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Jameco Part Number 884774



FEATURES AND SPECIFICATIONS

Features and Benefits

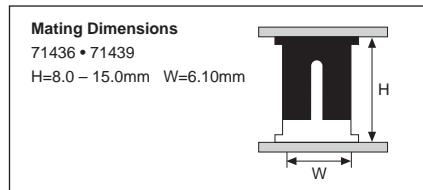
- Mated heights: 8, 9, 10, 11, 12, 13, 14 and 15mm
- Size 64 circuits
- Leaf-style design protects pins
- Antiflux design
- Low insertion force
- High-temperature LCP housing for use with reflow solder processes

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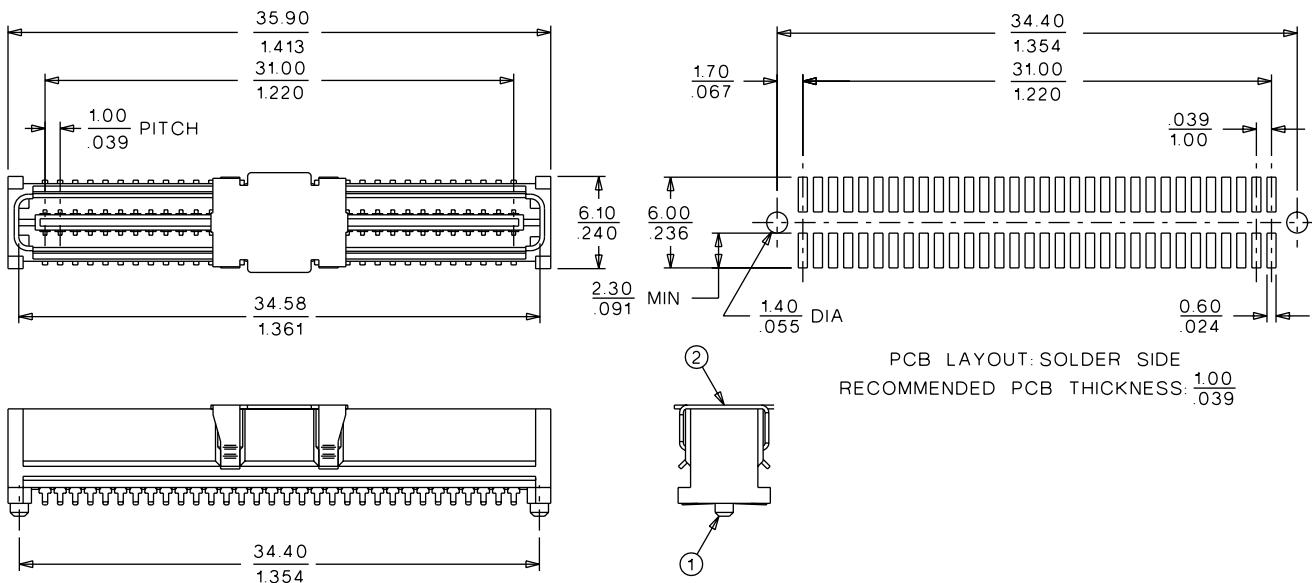
0.40 to 1.60mm (.016 to .063") Pitch

Reference Information

Product Specification: 71436-9999
Packaging: Tube or tape and reel
UL File No.: E29179
Mates With: [71439](#)
Designed In: Millimeters



CATALOG DRAWING (FOR REFERENCE ONLY)



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.					Mated Stack Height*	
	Tube Pack (with PCB Pegs, without Pick and Place Cap)		Tape Pack (without PCB Pegs, with Pick and Place Cap)				
	Plug	Receptacle	Plug	Receptacle			
64	71436-0164	71439-0164	71436-0864	71439-0864	8.00 (.315)	8.00 (.315) 9.00 (.354) 10.00 (.394) 11.00 (.433) 12.00 (.472) 13.00 (.512) 14.00 (.551) 15.00 (.591)	
	71436-1164	71439-0164	71436-1864	71439-0864	9.00 (.354)		
	71436-2164	71439-0164	71436-2864	71439-0864	10.00 (.394)		
	71436-1164	71439-1164	71436-1864	71439-1864	11.00 (.433)		
	71436-2164	71439-1164	71436-2864	71439-1864	12.00 (.472)		
	71436-2164	71439-2164	71436-2864	71439-2864	13.00 (.512)		
	71436-1164	71439-3164	71436-1864	71439-3864	14.00 (.551)		
	71436-2164	71439-3164	71436-2864	71439-3864	15.00 (.591)		

