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ELECTRONICS

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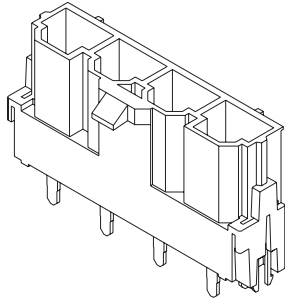
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Jameco Part Number 1299964

# 10.00mm (.393") Pitch Mini-Fit Sr.™ Header

**42819**

**Vertical, Single Row  
Metal Clip Mount**



### Features and Benefits

- High current
- Fully polarized
- Positive locks
- Low engagement force
- Wire-to-board
- Metal board retention clip

### Reference Information

Product Specification: PS-42815-0001  
 Packaging: Tray  
 UL File No.: E29179  
 CSA File No.: LR19980  
 TUV License No.: R9751144  
 Mates With: 42816 receptacle housing  
 Designed In: Millimeters

### Electrical

Voltage: 600V  
 Current: 48.0A max.\*  
 Contact Resistance: 1.5 milliohms max.  
 Dielectric Withstanding Voltage: 2200V  
 Insulation Resistance: 1000 Megohms min.

### Mechanical

Insertion Force to PCB: 19.6N max.  
 Normal Force: 1.96N min.  
 Durability: Tin—30 cycles; Gold—100 cycles

### Physical

Housing: Glass-filled, 4/6 nylon, UL 94V-0  
 Contact: Copper Alloy  
 Plating: Tin or Select Gold  
 Operating Temperature: -40 to +105°C  
 PCB Thickness: 1.57, 2.36, 3.17, or 6.35mm  
 (.062, .093, .125, or .250")

\* Depending on circuit size, wire gauge and PCB. Please refer to product specification.

Circuits	Order No.		PCB Thickness	Retention Clip Length	PC Tail Length	Lead-free
	Tin*	Select Gold				
2	<a href="#">42819-2212</a>	<a href="#">42819-2213</a>	1.57 (.062)	1.80 (.070)	3.50 (.137)	Yes
	<a href="#">42819-2222</a>	<a href="#">42819-2223</a>	2.36 (.093)	2.60 (.102)	5.10 (.200)	
	<a href="#">42819-2232</a>	<a href="#">42819-2233</a>	3.18 (.125)	3.40 (.133)	8.30 (.327)	
	<a href="#">42819-2242</a>	<a href="#">42819-2243</a>	6.35 (.250)	6.58 (.259)	3.50 (.137)	
3	<a href="#">42819-3212</a>	<a href="#">42819-3213</a>	1.57 (.062)	1.80 (.070)	3.50 (.137)	
	<a href="#">42819-3222</a>	<a href="#">42819-3223</a>	2.36 (.093)	2.60 (.102)	5.10 (.200)	
	<a href="#">42819-3232</a>	<a href="#">42819-3233</a>	3.18 (.125)	3.40 (.133)	8.30 (.327)	
	<a href="#">42819-3242</a>	<a href="#">42819-3243</a>	6.35 (.250)	6.58 (.259)	3.50 (.137)	
4	<a href="#">42819-4212</a>	<a href="#">42819-4213</a>	1.57 (.062)	1.80 (.070)	3.50 (.137)	
	<a href="#">42819-4222</a>	<a href="#">42819-4223</a>	2.36 (.093)	2.60 (.102)	5.10 (.200)	
	<a href="#">42819-4232</a>	<a href="#">42819-4233</a>	3.18 (.125)	3.40 (.133)	8.30 (.327)	
	<a href="#">42819-4242</a>	<a href="#">42819-4243</a>	6.35 (.250)	6.58 (.259)	3.50 (.137)	
5	<a href="#">42819-5212</a>	<a href="#">42819-5213</a>	1.57 (.062)	1.80 (.070)	3.50 (.137)	
	<a href="#">42819-5222</a>	<a href="#">42819-5223</a>	2.36 (.093)	2.60 (.102)	5.10 (.200)	
	<a href="#">42819-5232</a>	<a href="#">42819-5233</a>	3.18 (.125)	3.40 (.133)	8.30 (.327)	
	<a href="#">42819-5242</a>	<a href="#">42819-5243</a>	6.35 (.250)	6.58 (.259)	3.50 (.137)	
6	<a href="#">42819-6212</a>	<a href="#">42819-6213</a>	1.57 (.062)	1.80 (.070)	3.50 (.137)	
	<a href="#">42819-6222</a>	<a href="#">42819-6223</a>	2.36 (.093)	2.60 (.102)	5.10 (.200)	
	<a href="#">42819-6232</a>	<a href="#">42819-6233</a>	3.18 (.125)	3.40 (.133)	8.30 (.327)	
	<a href="#">42819-6242</a>	<a href="#">42819-6243</a>	6.35 (.250)	6.58 (.259)	3.50 (.137)	

\* Select Gold headers recommended. See product specification for additional information.

