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Part Number:

71436-0164

Status:

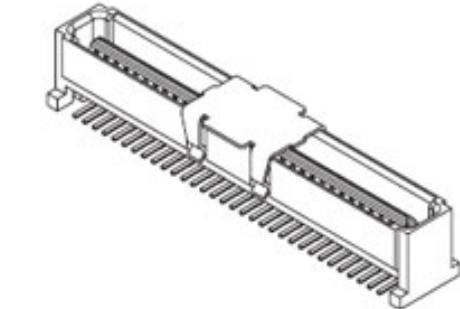
Active

Overview:

PMC

Description:

1.00mm Pitch Mezzanine IEEE 1386 Plug, Surface Mount, Dual Row, Vertical Stacking, 64 Circuits, 6.35mm Unmated Height, with PCB Locator Pegs, without Robotic Placement Metal Cap, Tube Packaging



Series

image - Reference only

Documents:

- [3D Model](#)
- [Drawing \(PDF\)](#)
- [Product Specification PS-71436-9999 \(PDF\)](#)
- [RoHS Certificate of Compliance \(PDF\)](#)

Agency Certification

CSA	LR19980
UL	E29179

General

Product Family	PCB Headers
Series	71436
Application	Board-to-Board, Signal
MolexKits	Yes
Overview	PMC
Product Name	Mezzanine
UPC	800754349819

Physical

Breakaway	No
Circuits (Loaded)	64
Circuits (maximum)	64
Color - Resin	Natural
Flammability	94V-0
Glow-Wire Compliant	No
Lock to Mating Part	None
Mated Height	8.00mm
Material - Metal	Phosphor Bronze
Material - Plating Mating	Gold
Material - Plating Termination	Tin
Material - Resin	High Temperature Thermoplastic
Net Weight	1.163/g
Number of Rows	2
Orientation	Vertical
PCB Locator	Yes
PCB Retention	None
PCB Thickness - Recommended	1.00mm
Packaging Type	Tube
Pitch - Mating Interface	1.00mm
Plating min - Mating	0.762µm
Plating min - Termination	1.905µm
Polarized to Mating Part	No
Shrouded	Fully
Stackable	No
Temperature Range - Operating	-55°C to +85°C
Termination Interface: Style	Surface Mount

Electrical

Current - Maximum per Contact	1A
Voltage - Maximum	100V

EU RoHS

ELV and RoHS

Compliant

REACH SVHC

Contains SVHC: No

Low-Halogen Status

Low-Halogen

China RoHS



Need more information on product environmental compliance?

Email productcompliance@molex.com
For a multiple part number RoHS Certificate of Compliance, [click here](#)

Please visit the [Contact Us](#) section for any non-product compliance questions.

Search Parts in this Series
71436Series

Mates With
71439-0*** for Stack Height 8.00mm



PRODUCT SPECIFICATION

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- 1.0 SCOPE
- 2.0 PRODUCT DESCRIPTION
- 3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS
- 4.0 RATINGS
- 5.0 PERFORMANCE
- 6.0 PROCESSING GUIDELINES

1.0 SCOPE

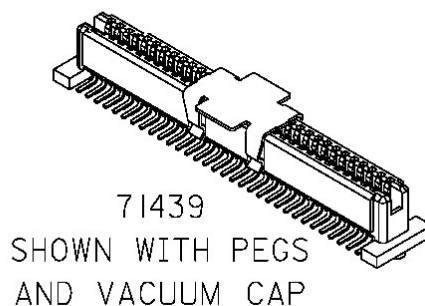
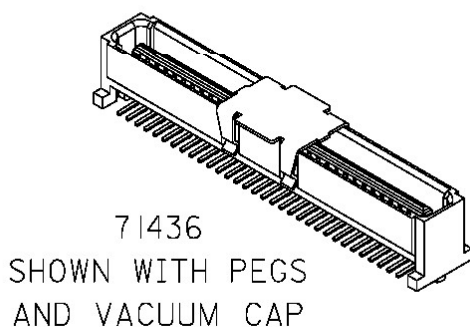
This Product Specification covers the 1.0mm pitch board-to-board plug and receptacle connectors.

