тик	LINEA	NGLE R R (SL)	CONN	ECT	OR SY	STEM	
	REV	DESCRIPTION	THIS DOCUMENT CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							
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	PS - 70400								9	
BORDER TEMPLATE: ES-40000-3996			REV. A	SHEET 3	95/MAR/10	EC U5	-0926	DCBRDC	3.LWP	





### 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 <u>CONFORMANCE TESTING</u>:

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

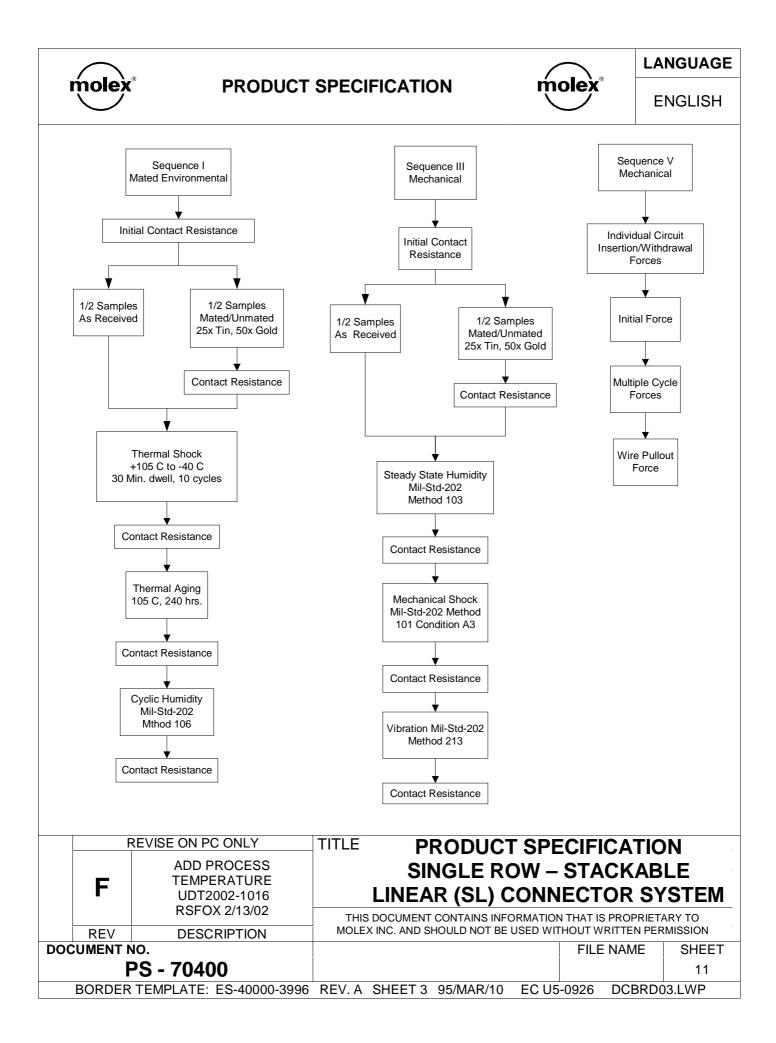
7.4 <u>Gages</u>:

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

## 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.

	F	REVISE ON PC ONLY	TITLE	P	RODUC	T SPE		CATIO	Ν
	F	ADD PROCESS TEMPERATURE UDT2002-1016 RSFOX 2/13/02			NGLE R R (SL)				
			-	THIS DOCUMENT CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					
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DOC	UMENT N	NO.					FILE	NAME	SHEET
	PS - 70400								10
	BORDER	TEMPLATE: ES-40000-3996	REV. A	SHEET 3	95/MAR/10	EC U5	-0926	DCBRD0	3.LWP







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## 9.0 TEST SUMMARY:

## 9.1 SEQUENCE I - MATED ENVIRONMENTAL:

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

## 9.2 SEQUENCE III - MECHANICAL:

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

	F	REVISE ON PC ONLY	TITLE	Р	RODUC	T SPE	ECIFI	CATIO	N
	F	ADD PROCESS TEMPERATURE UDT2002-1016 RSFOX 2/13/02	SINGLE ROW – STAC LINEAR (SL) CONNECTO THIS DOCUMENT CONTAINS INFORMATION THAT IS P MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRI						LE STEM
	REV	DESCRIPTION	MOLE	X INC. AND S	HOULD NOT BE	USED WI	HOUTW	RITIENPER	MISSION
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ENGLISH