**E**

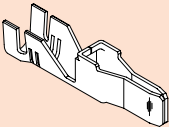
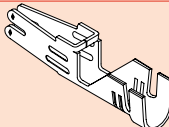
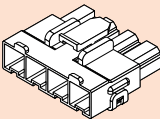
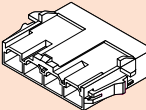
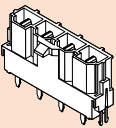
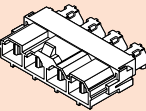
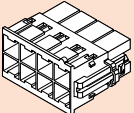
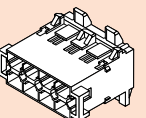
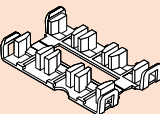
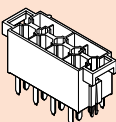
**Power Connectors**

# molex® 10.00mm (.393") Pitch Mini-Fit, Sr.™

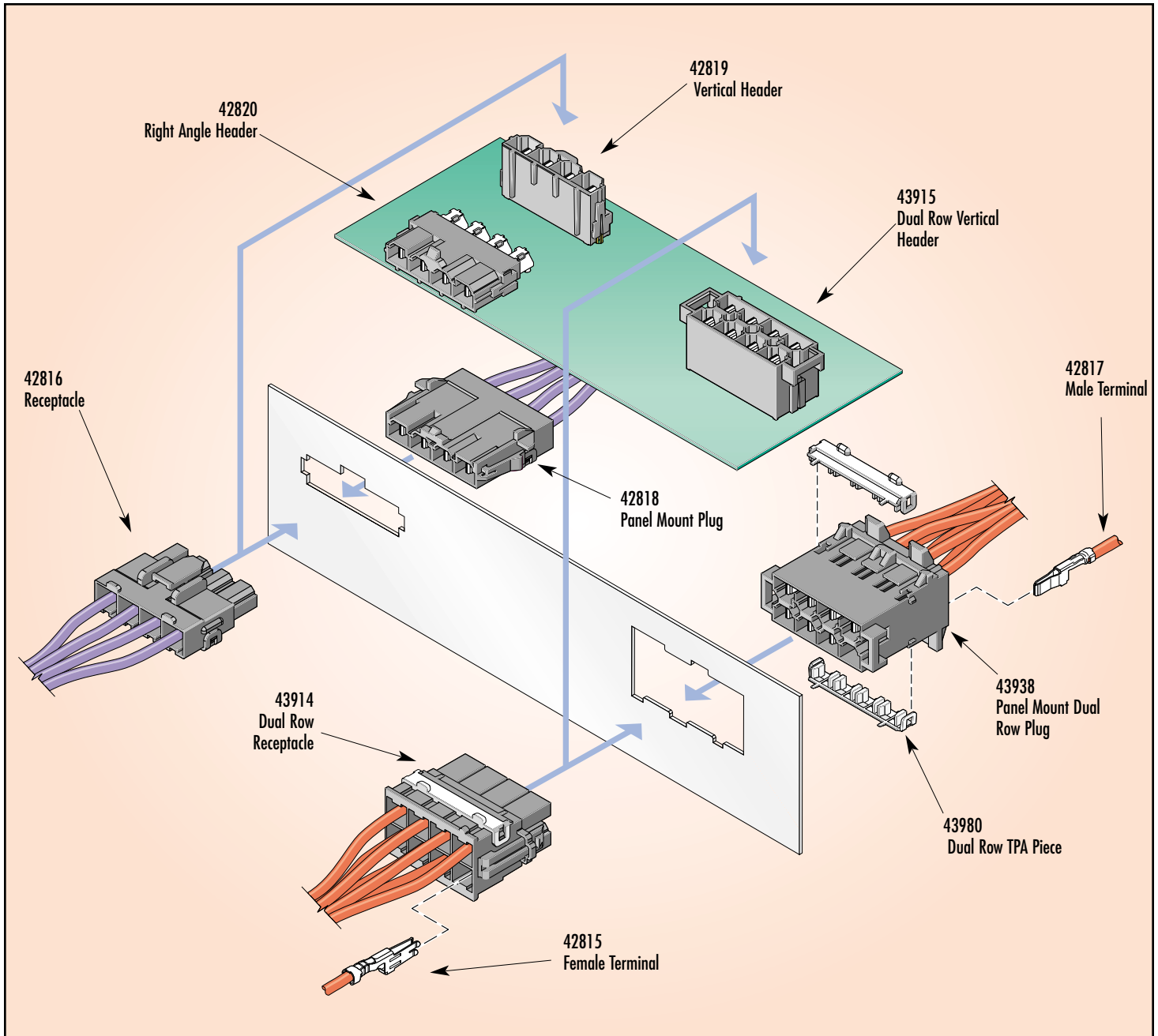
- Wire-to-Wire (Free hanging and panel mount)
- Wire-to-Board
- Mandatory Terminal Position Assurance (TPA) Piece
- Voltage: 600V
- Current: 50.0A Max.\*
- Temperature: -40 to +105°C