2.0 PRODUCT DESCRIPTION

2.1 The 71436 plug and the 71439 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.



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DOCUMENT NUMBER: PS-71436-9999	CREATED / REVISED BY: Marc Ibarra	CHECKED BY: Bob Barker	APPROVED BY: Steve Miller



PRODUCT SPECIFICATION

2.0 PRODUCT DESCRIPTION (CONT'D)

2.2 Product Name and Item Numbers

See figure 1 and table 1.

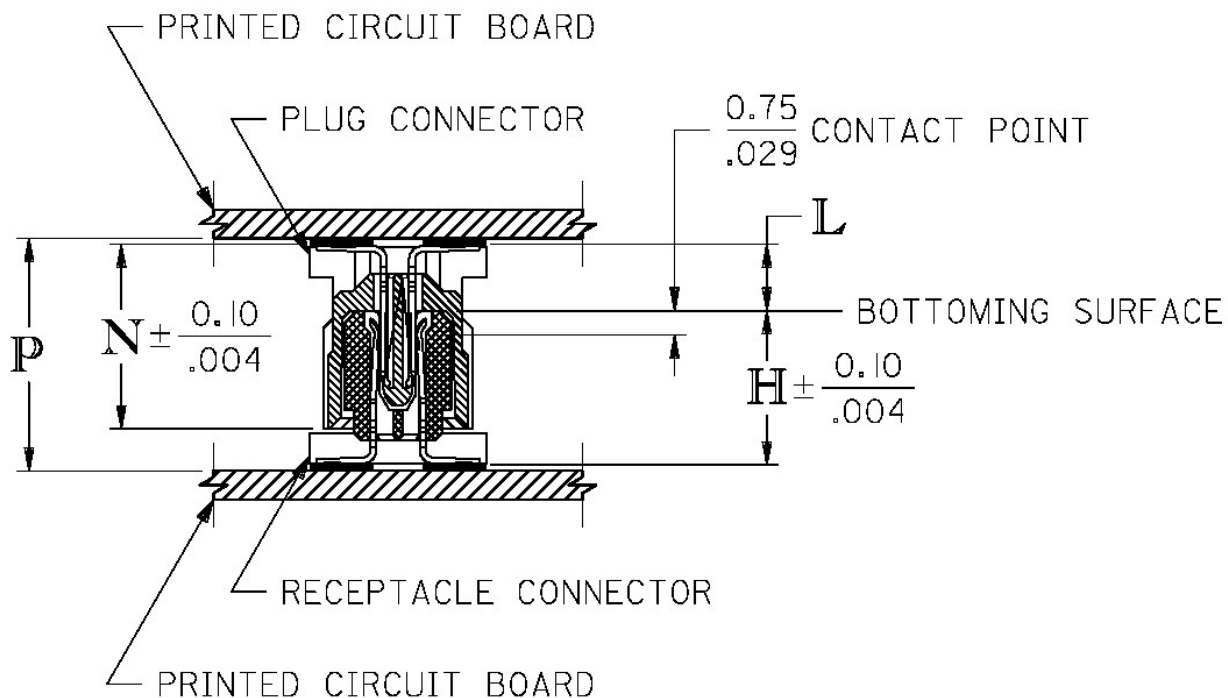


Figure 1

PLUG CONNECTOR			RECEPTACLE CONNECTOR		STACK HEIGHT DIMENSION P +0.00/-0.40 mm +.000/-.016 Inch
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
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 1

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2.3 Dimensions, Materials, and Platings:

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

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.: File Number E29179

4.0 RATINGS

4.1 VOLTAGE

250Volts AC (RMS) (contact to contact)

4.2 CURRENT (30°C Temperature rise)

0.5 Amps maximum, all circuits wired in series ; 1.0 Amps maximum, five adjacent circuits wired in series

4.3 TEMPERATURE

Operating: - 55°C to + 85°C

5.0 PERFORMANCE

5.1 ELECTRICAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
1	Contact Resistance (Low Level)	Mate connectors, measure by dry circuit: apply a maximum voltage of 20 mV and a current of 10 mA.	30 milliohms MAXIMUM [initial]
2	Contact Resistance @ Rated Current	Mate connectors: apply a maximum voltage of 20 mV at rated current.	15 milliohms MAXIMUM [initial]
3	Insulation Resistance	Apply 250±50 VDC, measure resistance between adjacent terminals.	100 megaohms MINIMUM
4	Dielectric Withstanding Voltage	Apply 250VAC for 1 minute between adjacent terminals.	No breakdown;

