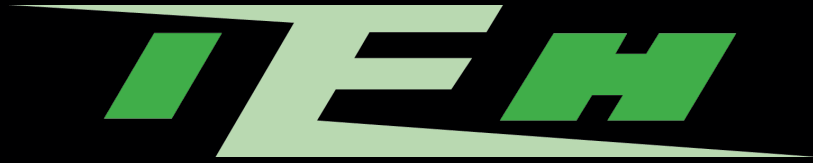


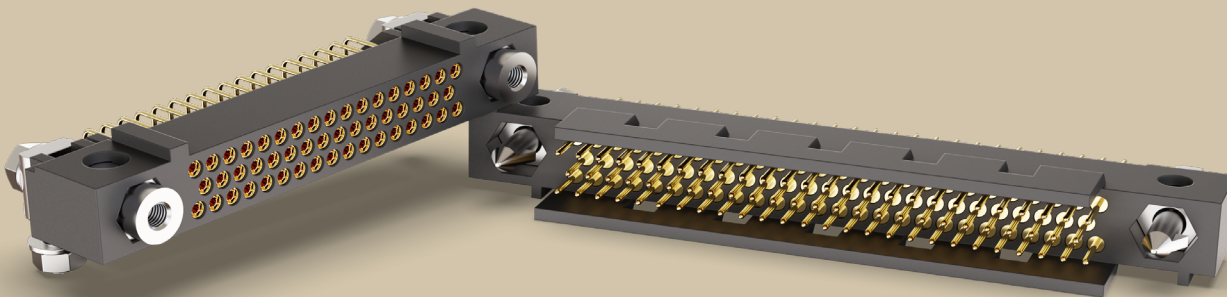
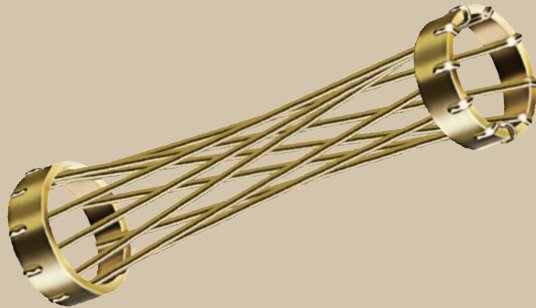
HMP .075 X .075 HYPERBOLOID SERIES



HYPERBOLOID CONNECTORS

FOR SUPERIOR PERFORMANCE IN ALL APPLICATIONS

IEH CORPORATION ISO 9001:2015



www.iehcorp.com



IEH Quality Statement

Listening to our customers and meeting their needs while
continuously improving our processes and services

CONTENTS

HMP SERIES - .075 X .075 CONNECTORS

PAGE

- 3 Introduction
- 4 Specifications
- 5 Ordering Chart

3 ROW

- 6 FAE9 - Receptacle, Stacking
- 7 FDE, FSE - Receptacle, Straight (Dip Solder, Solder Cup)
- 8 FEE - Receptacle, Right Angle (Dip Solder)
- 9 MAE9 - Plug, Stacking
- 10 MDE, MSE - Plug, Straight (Dip Solder, Solder Cup)
- 11 MEE - Plug, Right Angle (Dip Solder)

4 ROW

- 12 FAE9 - Receptacle, Stacking
- 13 FDE, FSE - Receptacle, Straight (Dip Solder, Solder Cup)
- 14 FEE - Receptacle, Right Angle (Dip Solder)
- 15 MAE9 - Plug, Stacking
- 16 MDE, MSE - Plug, Straight (Dip Solder, Solder Cup)
- 17 MEE - Plug, Right Angle (Dip Solder)

5 ROW

- 18 FAE9 - Receptacle, Stacking
- 19 FDE, FSE - Receptacle, Straight (Dip Solder, Solder Cup)
- 20 FEE - Receptacle, Right Angle (Dip Solder)
- 21 MAE9 - Plug, Stacking
- 22 MDE, MSE - Plug, Straight (Dip Solder, Solder Cup)
- 23 MEE - Plug, Right Angle (Dip Solder)

6 ROW

- 24 FAE9 - Receptacle, Stacking
- 25 FDE, FSE - Receptacle, Straight (Dip Solder, Solder Cup)
- 26 FEE - Receptacle, Right Angle (Dip Solder)
- 27 MAE9 - Plug, Stacking
- 28 MDE, MSE - Plug, Straight (Dip Solder, Solder Cup)
- 29 MEE - Plug, Right Angle (Dip Solder)