10.00mm (.393") Pitch  
Mini-Fit, Sr.™

	Series	Description	Mates With/ Use With	Material	Circuits/ Wire Gauge	Features and Benefits
<b>Terminals</b>						
	42817	Male Terminal	Mates with 42815 Terminal Used in 42818 and 43938 Housings	Tin or Select Gold Plated Copper Alloy	8 to 16 AWG	<ul style="list-style-type: none"> <li>■ Mating Cycles - Tin: 30 / Gold: 100</li> <li>■ Four points of electrical contact provide high reliability</li> <li>■ Low insertion force design for greater ease in mating</li> </ul>
	42815	Female Terminal	Mates with 42817 Terminal and PCB Header Terminal Used in 42816 and 43914 Housings			
<b>Single Row Housings</b>						
	42816	Receptacle Housing	42818, 42819, 42820	Black Polyester, UL 94V-0	2, 3, 4, 5, and 6 Circuits	<ul style="list-style-type: none"> <li>■ TPA (Terminal Position Assurance) piece attached to housing to prevent terminal backouts</li> <li>■ Positive latch guards against accidental disengagement of housings</li> <li>■ Polarized housing assures proper mating</li> <li>■ Used in wire-to-wire and wire-to-board applications</li> </ul>
	42818	Plug Housing	42816			
<b>Single Row PC Board Headers</b>						
	42819	Vertical Header	42816	Housings: Black Glass-filled 4/6 Nylon, UL 94V-0 Terminals: Tin or Select Gold Plated Copper Alloy	2, 3, 4, 5 and 6 Circuits	<ul style="list-style-type: none"> <li>■ SMC (Surface Mount Compatible)</li> <li>■ Metal fork locks for secure retention to PC Board</li> <li>■ Accommodates 1.57, 2.36, 3.18 and 6.35mm (.062, .093, .125 and .250") thick PC Boards</li> </ul>
	42820	Right Angle Header	42816			
<b>Dual Row Housings</b>						
	43914	Receptacle Housing	43938, 43915	Black Polyester, UL 94V-0	6, 8, 10, 12 and 14 Circuits	<ul style="list-style-type: none"> <li>■ Mandatory TPA (Terminal Position Assurance) piece (43980 Series) sold separately</li> <li>■ Positive latch guards against accidental disengagement of housings</li> <li>■ Polarized housing assures proper mating</li> <li>■ Used in wire-to-wire or wire-to-board applications</li> </ul>
	43938	Plug Housing	43914			
<b>Dual Row TPA (Terminal Position Assurance Piece)</b>						
	43980	TPA	Must Use With 43914, 43938	White Polyester, UL 94V-0	6, 8, 10, 12 and 14 Circuits	<ul style="list-style-type: none"> <li>■ Virtually eliminates terminal back out.</li> <li>■ White color for easy activation identification</li> </ul>
<b>Dual Row Vertical PC Board Header</b>						
	43915	Vertical Header	43914	Housing: Black Glass-filled 4/6 Nylon, UL 94V-0 Terminals: Tin or Select Gold Plated Copper Alloy	6, 8, 10, 12 and 14 Circuits	<ul style="list-style-type: none"> <li>■ SMC (Surface Mount Compatible)</li> <li>■ Metal fork locks for secure retention to PC Board</li> <li>■ Accommodates 1.57, 2.36, 3.18 and 6.35mm (.062, .093, .125 and .250") Thick PC Boards</li> </ul>

\*Maximum current is dependent on wire gauge and circuit size. See Mini-Fit, Sr. product specification PS-42815-001.



**APPLICATION EXAMPLES**

- Servers
- Workstations
- UPS Systems
- Telecommunications
- Welders
- High Current Applications
- Generators
- Networking Equipment
- Factory Automation Equipment
- HVAC
- Power Supplies
- Power Transmission

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# PRODUCT SPECIFICATION

## MINI-FIT SR. SERIES

### 1.0 SCOPE

This specification covers the 10.00 mm / (.394 in.) centerline tin and gold plated connector series, single and dual row versions in wire to wire and wire to printed circuit board applications. This product performance is optimized for stranded tinned wire termination.