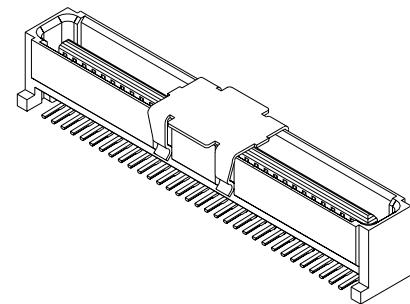
* Recommended Plug/Receptacle combination for mated stack height per EIA standard 700 AAAB. Also per EIA standard, board stack height measured from facing surfaces of parallel circuit boards includes solder thickness of 0.1mm (.004") per side.

Note: Other options available such as PCB pegs in tape pack, and Pick and Place Cap in tube pack

1.00mm (.039") Mezzanine IEEE 1386 Board-to-Board Plug

71436

Dual Row, SMT Vertical Stacking





MOLEX INCORPORATED
LISLE, ILL. 60532 U.S.A.

PRODUCT SPECIFICATION
1.0mm BOARD-TO-BOARD CONNECTORS
PS-71436-9999

1.0 Scope:

This specification covers the 1.0mm pitch board-to-board plug and receptacle connectors.

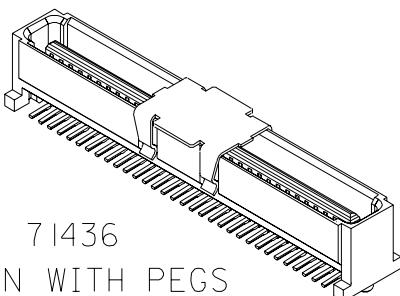
2.0 Product Description:

2.1 The 71436/71741 plug and the 71439/71742 receptacle connectors have been designed in accordance with EIA standard 700 AAAB for 1.0mm two-part connectors for use with parallel printed boards.

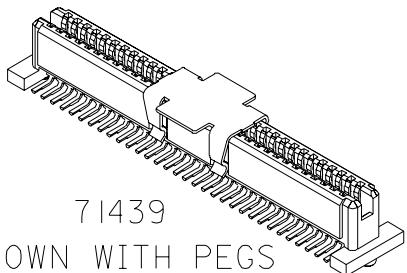
2.1.1 All 1.0mm connectors are available with or without locating pegs.

2.1.2 All 1.0mm connectors can be supplied with a vacuum cap for robotic placement.

2.1.3 71741 plug and 71742 receptacle have passive latches (two on each side) for added retention.



71436
SHOWN WITH PEGS
AND VACUUM CAP



71439
SHOWN WITH PEGS
AND VACUUM CAP

DRWG. NO. PS-71436-9999

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DRWG. NO. PS-71436-9999



MOLEX INCORPORATED
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PRODUCT SPECIFICATION
1.0mm BOARD-TO-BOARD CONNECTORS
PS-71436-9999

2.0 Product Description: (cont'd)

2.2 Product Name and Item Numbers

See figure 1 and table 1.