## 9.3 ENVIRONMENTAL PERFORMANCE:

TEST CONDITION	TREATMENT	REQUIREMENT	UNITS	MAXIMUM
	22 AWG	**** Minimum	Amps	3
	24 AWG	**** Minimum	Amps	3
	26 AWG	**** Minimum	Amps	1.8
Temperature Rise and	28 AWG	**** Minimum	Amps	1.2
Temperature Rise and Current Cycling (+30°C)	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												
<b>TEST CONDITION</b>	TREATMENT	PLATING	UNITS	MEAN	MINIMUM	MAXIMUM							
	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)							
Insertion Force	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)							
	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)							
Withdrawal Force	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												
<b>TEST CONDITION</b>	TREATMENT	PLATING	UNITS	MEAN	MINIMUM	MAXIMUM							
	Initial	Tin	LB/N	2.39/10.62	2.24/9.96	2.53/11.25							
	initial	Gold	LB/N	0.99/4.39	0.91/4.05	1.05/4.67							
Insertion Force	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							
	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							
Withdrawal Force	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							

	F	REVISE ON PC ONLY	TITLE	Р	RODUCI	<b>SPE</b>	CIFI	CATIO	N
	F	ADD PROCESS TEMPERATURE UDT2002-1016 RSFOX 2/13/02		LINEA	NGLE RO R (SL) C	ONN	ECT	OR SY	STEM
	REV	DESCRIPTION	THIS DOCUMENT CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						
DOC	UMENT N	10.					FILE	NAME	SHEET
PS - 70400									13
	BORDER	TEMPLATE: ES-40000-3996	REV. A	SHEET 3	95/MAR/10	EC U5	-0926	DCBRDC	3.LWP





LANGUAGE

ENGLISH

TEST CONDITION	TREATMENT	PLATING	UNITS	MEAN	MINIMUM	MAXIMUM	
	22 AWG with strain relief	**** Minimum	N/LB	65.3/14.67	56.2/12.63	72.4/16.28	
	22 AWG w/o strain relief	**** Minimum	N/LB	48.0/10.78	39.2/8.81	54.5/12.24	
Wire Pullout	24 AWG	**** Minimum	N/LB	37.0/8.32	28.5/6.40	44.9/10.10	
Force (Axial)	26 AWG	**** Minimum	N/LB				
FUICE (Axial)	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:

TREATMENT	REQUIREMENT	UNITS	MEAN	MINIMUM	MAXIMUM		
Terminal Retention Force (in Initial Housing)		N/LB	37.94/8.53	23.04/5.18	55.74/12.53		
Initial	1000 Min.	n. Megaohms Passed					
After Shock (Thermal)	1000 Min.	Megaohms					
After Thermal Aging	1000 Min. Megaohms Passed						
(Steady State)		Megaohms					
After Humidity (Cyclic)	1000 Min.	Megaohms	Passed				
	Initial Initial After Shock (Thermal) After Thermal Aging After Humidity (Steady State) After Humidity	Initial**** MinimumInitial1000 Min.After Shock (Thermal)1000 Min.After Thermal Aging1000 Min.After Humidity (Steady State)1000 Min.After Humidity After Humidity1000 Min.	Initial**** MinimumN/LBInitial1000 Min.MegaohmsAfter Shock (Thermal)1000 Min.MegaohmsAfter Thermal Aging1000 Min.MegaohmsAfter Humidity (Steady State)1000 Min.Megaohms	Initial**** MinimumN/LB37.94/8.53Initial1000 Min.MegaohmsAfter Shock (Thermal)1000 Min.MegaohmsAfter Thermal Aging1000 Min.MegaohmsAfter Humidity (Steady State)1000 Min.MegaohmsAfter Humidity After Humidity1000 Min.Megaohms	Initial**** MinimumN/LB37.94/8.5323.04/5.18Initial1000 Min.MegaohmsPassedAfter Shock (Thermal)1000 Min.MegaohmsPassedAfter Thermal Aging1000 Min.MegaohmsPassedAfter Humidity (Steady State)1000 Min.MegaohmsPassedAfter Humidity (Steady State)1000 Min.MegaohmsPassed		

REVISE ON PC ONLY		TITLE PRODUCT SPECIFICATION									
	F	ADD PROCESS TEMPERATURE UDT2002-1016 RSFOX 2/13/02	ТНІ	SI	NGLE RO R (SL) C	OW - ONN	STA ECT	CKAB OR SY	LE 'STEM		
	REV	DESCRIPTION	MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION								
DOCUMENT NO.						FILE	NAME	SHEET			
PS - 70400									14		
BORDER TEMPLATE: ES-40000-3996			REV. A	SHEET 3	95/MAR/10	EC U5	-0926	DCBRDC	3.LWP		