### 2.0 PRODUCT DESCRIPTION

#### 2.1 PRODUCT NAME AND PART NUMBER

<u>Product Name</u>	<u>Part Number</u>
Female Terminal	42815-****
Male Terminal	42817-****
Receptacle (single row)	42816-****
Plug (single row)	42818-****
Vertical Header (single row)	42819-****
Right Angle Header (single row)	42820-****
Receptacle (dual row)	43914-****
TPA (dual row)	43980-****
Vertical Header (dual row)	43915-****
Panel Mount Plug (dual row)	43938-****

#### 2.2 DIMENSIONS, MATERIALS PLATINGS & MARKINGS.

See the appropriate sales drawings for the information on dimensions, materials, platings and markings.

### 3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS

See sales drawings and the other sections of this specification for the necessary referenced documents and specifications.

#### 3.1 Agency Approvals

UL File #E29179  
CSA Certificate #LR 19980-555  
TUV Certificate #R 9751144, #R 9950481

### 4.0 RATINGS

#### 4.1 VOLTAGE RATINGS

IEC 950            250 Volts AC (RMS) / DC  
UL / CSA         600 Volts AC (RMS) / DC  
TUV                250 Volts AC

REVISION: <b>16</b>	<u>ECR/ECN INFORMATION:</u> EC No: <b>UCP2007-0850</b> DATE: <b>2006 / 10 / 05</b>	TITLE: <b>PRODUCT SPECIFICATION FOR MINI-FIT SR. CONNECTOR SYSTEM</b>	SHEET No. <b>1 of 8</b>
DOCUMENT NUMBER: <b>PS-42815-001</b>	CREATED / REVISED BY: <b>M. CARRANZA</b>	CHECKED BY: <b>J. COMERCI</b>	APPROVED BY: <b>J. COMERCI</b>



# PRODUCT SPECIFICATION

## 4.2 CURRENT RATINGS

Rating is established based on MIL-W-5088 max. current capacity guidelines for copper conductors and test data summary TS-42815-001 section 5.3.7. Test data is based on 30 deg. C temperature rise using tin-plated terminals and UL 1015 tin stranded wire.

Single Row Product (tested to 30degC max. rise)

	2ckt. W to W	2ckt. W to PCB**	6ckt W to W	6ckt. W to PCB**
16 AWG	13A	13A	13A	13A
14 AWG	17A	17A	17A	17A
12 AWG	23A	23A	23A	23A
10 AWG	33A	33A	33A	33A
8 AWG	50A	48A	45A	37A
12AWG Double Crimp	40A (20A per wire)	40A (20A per wire)		

Note: CSA ratings are as follows; 12AWG = 23A max., 10AWG = 30A max.

TUV ratings are as follows; 12AWG = 23A max., 10AWG = 33A max.

\*\*PCB trace design may greatly effect temperature rise results.

Dual Row Product (tested to 30degC max. rise)

	6ckt. W to W	6ckt. W to PCB**	14ckt W to W	14ckt. W to PCB**
16 AWG	13A	13A	13A	12A
14 AWG	17A	17A	17A	16A
12 AWG	23A	23A	23A	22A
10 AWG	32A	31A	29A	28A
8 AWG	43A	37A	38A	36A

\*\*PCB trace design may greatly affect temperature rise results.

## 4.3 TEMPERATURES

Operating: -40 Degrees C to +105 Degrees C

Non-operating: -40 Degrees C to +105 Degrees C

(Including 30 degrees C terminal temperature at full current)

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# PRODUCT SPECIFICATION

## 5.0 PERFORMANCE

### 5.1 ELECTRICAL PERFORMANCE

Section	Item	Test Condition	Requirement
5.1.1	Initial Contact Resistance (low level)	Mate connectors, measure by dry circuit, 20mV max., 100mA. Wire resistance shall be removed from the measured value.	1.5 mOhm max. (tin) 1.0 mOhm max. (gold)
5.1.2	Insulation Resistance	Mate connectors, apply 500V DC between adjacent terminal or ground.	1000 M Ohm min.
5.1.3	Dielectric Strength	Mate connectors, apply 2200V AC for 1 minute between adjacent terminal or ground.	No breakdown
5.1.4	Contact Resistance (rated)	Measure contact resistance at rated current.	1.5 mOhm max. (tin) 1.0 mOhm max. (gold)
5.1.5	Contact Resistance on Crimp	Crimp the wire to the terminal, measure crimp resistance by dry circuit, 20mV max., 100mA	1.0 mOhm max.