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5.2 MECHANICAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
5	Terminal Retention Force	Apply axial force on terminal in housing at rate of 25±6mm (1 ± ¼ inch) per minute.	3.9 N (0.4 Kgf) MINIMUM retention force
6	Connector Mate and Unmate Forces	Mate and unmate connectors (male to female) at a rate of 25 ± 6 mm (1 ± ¼ inch) per minute.	Mate Force: 60g X no. of circuits maximum & Un-Mate Force: 23g X no. of circuits, minimum
7	Durability	Mate connectors up to 100 cycles at a maximum rate of 10mm (0.40in) per second; rest 30 seconds minimum (when unmated).	Maximum contact resistance change: 15 milliohms
8	Vibration (Random)	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 < 1 microsecond
10	Shock (Mechanical)	490 m/s ² (50g) peak saw-tooth, 11 milliseconds duration; one shock each direction in each axis x, y and z.	Maximum contact resistance change: 15 milliohms & Discontinuity < 1 microsecond

5.3 ENVIRONMENTAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT						
11	Shock (Thermal)	Mate connectors; expose to 5 cycles of: <table><tr><td><u>Temperature °C</u></td><td><u>Duration (Minutes)</u></td></tr><tr><td>-40 +0/-3</td><td>30</td></tr><tr><td>+105 +3/-0</td><td>30</td></tr></table>	<u>Temperature °C</u>	<u>Duration (Minutes)</u>	-40 +0/-3	30	+105 +3/-0	30	Maximum contact resistance change: 15 milliohms & Visual: No Damage
<u>Temperature °C</u>	<u>Duration (Minutes)</u>								
-40 +0/-3	30								
+105 +3/-0	30								
12	Thermal Aging	Mate connectors; expose to: 250 hours at 85 ± 2°C	Maximum contact resistance change: 15 milliohms & Visual: No Damage						

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5.3 ENVIRONMENTAL REQUIREMENTS (continued)

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
27	Humidity (Steady State)	Mate connectors: expose to a temperature of $40 \pm 2^{\circ}\text{C}$ with a relative humidity of 90-95% for 240 hours. Per MIL-STD-202F, Method 103B, Test Condition A.	Maximum contact resistance change: 15 milliohms & Visual: No Damage
28	Humidity (Cyclic)	Test mated connectors per MIL-STD-202F, Method 106E, excluding steps 7a and 7b.	Maximum contact resistance change: 15 milliohms & Visual: No Damage
30	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
36	Mixed Flowing Gas	Environmental Class II, 7 days unmated.	Maximum contact resistance change: 15 milliohms