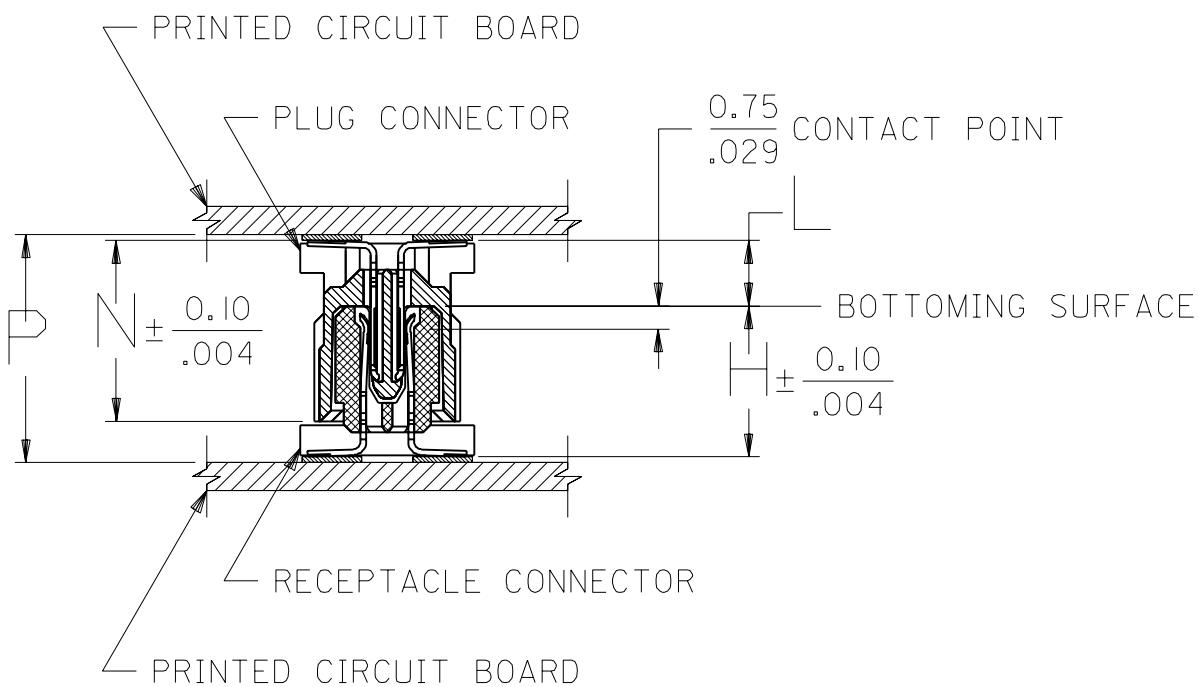


Figure 1

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PS-71436-9999

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MOLEX INCORPORATED
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PRODUCT SPECIFICATION
1.0mm BOARD-TO-BOARD CONNECTORS
PS-71436-9999

2.0 Product Description: (cont'd)

2.2 Product Name and Item Numbers

PLUG CONNECTOR			RECEPTACLE CONNECTOR		STACK HT. DIM. P
ITEM NO.	DIM. N	DIM. L	ITEM NO.	DIM. H	
71436-0***	6.35/.250	2.30/.090	71439-0***	5.30/.209	8.00/.315
71436-1***	7.35/.289	3.30/.130	71439-0***	5.30/.209	9.00/.354
71436-2***	8.35/.329	4.30/.169	71439-0***	5.30/.209	10.00/.394
71741-0001	8.35/.329	4.30/.169	71742-0001	5.30/.209	10.00/.394
71436-1***	7.35/.289	3.30/.130	71439-1***	7.30/.287	11.00/.433
71436-2***	8.35/.329	4.30/.169	71439-1***	7.30/.287	12.00/.472
71436-2***	8.35/.329	4.30/.169	71439-2***	8.30/.327	13.00/.512
71436-1***	7.35/.289	3.30/.130	71439-3***	10.30/.406	14.00/.551
71436-2***	8.35/.329	4.30/.169	71439-3***	10.30/.406	15.00/.591

Table I

2.3 Dimensions, Materials, and Platings:

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

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PS-71436-9999

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MOLEX INCORPORATED
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PRODUCT SPECIFICATION
1.0mm BOARD-TO-BOARD CONNECTORS
PS-71436-9999

3.0 Applicable Documents and Specifications:

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

3.2 Recognized Agency Approvals:

3.2.1 Underwriters Laboratories Inc.: Pending

4.0 Ratings:

4.1 Voltage: 250V r.m.s. (contact to contact)

4.2 Current (30°C temperature rise): 0.5 Ampere maximum, all circuits wired in series; 1.0 Ampere maximum, five adjacent circuits wired in series