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# PRODUCT SPECIFICATION

## 5.2 MECHANICAL PERFORMANCE

Section	Item	Test Condition	Requirement
5.2.1	Contact Insertion and Withdrawal	Insert and withdraw a contact at a speed rate of 25 +/- 6mm / minute	Max. Insertion = 3Kg Min. Withdrawal = 0.5Kg
5.2.2	Connector Insertion and Withdrawal	Insert and withdraw a connector at a rate of 25 +/- 6mm / minute	Max. Insertion = 3.0Kg/ckt. Min. Withdrawal = 0.5Kg/ckt.
5.2.3	Terminal Insertion Force	Insert the crimped terminal into the housing.	Max. Insertion = 7.0Kg
5.2.4	Crimp Terminal Retention Force	Apply axial pull out force at a speed rate of 25 +/- 6mm / minute on the terminal assembled in the housing and with the TPA cover installed.	Min. Retention = 10Kg
5.2.5	Header Terminal Retention Force	Apply axial pull out force at a speed rate of 25 +/- 6mm / minute on the terminal assembled in the housing.	Min. Retention = 2.0Kg
5.2.6	Wire Pull Out Force	Mount the crimped terminal, apply an axial pull out force on the wire at a speed rate of 25 +/- 6mm / minute.	16AWG = 14Kg 14AWG = 23Kg 12AWG = 31Kg 10AWG = 36Kg 8AWG = 40Kg
5.2.7	Normal Force	Apply a perpendicular force at a speed rate of 25 +/- 6mm / minute.	200 g min.
5.2.8	PCB Insertion and Withdrawal Force	Apply force perpendicular to the housing at a speed rate of 25 +/- 6mm minute as shown.	Insertion = 2Kg max. Withdrawal = 1Kg min.
5.2.9	Panel Insertion & Withdrawal	Insert and withdraw a connector at a speed rate of 25 +/- 6mm / minute	Insertion = 5Kg max. Withdrawal = 10Kg min.

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<b>PS-42815-001</b>	<b>M. CARRANZA</b>	<b>J. COMERCI</b>	<b>J. COMERCI</b>





# PRODUCT SPECIFICATION

## 5.2 MECHANICAL PERFORMANCE (continued)

Section	Item	Test Condition	Requirement
5.2.10	Latch Yield Strength (only 43914 receptacle w/ 43938 plug)	Insert and withdraw connector housings (30 times) and pull apart at a speed rate of 25 +/- 6mm / minute	Yield = 7.0Kg min.
5.2.10A	Latch Yield Strength (all other)	Insert and withdraw connector housings (30 times) and pull apart at a speed rate of 25 +/- 6mm / minute	Yield = 10.0Kg min.
5.2.11	Durability (tin)	Insert and withdraw connectors (30 times) at a maximum rate of 10 cycles per minute prior to environmental tests.	Contact Res. change = 1.0mOhm max.
5.2.11A	Durability (gold)	Insert and withdraw connectors (100 times) at a maximum rate of 10 cycles per minute prior to environmental tests.	Contact Res. change = 1.0mOhm max.
5.2.12	Vibration without lubrication (tin) <b>Not Recommended</b>	(30 times) at a maximum rate of 10 cycles per minute prior to environmental tests.	Contact Res change =. 4.0mOhm max Discontinuity not greater than 1 microsecond
5.2.12A	Vibration with lubrication (tin) (Nyogel 760G)	Amplitude: 1.50 mm peak to peak Sweep: 10-50-10 Hz in one minute Duration: 2 hours in each X-Y-Z axis.	Contact Res change =. 1.0mOhm max Discontinuity not greater than 1 microsecond
5.2.12B	Vibration without lubrication (gold)	Amplitude: 1.50 mm peak to peak Sweep: 10-55-10 Hz in one minute Duration: 2 hours in each X-Y-Z axis.	Contact Res change =. 1.0mOhm max Discontinuity not greater than 1 microsecond
5.2.13	Mechanical Shock	Sweep: 10-50-10 Hz in one minute Duration: 2 hours in each X-Y-Z axis.	Contact Res. change = 1.0mOhm max. Discontinuity not greater than 1 microsecond

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# PRODUCT SPECIFICATION

## 5.3 ENVIRONMENTAL PERFORMANCE

Section	Item	Test Condition	Requirement
5.3.1	Cold Resistance	-40 +/- 3 degrees C for 96 hrs.	Appearance: No damage Contact Res. change = 1.0mOhm max.
5.3.2	Thermal Shock	Mate connectors, expose to 25 cycles of: -40 +0/-3 deg. C for 30 minutes +25 +/- 10 deg. C for 5 minutes max. +105 +3/-0 deg. C for 30 minutes +25 +/- 10 deg. C for 5 minutes max.	Appearance: No damage Contact Res. change = 1.0mOhm max.
5.3.3	Thermal Aging	Mate connectors, expose to 240 hours at 105 +/- 2 deg. C	Appearance: No damage Contact Res. change = 1.0mOhm max
5.3.4	Humidity (Steady State)	Mate connectors, expose to a temperature of 40 +/- 2 deg. C with a relative humidity of 90% to 95% for 96 hours.	Appearance: No damage Contact Res. change = 1.0mOhm max Dielectric withstanding voltage: No breakdown Insul. res: 1000M Ohm min.
5.3.5	Humidity (cyclic) without lubrication <b>Not Recommended</b>	Mate connectors, expose to 25 cycles at 90% to 95% relative humidity with a transition time of 2.5 hrs. between extremes. +25 +/- 10 deg. C for 5 minutes max. +65 +3/-0 deg. C for 30 minutes	Appearance: No damage Contact Res. change = 2.0mOhm max Dielectric withstanding voltage: No breakdown Insul. res: 1000M Ohm min.