	13	12	П	10	9	8	7	6		70450	4	3	2		I	
											CKT. SIZE	EDP. NO.	ENG. NO.	DIM "A" REF.	DIM "B" MAX.REF.	
											4	022-55-2042	70450-0050	(2.54)	<u>(5.05)</u> .199	] .
J	NOTES:								6	022-55-2062	70450-0051	.200	.299	J		
	I. MATERIAL: G.F. POLYESTER									8	022-55-2082	70450-0052	<u>(7.62)</u> .300	(10.13) .399		
		<u>C</u>	<u>DPTION "B"</u>				G TO BE U AND 71851.	SED WITH TERMINAL NO	OS.70	0028,	10	022-55-2102	70450-0053	<u>(10.16)</u> .400	<u>(12.67)</u> .499	
								SED WITH (0.64)/.025	SQUAF	RE OR	12	022-55-2122	70450-0054	(12.70) .500	(15.21)	Ι.
I			D .			ROUND				70050	14	022-55-2142	70450-0055	(15.24) .600	<u>(17.75)</u> 699	
			MAX. REF.			4. REFER 5. PACKAG		PRODUCT SPECIFICATIO 70450-100.	UN PS	5-10030.	16	022-55-2162	70450-0056	(17.78) .700	(20.29) .799	
			REF. →								18	022-55-2182	70450-0057	(20.32) .800	(22.83) .899	
				v							20	022-55-2202	70450-0058	(22.86) .900	(25.37) .999	]
н				(5.05) .199 MAX.F	PEE						22	022-55-2222	70450-0059	(25.40) 1.000	(27.91) 1.099	- н
				.199							24	022-55-2242	70450-0060	(27.94) 1.100	(30.45) 1.199	
		_		A I							26	022-55-2262	70450-0061	(30.48) 1.200	(32.99) 1.299	
											28	022-55-2282	70450-0062	( <u>33.02)</u> 1.300	( <u>35.53)</u> 1.399	
G		(2.54									30	022-55-2302	70450-0063	(35.56) 1.400	(38.07) 1.499	G
		REF.									32	022-55-2322	70450-0064	(38.10)	(40.6 I) 1.599	
				0//T #   ID		(3.05)					34	022-55-2342	70450-0065	(40.64) 1.600	(43.15) 1.699	
_			С	CKT #IID		(3.05) .120 REF	•				36	022-55-2362	70450-0066	(43.18)	(45.69) 1.799	1_
F		_	<u> </u>	/							38	022-55-2382	70450-0067	(45.72) 1.800	( <u>48.23)</u> 1.899	F
			Inli M		(3.8 I) .150 REF.		<b>A</b>				40	022-55-2402	70450-0068	(48.26) 1.900	(50.77) 1.999	
					.150						42	022-55-2422	70450-0069	(50.80) 2.000	<u>(53.31)</u> 2.099	
							5.24) <sub>DEE</sub>				44	022-55-2442	70450-0070	(53.34) 2.100	(55.85) 2.199	
Е							5.24) 600 REF.				46	022-55-2462	70450-0071	(55.88) 2.200	(58.39) 2.299	704
			 - ×								48	022-55-2482	70450-0072	(58.42) 2.300	(60.93) 2.399	0
											50	022-55-2502	70450-0073	(60.96) 2.400	<u>(63.47)</u> 2.499	
		-	<b>←</b> _C		CE/						52	NOT TOOLED	70450-0074	(63.50) 2.500	<u>(66.01)</u> 2.599	
D			C		SEC	CTION C-C					54	NOT TOOLED	70450-0075	(66.04) 2.600	<u>(68.55)</u> 2.699	D
														2.000	2.033	
С																С
			$      \Delta$													
																_
В				- CKT #IID 4 CKT ONLY										ſ	MFG. SH. REV.	В
			- 1	- UNI UNLI		ADD P	KG NOTE	REVISED CKT #1 FOR 4 CKT ONLY	PE	REVISED ER ECR # UØØ293	DIMENSIONS SHOWN ON UNLESS OTHERWISE TOLERANCES: ANGULA		▼ = 0 REVI		CAD SYSTEM	1
						SCHAFEF	2000-0468 99/12/1 ED PER	G PER ECR = U31621 D 01/06/94 REED ADDED CKT = 1 ID	07/	/13/90 MGB/DJK ADDED NOTE 4		METRIC	HOUSING - ( Al ROW (2.5			
						ECN UDT	1999-0722 99/03/09	FOR 4 CKT ONLY F PER ECR #U30676 C 05/04/93 BRINKMAN	2   PE	ER ECR # 10059 /01/87 MJM/JAS	2 PLACE ± .000	± 0.15 W	ITH POLARI	7 A TION	KFY I	4
Α						GI ECR #UB	a261	ADDED CKT #IID PER ECR # 1121702	R	REDRAWN ON CAD PER ECR # 9296	DRAFT WHERE APPLIC REMAIN WITHIN DIM		DRWG, NO			<b>A</b>
						GI ECR #UB MCGRATH	97/07/24	E II/20/92 RB E	10		DRWG. MJM CHK'D. BY APP'D. WAZ SCALE	MJM FILE NAME 4:   S70450X2	CHART SD-	-70450-00		1
	13	12	11	10	9	8	7	6		5	<sub>ву</sub> - waz   4	3	2			-
/		_		-	-	-		-				-				$\backslash$