4.3 Operating temperature range: -55°C to +85°C

5.0 Performance:

5.1 Electrical

Item	Test Condition	Requirement
Contact Resistance (Low Level)	Mate connectors, measure by dry circuit (20mV max., 10mA max.)	30 milliohms maximum, initial
Contact Resistance (Rated)	Mate connectors, measure contact resistance at rated current	15 milliohms maximum change from initial

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PS-71436-9999

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PS-71436-9999

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PRODUCT SPECIFICATION
1.0mm BOARD-TO-BOARD CONNECTORS
PS-71436-9999

5.0 Performance: (cont'd)

5.1 Electrical

Item	Test Condition	Requirement
Insulation Resistance	Apply 250±50 VDC, measure resistance between adjacent terminals	1000 megohms minimum
Dielectric Withstanding Voltage	Apply 250 VAC for 1 minute between adjacent terminals	No breakdown

5.2 Mechanical

Item	Test Condition	Requirement
Terminal Retention Force	Apply axial force on terminal in housing at rate of 25±6mm (1±1/4in) per minute	3.9N (0.4Kgf) minimum
Mate and Un-mate Forces	Mate and un-mate connectors at rate of 25±6mm (1±1/4in) per minute	Mate Force: 60g X no. of circuits maximum Un-mate Force: 23g X no. of circuits, minimum
Durability	Mate connectors up to 100 cycles at rate of 10mm (0.40in) per second maximum; rest 30 seconds minimum (when unmated)	Maximum contact resistance change: 15 milliohms

DRWG. NO.
PS-71436-9999

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PS-71436-9999

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MOLEX INCORPORATED
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PRODUCT SPECIFICATION
1.0mm BOARD-TO-BOARD CONNECTORS
PS-71436-9999

5.0 Performance: (cont'd)

5.2 Mechanical

Item	Test Condition	Requirement
Vibration	Amplitude: 1.9mm (.076in) peak-to-peak; Sweep: 10-55-10 Hz in one minute; Duration: 2 hours in each axis x, y and z	Maximum contact resistance change: 15 milliohms Discontinuity no greater than one microsecond
Mechanical Shock	490 m/s ² (50 g) peak sawtooth, 11 milliseconds duration; one shock each direction in each axis x, y, and z	Maximum contact resistance change: 15 milliohms Discontinuity no greater than one microsecond

5.3 Environmental

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PRODUCT SPECIFICATION
1.0mm BOARD-TO-BOARD CONNECTORS
PS-71436-9999

5.0 Performance: (cont'd)

5.3 Environmental

Item	Test Condition	Requirement
Thermal Aging	Mated connectors exposed to +85°C for 250 hours	Appearance: No damage Maximum contact resistance change: 15 milliohms
Humidity (Steady State)	Mated connectors exposed to +40±2°C, 90-95%RH, for 240 hours per MIL-STD-202F, Method 103B, Test Condition A	Appearance: No damage Maximum contact resistance change: 15 milliohms
Humidity (Cyclic)	Test mated connectors per MIL-STD-202F, Method 106E, excluding steps 7a and 7b	Appearance: No damage Maximum contact resistance change: 15 milliohms
Temperature Rise and Current Cycling	Measure temperature rise of mated connectors at rated current after 96 hours, then after 45 minutes ON, 15 minutes OFF for 240 hours, and finally after 96 hours at rated current	Maximum temperature rise: 30°C over ambient Maximum contact resistance change: 15 milliohms
Mixed Flowing Gas	Environmental Class II, 7 days unmated	Maximum contact resistance change: 15 milliohms