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# PRODUCT SPECIFICATION

## 5.3 ENVIRONMENTAL PERFORMANCE (cont.)

Section	Item	Test Condition	Requirement
5.3.6	Immunity to Fretting Corrosion without lubrication. (tin) <b>Not Recommended</b>	Mate connectors, expose to 500 cycles with a max. transition time of 5 minutes between extremes. +25 +/- 10 deg. C for 30 minutes +70 +3/-0 deg. C for 30 minutes	Appearance: No damage  Contact Res. change = 4.0mOhm max
5.3.6A	Immunity to Fretting Corrosion with lubrication. (tin) (Nyogel 760G)	Mate connectors, expose to 500 cycles with a max. transition time of 5 minutes between extremes. +25 +/- 10 deg. C for 30 minutes +70 +3/-0 deg. C for 30 minutes	Appearance: No damage  Contact Res. change = 1.0mOhm max
5.3.7	Temp. Rise & Current Cycling	Mate the connectors and measure the temperature rise at the rated current for 96 hrs., 45 minutes ON and 15 minutes OFF for 240 hrs., and an additional 96 hrs. of steady-state current.	Max. Temp. Rise = 30deg. C Per EIA 364 and CSA requirement
5.3.8	Solderability**	Solder time: 3 +/- 5 seconds Solder temp.: 260 +/- 5 deg. C	95% of the immersed area must show no voids or pin holes.
5.3.9	IR Process Resistance	245 +/- 3 deg. C for 4 minutes, allow to cool to room temperature, repeat for 3 cycles. <i>(To deter blistering of housing, parts should be baked for a minimum of 24 hours at 125 +5/-0 deg. C)</i>	Appearance: No damage  Dimensional: Conformance to sales drawing requirements.
5.3.10	Resistance to Solder**	Solder time: 3 +/- 0.5 seconds Solder temp.: 260 +/- deg. C	Appearance: No damage

\*\*NOTE : This product is compatible with lead-free hand soldering temperatures.

REVISION: <b>16</b>	ECR/ECN INFORMATION: EC No: <b>UCP2007-0850</b> DATE: <b>2006 / 10 / 05</b>	TITLE: <b>PRODUCT SPECIFICATION FOR MINI-FIT SR. CONNECTOR SYSTEM</b>	SHEET No. <b>7 of 8</b>
DOCUMENT NUMBER: <b>PS-42815-001</b>	CREATED / REVISED BY: <b>M. CARRANZA</b>	CHECKED BY: <b>J. COMERCI</b>	APPROVED BY: <b>J. COMERCI</b>



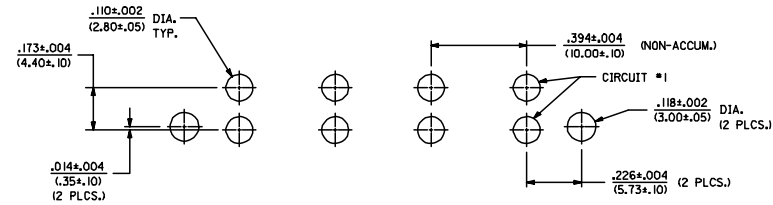
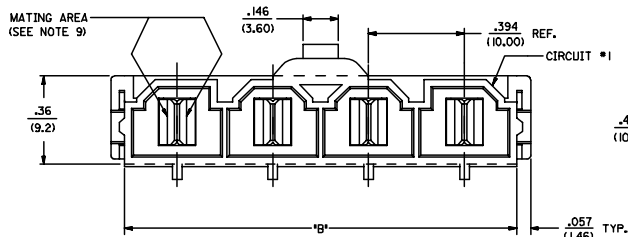
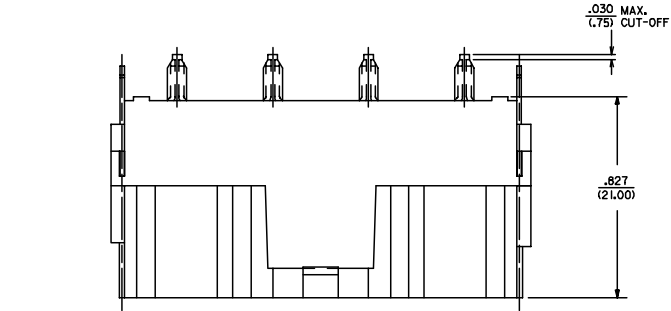
# PRODUCT SPECIFICATION