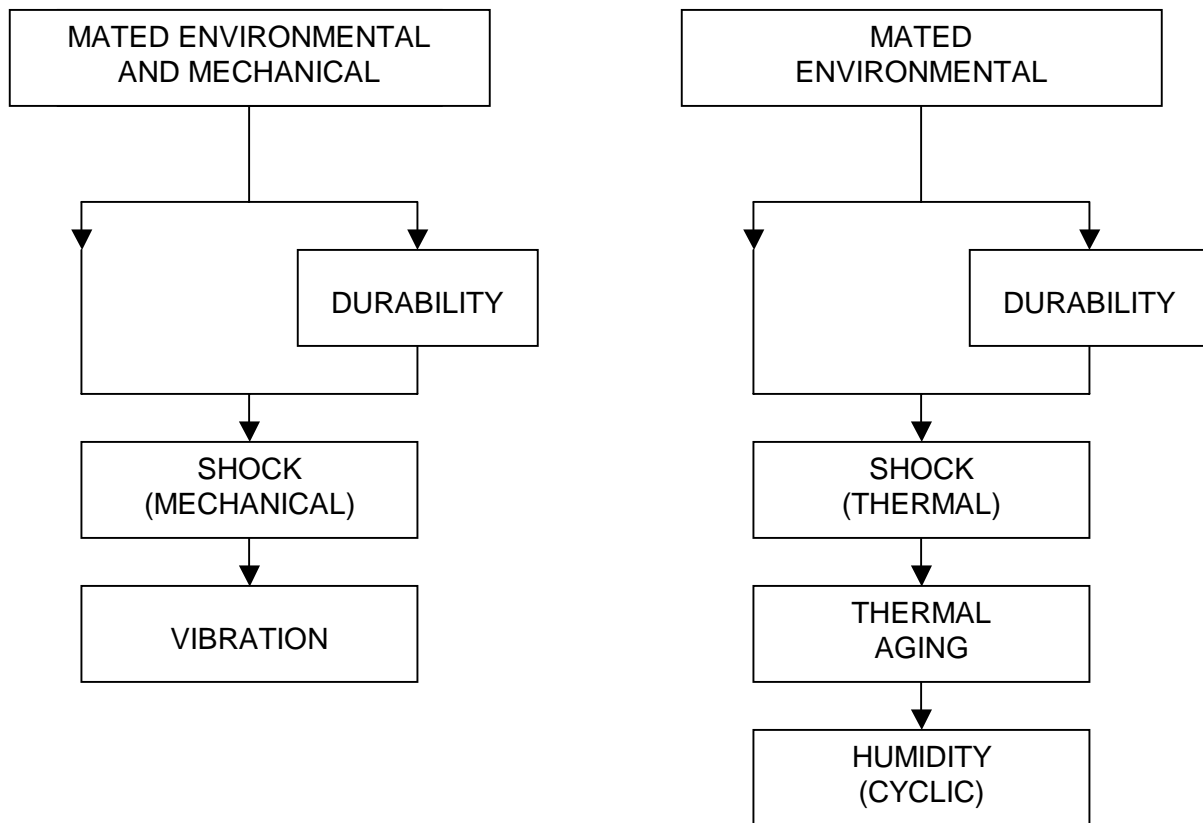
6.0 PROCESSING GUIDELINES

<u>PROCESSING STEPS</u>	<u>RECOMMENDATION</u>	<u>COMMENTS</u>
Resistance to Soldering Heat	Peak soldering temperature to be 265 degrees C. Maximum time within 5 degrees of peak temperature to be 40 seconds. Note: Connectors must be dried for 8 hours @ 70°C prior to processing at temperatures over 245°C . Connectors may be left in the tape and reel or tubes during the drying operation.	Appearance: No Physical Damage

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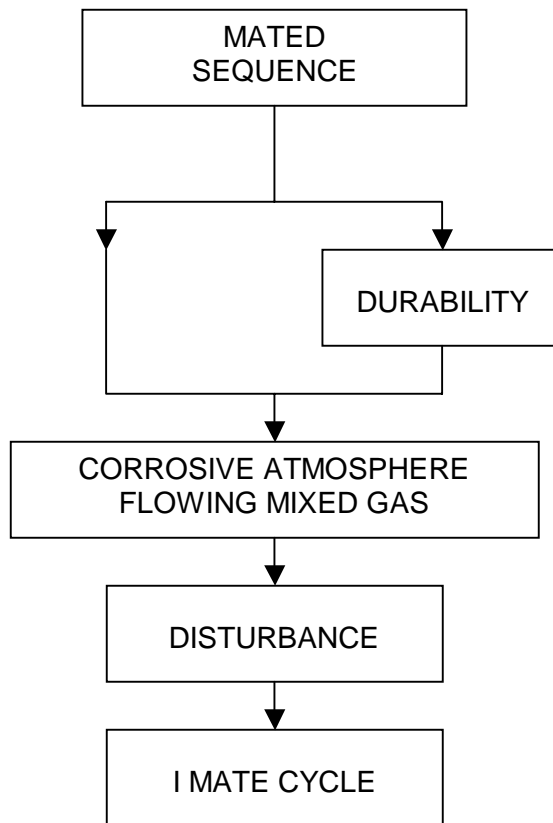
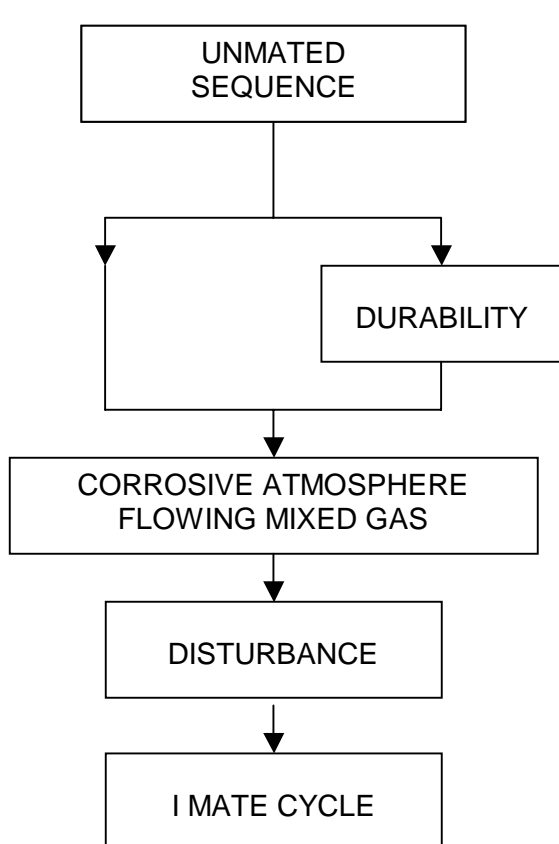