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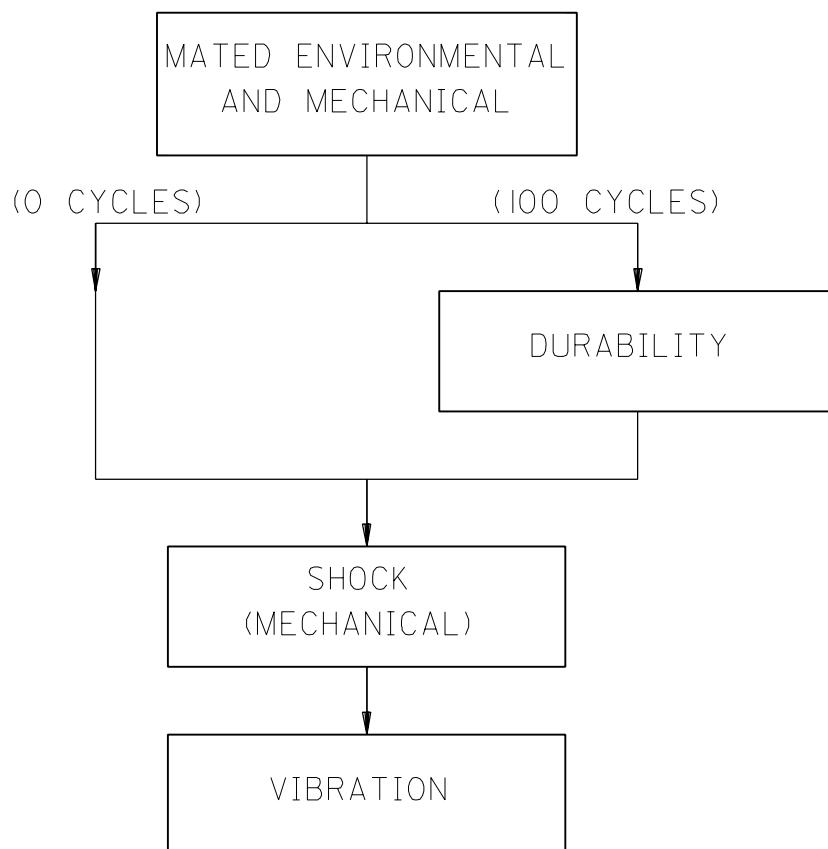
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PRODUCT SPECIFICATION
1.0mm BOARD-TO-BOARD CONNECTORS
PS-71436-9999



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PS-71436-9999

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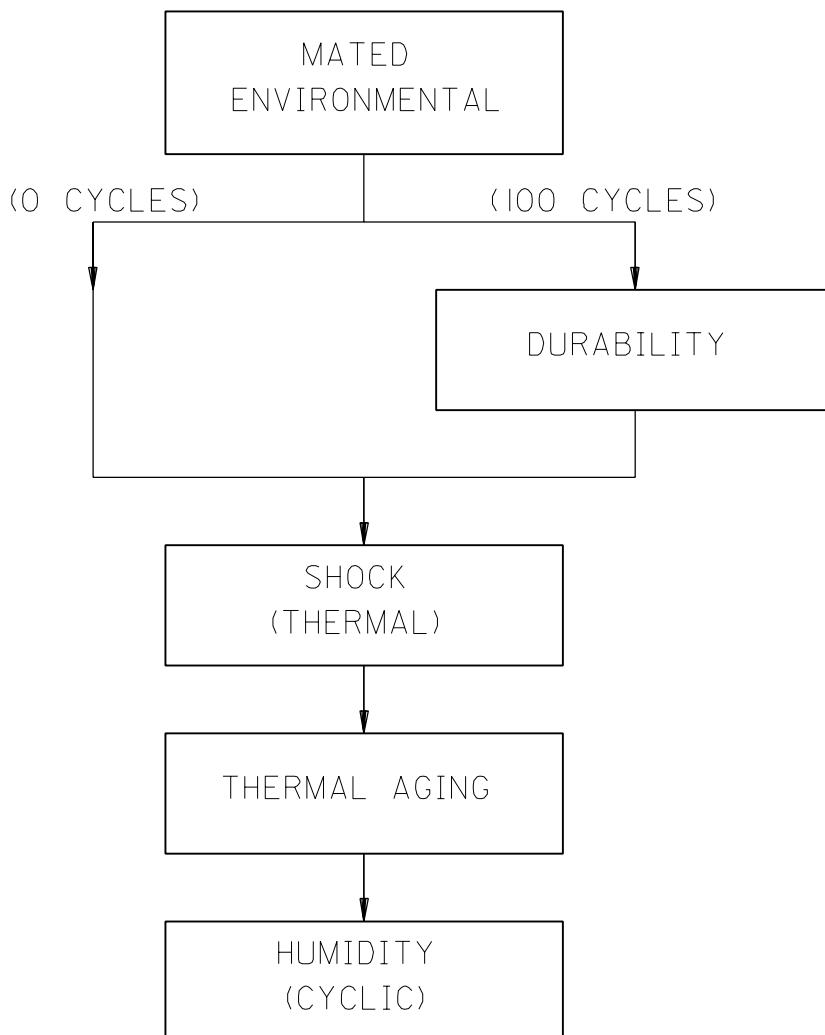
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PRODUCT SPECIFICATION
1.0mm BOARD-TO-BOARD CONNECTORS
PS-71436-9999