## 5.3 ENVIRONMENTAL PERFORMANCE (cont.)

Section	Item	Test Condition	Requirement
5.3.11	Resistance to Solvents	Solvent: flourinert FC-70 (3M Corp.) Solvent temp: Boiling temp. Immersion time: 120 +/- 5 seconds  Solvent: Alpha 1003 (Alpha Metal) Solvent: Isopropyl Alcohol Solvent Temp.: Boiling temp. Immersion time: 240 +/- 5 seconds  Repeat in solvent 5 times. Rinse with deionized water between cycles.	Appearance: No damage

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DOCUMENT NUMBER: <b>PS-42815-001</b>	CREATED / REVISED BY: <b>M. CARRANZA</b>	CHECKED BY: <b>J. COMERCI</b>	APPROVED BY: <b>J. COMERCI</b>

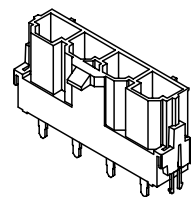
ITEM NUMBER	CKT. SIZE	DIM. 'A'	DIM. 'B'	DIM. 'C'	TERMINAL PLATING
42819-2212	2	.138/(3.50)	.823/(20.90)	.071/(1.80)	OVERALL TIN
42819-2222	2	.201/(5.10)	.823/(20.90)	.102/(2.60)	
42819-2229	2	.201/(5.10)	.823/(20.90)	.102/(2.60)	
42819-2232	2	.201/(5.10)	.823/(20.90)	.134/(3.40)	
42819-2242	2	.327/(8.30)	.823/(20.90)	.259/(6.58)	
42819-3212	3	.138/(3.50)	1.216/(30.90)	.071/(1.80)	
42819-3222	3	.201/(5.10)	1.216/(30.90)	.102/(2.60)	
42819-3232	3	.201/(5.10)	1.216/(30.90)	.134/(3.40)	
42819-3242	3	.327/(8.30)	1.216/(30.90)	.259/(6.58)	
42819-4212	4	.138/(3.50)	1.610/(40.90)	.071/(1.80)	
42819-4222	4	.201/(5.10)	1.610/(40.90)	.102/(2.60)	
42819-4232	4	.201/(5.10)	1.610/(40.90)	.134/(3.40)	
42819-4242	4	.327/(8.30)	1.610/(40.90)	.259/(6.58)	
42819-5212	5	.138/(3.50)	2.004/(50.90)	.071/(1.80)	
42819-5222	5	.201/(5.10)	2.004/(50.90)	.102/(2.60)	
42819-5232	5	.201/(5.10)	2.004/(50.90)	.134/(3.40)	
42819-5242	5	.327/(8.30)	2.004/(50.90)	.259/(6.58)	
42819-6212	6	.138/(3.50)	2.398/(60.90)	.071/(1.80)	
42819-6222	6	.201/(5.10)	2.398/(60.90)	.102/(2.60)	
42819-6232	6	.201/(5.10)	2.398/(60.90)	.134/(3.40)	
42819-6242	6	.327/(8.30)	2.398/(60.90)	.259/(6.58)	
42819-2213	2	.138/(3.50)	.823/(20.90)	.071/(1.80)	SELECT GOLD
42819-2223	2	.201/(5.10)	.823/(20.90)	.102/(2.60)	
42819-2233	2	.201/(5.10)	.823/(20.90)	.134/(3.40)	
42819-2243	2	.327/(8.30)	.823/(20.90)	.259/(6.58)	
42819-3213	3	.138/(3.50)	1.216/(30.90)	.071/(1.80)	
42819-3223	3	.201/(5.10)	1.216/(30.90)	.102/(2.60)	
42819-3233	3	.201/(5.10)	1.216/(30.90)	.134/(3.40)	
42819-3243	3	.327/(8.30)	1.216/(30.90)	.259/(6.58)	
42819-4213	4	.138/(3.50)	1.610/(40.90)	.071/(1.80)	
42819-4223	4	.201/(5.10)	1.610/(40.90)	.102/(2.60)	
42819-4233	4	.201/(5.10)	1.610/(40.90)	.134/(3.40)	
42819-4243	4	.327/(8.30)	1.610/(40.90)	.259/(6.58)	
42819-5213	5	.138/(3.50)	2.004/(50.90)	.071/(1.80)	
42819-5223	5	.201/(5.10)	2.004/(50.90)	.102/(2.60)	
42819-5233	5	.201/(5.10)	2.004/(50.90)	.134/(3.40)	
42819-5243	5	.327/(8.30)	2.004/(50.90)	.259/(6.58)	
42819-6213	6	.138/(3.50)	2.398/(60.90)	.071/(1.80)	
42819-6223	6	.201/(5.10)	2.398/(60.90)	.102/(2.60)	
42819-6233	6	.201/(5.10)	2.398/(60.90)	.134/(3.40)	
42819-6243	6	.327/(8.30)	2.398/(60.90)	.259/(6.58)	