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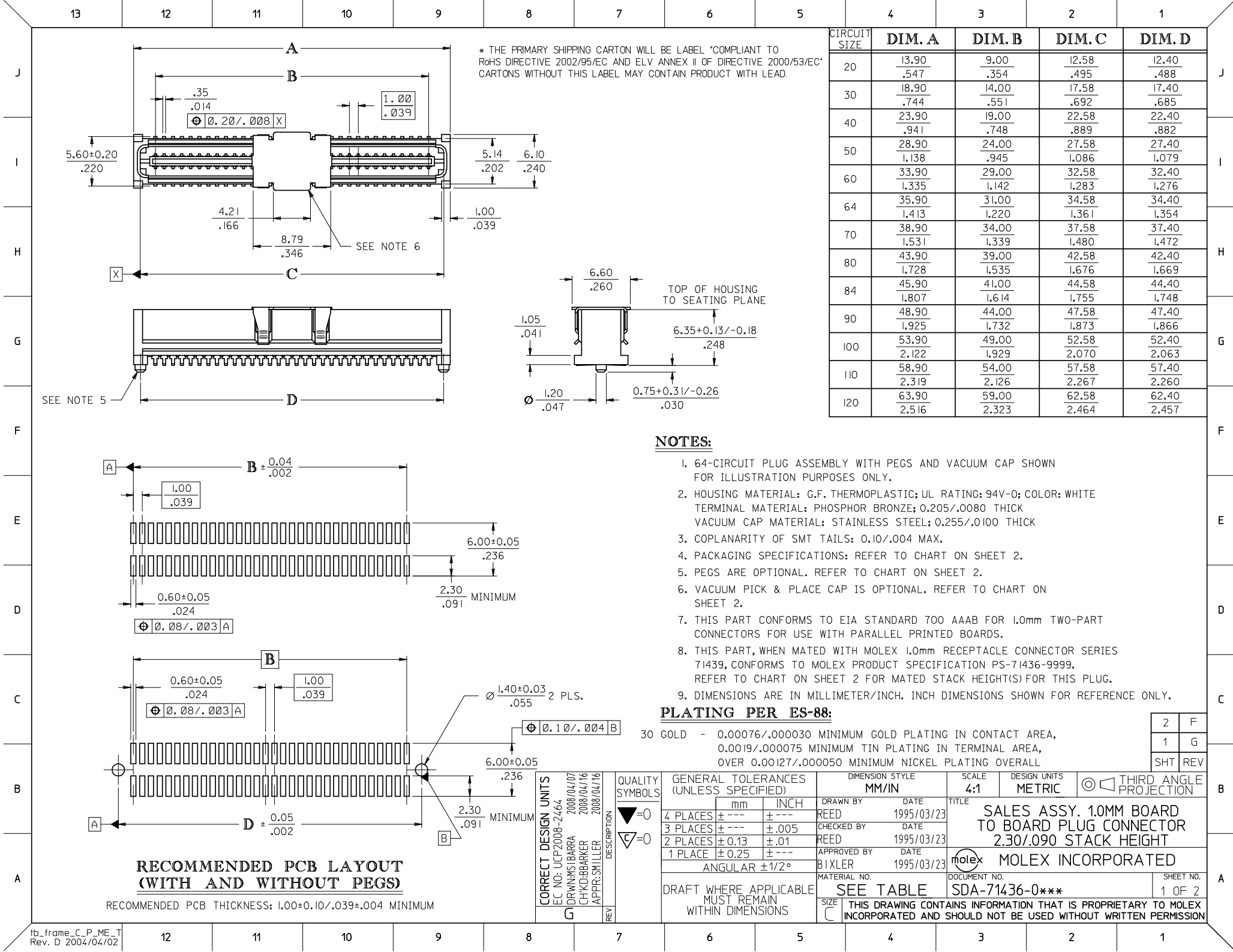
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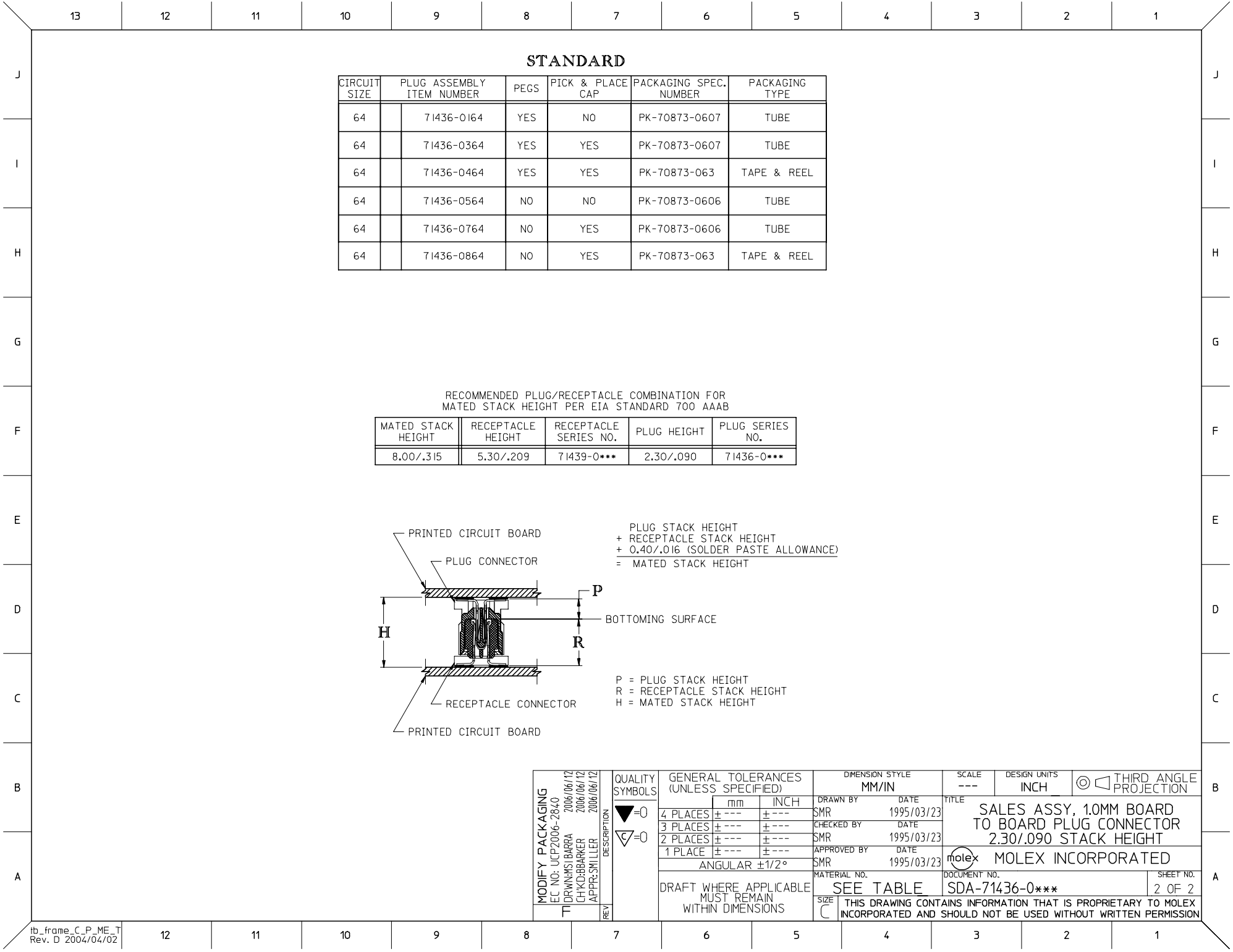


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Solder Process Data

Lead-free Process Capability
Process Temperature max. C

Reflow Capable (SMT only)
260

Material Info

Reference - Drawing Numbers

Product Specification
Sales Drawing

PS-71436-9999, RPS-71436-002, RPS-71436-003
SDA-71436-0***

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