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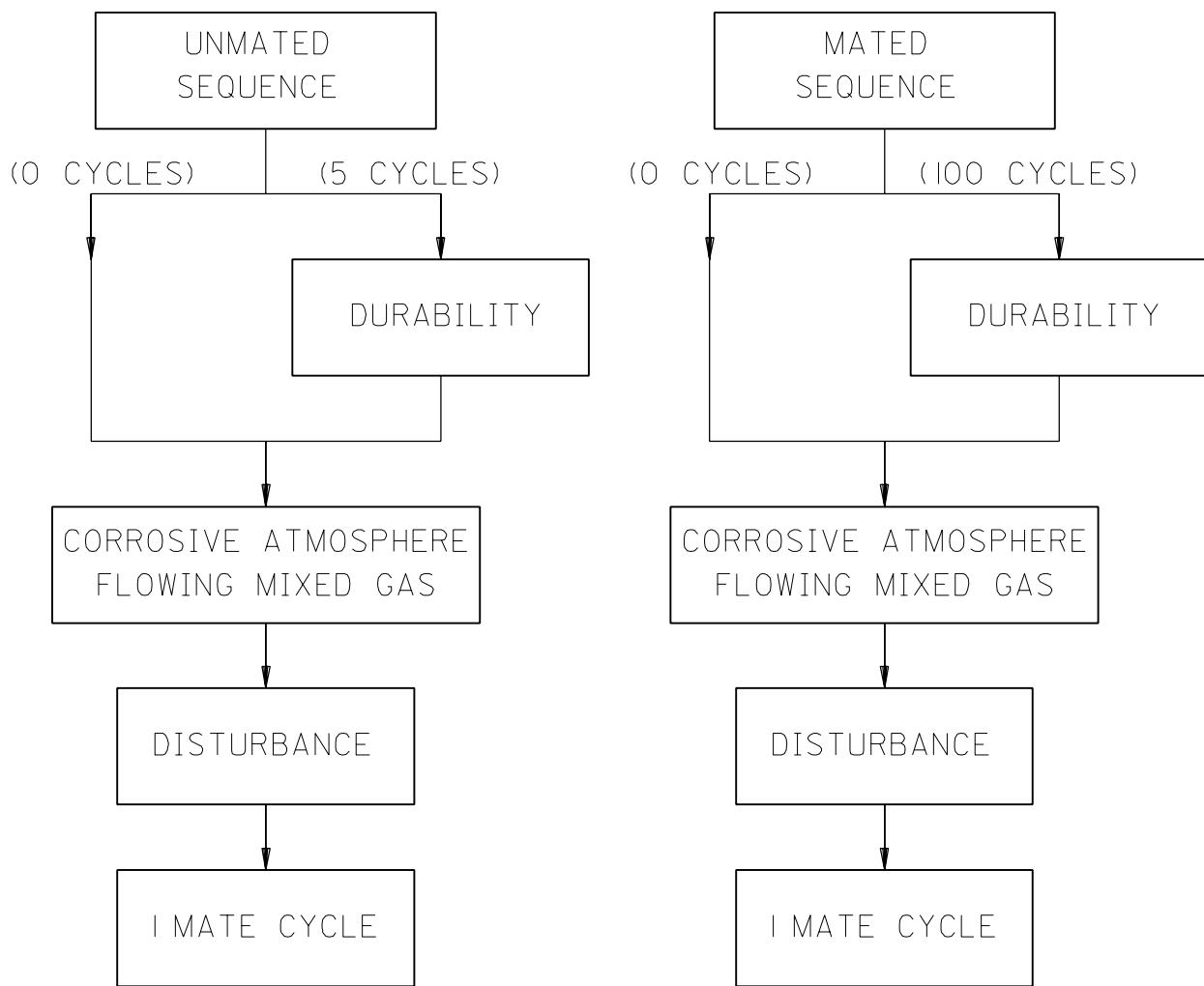
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PRODUCT SPECIFICATION
1.0mm BOARD-TO-BOARD CONNECTORS
PS-71436-9999