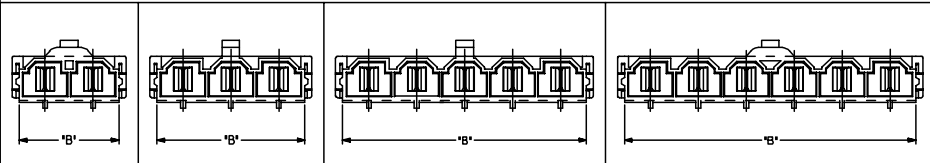
RECOMMENDED P.C. BOARD PLATED-THRU HOLE LAYOUT  
(4 CKT. SHOWN FOR REF.)

- NOTES:**
- HOUSING MATERIAL: 30% GLASS-FILLED NYLON4/6, U.L. 94V-0, COLOR: BLACK.
  - TERMINAL MATERIAL: ALLOY 151.
  - PART MATES WITH MOLEX RECEPTACLE \*42819-\*\*\*2 WITH T.P.A.
  - PART IS DESIGNED IN METRIC.
  - AN 'X' IN FRONT OF THE ITEM NUMBER INDICATES THE PART IS NOT TOOLED.
  - THIS PART MEETS I.E.C. 950 AND U.L. 1950 REQUIREMENTS FOR CREEPAGE AND CLEARANCE AT 600 VAC AND 840 VDC.
  - TERMINAL PLATING + 2 = .000100/(.00254) MIN. \*TIN OVER .000050/(.00127) MIN. NICKEL.  
3 = .000030/(.00076) MIN. SELECT GOLD IN CONTACT AREA. .000100/(.00254) MIN. SELECT \*TIN ON SOLDER TAILS OVER .000050/(.00127) MIN. NICKEL.  
\* THE PRIMARY SHIPPING CARTON WILL BE LABELED COMPLIANT TO ROHS DIRECTIVE 2002/95/EC AND EU ANNEX II OF DIRECTIVE 2000/53/EC. CARTONS WITHOUT THIS LABEL MAY CONTAIN PRODUCT WITH TIN-LEAD.
  - PARTS ARE NOT TO BE MATED OR UNMATED WHILE CIRCUITS ARE LIVE.
  - WHEN USING OVERALL TIN PLATED TERMINALS: FOR APPLICATIONS INVOLVING VIBRATION AND/OR THERMAL CYCLING, MOLEX STRONGLY RECOMMENDS THE USE OF NYE LUBRICANT (NYGOL 760GI) ON THE MATING SURFACES OF THE TERMINAL.

- LEGEND:**
- A-42819 - \* \* \* \* \*
- CIRCUIT SIZE (2-6)
- MOUNTING OPTION  
1 = FLANGES (SEE DWG. SDA-42819-\*\*\*)  
2 = RETENTION CLIP
- P.C. BOARD THICKNESS  
1 = .062/(1.57) NOMINAL  
2 = .093/(2.36) NOMINAL  
3 = .125/(3.18) NOMINAL  
4 = .250/(6.35) NOMINAL
- PLATING  
2 OR 9 = OVERALL TIN OVER NICKEL  
3 = SELECT GOLD IN CONTACT AREA  
SELECT TIN ON SOLDER TAILS OVER NICKEL



HEADER WITH ISO TERMINAL & CLIP  
ISO VIEW



REVISED GEOM. E.C. NO. UCP2006-2520 DRAWN: JOMERCI 2006/05/03 CHECKED: JOMERCI 2006/05/03 APPR: JOMERCI 2006/05/03 E2	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
	$\nabla=0$ $\nabla=0$	4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.25 ± --- 1 PLACE ± 0.40 ± --- ANGULAR ±1/2°	IN/MM DRAWN BY DATE KSM 12/21/95 CHECKED BY DATE SF 12/21/95 APPROVED BY DATE SF 12/21/95	IN/MM TITLE VERTICAL ASSEMBLY MINIFIT SR. SERIES	4:1	METRIC	
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE CHART	MATERIAL NO. SDA-42819-0002	MOLEX INCORPORATED	SHEET NO. 1 OF 1		
	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						