- 30 MPE - Plug, Pin Carrier and Shroud

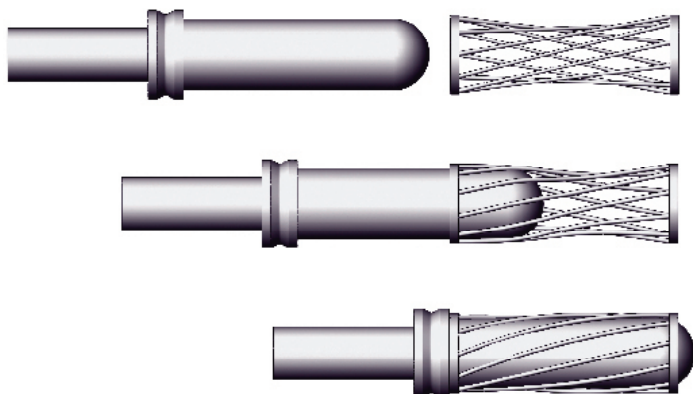
CONTENTS
HMP SERIES - .075 X .075 CONNECTORS

PAGE

APPENDIX

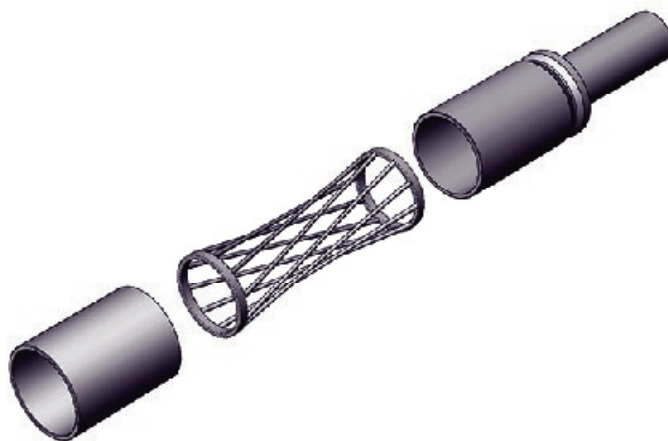
31	Termination Styles - Receptacle
32	Termination Styles - Plug
33	Hardware Styles - Sockets
35	Hardware Styles - Plug
36	Hardware Styles - Plug
37	Hardware Styles - Plug
38	Alignment Comb
39	Polarization Chart
40	PWB Pattern - Receptacle, 3 Row
41	PWB Pattern - Plug, 3 Row
42	PWB Pattern - Receptacle, 4 Row
43	PWB Pattern - Plug 4 Row
44	PWB Pattern - Receptacle, 5 Row
45	PWB Pattern - Plug, 5 Row
46	PWB Pattern - Receptacle, 6 Row
47	PWB Pattern - Plug, 6 Row

The HYPERBOLOID contact is an advanced design that satisfies performance requirements previously considered impossible. Radically different in concept, it is used in connectors having the highest standards of performance. The distinguishing feature of the HYPERBOLOID socket is the hyper-boloid-shaped sleeve formed by straight wires strung at an angle to the longitudinal axis. Viewed from the side, you see a curve defined by a series of apparent short straight line segments which are tangent lines to points along a hyperbolic curve. This geometry provides for a design which has a decreasing circumscribed circle when viewed from the entry. It begins larger than the pin acceptance diameter and is less than this same diameter at the center. When the pin is inserted into this sleeve, the wires stretch, well within elastic limits, to accommodate it. In so doing, the wires wrap themselves around the pin providing a number of continuous line contact paths. The illustration below will assist in visualization.



The actual physical construction of the contact involves several components. The wires are strung on an internal wire carrier (inner sleeve) which is subsequently capped or enclosed by a front outer ring (front sleeve) and rear ring which includes the termination configuration (terminal). All components to the assembly are completely finished with the specified electroplating prior to assembly. The wires are continuous process plated on reel before use. In this manner, interface finish requirements can be controlled very closely without the common problems of gradient, shadow, or other finish imperfections often appearing in alternative designs. Very often, this processing feature permits the specifier to reduce precious metal content with resultant savings. Joints are calculated interference fits, insuring gas tight interfaces between all elements of the HYPERBOLOID construction. An exploded view is provided next.