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PRODUCT SPECIFICATION
1.0mm BOARD-TO-BOARD CONNECTORS
PS-71436-9999

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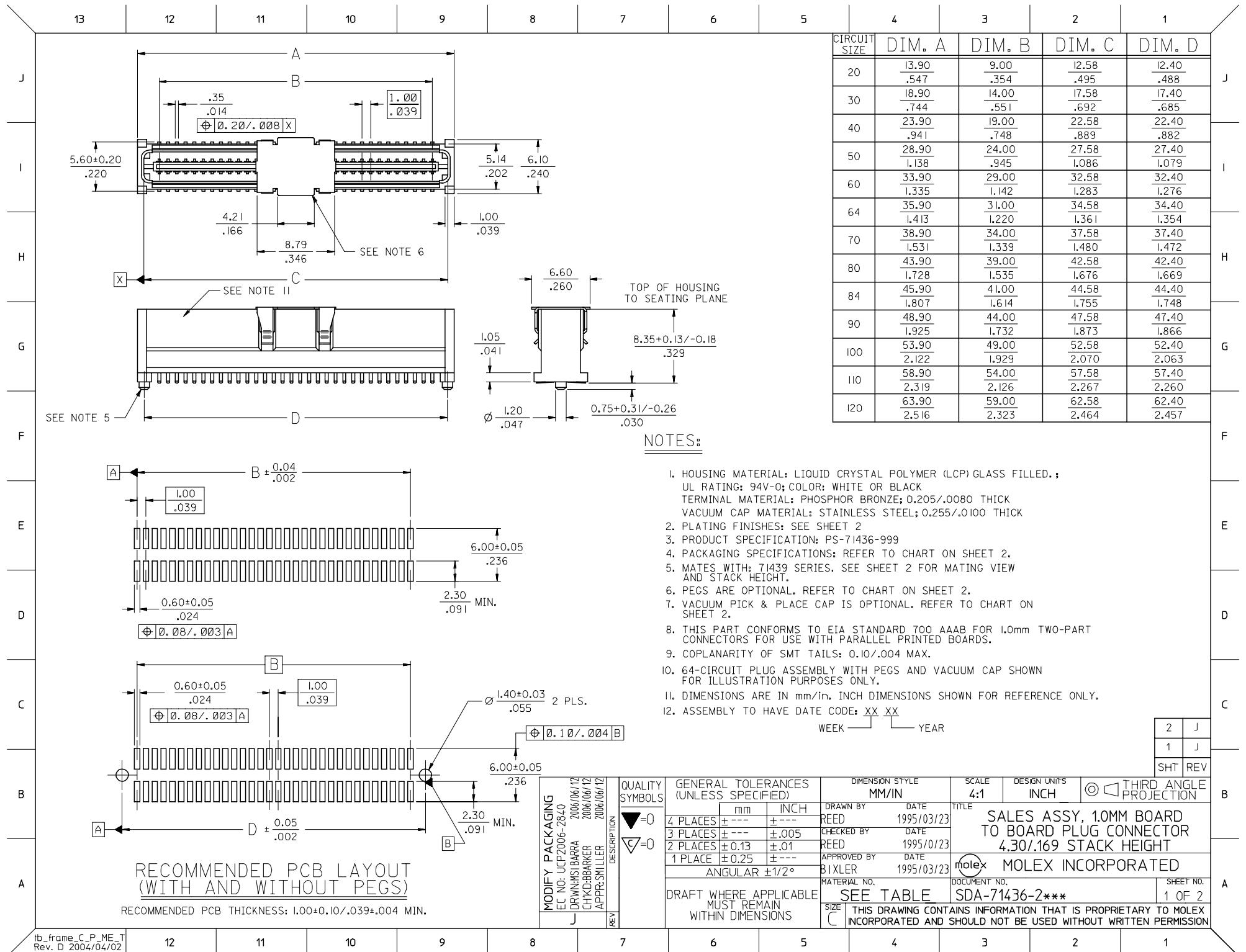
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WHITE (NATURAL) MATERIAL

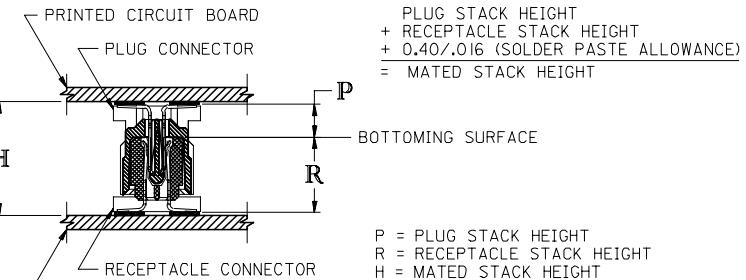
CIRCUIT SIZE	PLUG ASSEMBLY ITEM NUMBER	PEGS	CONTACT PLATING SEE PLATING NOTES	PICK & PLACE CAP	PACKAGING SPEC. NUMBER	PACKAGING TYPE
64	71436-2164	YES	30 GOLD	NO	PK-70873-0607	TUBE
64	71436-2364	YES	30 GOLD	YES	PK-70873-0607	TUBE
64	71436-2464	YES	30 GOLD	YES	PK-70873-063	TAPE & REEL
64	71436-2564	NO	30 GOLD	NO	PK-70873-0606	TUBE
64	71436-2764	NO	30 GOLD	YES	PK-70873-0606	TUBE
64	71436-2864	NO	30 GOLD	YES	PK-70873-063	TAPE & REEL
64	71436-2264	NO	50 GOLD	YES	PK-70873-063	TAPE & REEL

BLACK MATERIAL WITH PICK & PLACE CAP

CIRCUIT SIZE	PLUG ASSEMBLY ITEM NUMBER	PEGS	CONTACT PLATING (SEE NOTES PAGE2)	PICK & PLACE CAP	PACKAGING SPEC. NUMBER	PACKAGING TYPE
64	71436-2964	NO	30 GOLD	YES	PK-70873-063	TAPE & REEL

RECOMMENDED PLUG/RECEPTACLE COMBINATION FOR
MATED STACK HEIGHT PER EIA STANDARD 700 AAAB

MATED STACK HEIGHT	RECEPTACLE HEIGHT	RECEPTACLE SERIES NO.	PLUG HEIGHT	PLUG SERIES NO.
10.00/.394	5.30/.209	71439-0***	4.30/.169	71436-2***
12.00/.472	7.30/.287	71439-1***	4.30/.169	71436-2***
13.00/.512	8.30/.327	71439-2***	4.30/.169	71436-2***
15.00/.591	10.30/.406	71439-3***	4.30/.169	71436-2***



QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DRAWN BY REED 1995/03/23	TITLE SALES ASSY, 1.0MM BOARD TO BOARD PLUG CONNECTOR 4.30/.169 STACK HEIGHT	SCALE --- DESIGN UNITS INCH	THIRD ANGLE PROJECTION
	mm	INCH				
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▽=0	3 PLACES	±---	±---	CHECKED BY DATE		
▽=0	2 PLACES	±---	±---	REED 1995/03/23		
▽=0	1 PLACE	±---	±---	APPROVED BY DATE		
▽=0	ANGULAR $\pm 1/2^\circ$		BIXLER 1995/03/23			
▽=0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		REV. J	MATERIAL NO. SEE TABLE	DOCUMENT NO. SDA-71436-2***	SHEET NO. 2 OF 2
▽=0			REV. J	SIZE C	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	