The unique geometry, precision processing, and careful attention to quality result in a highly desirable contact design which provides:



- **VLIF (Very Low Insertion Force):** Common sizes #22 and less average under one ounce per contact.
- **Extraordinary Resistance to Shock & Vibration:** Tests exceeding 300 g's without discontinuity.
- **Duty Cycle Exceeding 100,000 Mate/Demate:** The burnishing action of the wires on the pin surface is non-destructive. Unlike the "plow" and scrape action of common designs, HYPERBOLOID's gentle mating action enhances life.
- **Low, Low Contact Resistance:** The multiplicity of line contact, as opposed to point contact in other designs, provides an excellent interface exhibiting low contact resistance (often less than 1/2 of MIL spec. allowances). This characteristic also provides for a cooler running contact under load.
- **Improved Current Carrying Capacity:** The low contact resistance gives a lower °C rise from ambient under load. This feature often allows the user to operate the same size contact under higher load.
- **Highest Reliability:** In use for over 40 years under the most demanding conditions HYPERBOLOID has proven itself to be the leading design for integrity and reliability. On space platforms, ships and boats at sea, land vehicles, fighter and transport aircraft, missiles, torpedoes, medical and transplant electronics, industrial and environmental controls, rail, construction, ATE and test equipment, PGA sockets, test interface stations, and other applications, HYPERBOLOID has lived up to its promise of the highest reliability connector available.

SPECIFICATIONS

MATERIALS:

Pin Contacts:	PhBr per ASTM B139, BeCu per ASTM B196 or B197, or Cu alloy
Pin Diameter	0.6mm nominal
Socket Contacts:	
Contact Wires:	BeCu per ASTM B197
Termination:	PhBr per ASTM B139 or Cu alloy or BeCu per B196/B197
Support Elements:	Cu alloy
Hardware:	Corrosion resistant steel per ASTM A582 ('D' shaped guide receptacles are BeCu per ASTM B196 or B197) or Cu alloy
Insulator:	Modified polyphenylene sulfide per MIL-M-24519, Type GST-40F or Equivalent
Pin Shields:	Aluminum 5052-H32 per QQ-A-250/8

FINISHES:

Pin Contacts:	Gold per MIL-DTL-45204 Type II, Class 1 (.000050), Grade C over Nickel, 0.000050 min., per SAE-AMS-QQ-N-290 over Copper, 0.000010 min., per SAE AMS 2418
Socket Contacts:	
Contact Wires:	Gold per MIL-DTL-45204 Type II, Class 1 (.000050), Grade C over Nickel, 0.000050 min., per SAE-AMS-QQ-N-290 over Copper, 0.000010 min., per SAE AMS 2418
Termination:	Gold per MIL-DTL-45204, Type II Class 00 (.000020), Grade C over Nickel, 0.000050 min., per SAE-AMS-QQ-N-290 over Copper, 0.000010 min., per SAE AMS 2418 or solder dip over Nickel, 0.000050 min., per SAE-AMS-QQ-N-290 over Copper, 0.000010 min., per SAE AMS 2418
Support Elements:	Nickel, 0.000050 min., per SAE-AMS-QQ-N-290 over Copper, 0.000010 min., per SAE AMS 2418
Hardware:	Passivate per SAE-AMS2700 except BeCu hardware to be Nickel plate, 0.000050 min.

PERFORMANCE:

Current Rating:	4* amp continuous (higher ratings may be supported-contact factory)
Insulation Resistance:	5000 megaohms min. - EIA-364-21 & MIL-DTL-55302 (par. 4.5.8)
Contact Resistance:	8 milliohms max, - EIA-364-06 & MIL-DTL-55302 (par. 4.5.5)
Test Voltage (DWV):	750 VAC RMS @ sea level - EIA-364-20 & MIL-DTL-55302 (par. 4.5.7.1) 250 VAC RMS @ 70,000 ft.
Temperature:	-65°C to +125°C (-86°F to +257°F)
Mating Force:	0.15 lbs. x number of contacts, max. - MIL-STD-55302 (par. 4.5.4)
De-mating Force:	0.03 lbs. x number of contacts, min. - MIL-STD-55302 (par. 4.5.4)
Contact Life:	100,000 mating cycles - Exceeds MIL-DTL-55302 (par. 4.5.9)
Solderability:	IPC/EIA J-STD-002, Category 3
Humidity:	IAW EIA-364-31, Method IV, except 7A & 7B (not required)
Vibration:	IAW EIA-364-28 & MIL-DTL-55302 (par. 4.5.10)
Shock:	IAW EIA-364-27 & MIL-DTL-55302 (par. 4.5.14)
Salt Spray:	IAW EIA-364-26 & MIL-DTL-55302 (par. 4.5.11)
Temperature Cycling:	IAW EIA-364-32 & MIL-DTL-55302 (par. 4.5.13)

DIMENSIONS:

Catalog product dimensions are nominal.
For linear and positional tolerances, contact factory.

* Ampacity ratings shown are derated in accordance with the published military specifications. For stand-alone, full service ratings, supported by test data, please refer to IEH's Contacts Catalog, or contact the factory.

All information contained herein is believed to be reliable as of the date of publication, but is subject to change without notice. Current product drawings and specifications are available upon request from IEH.

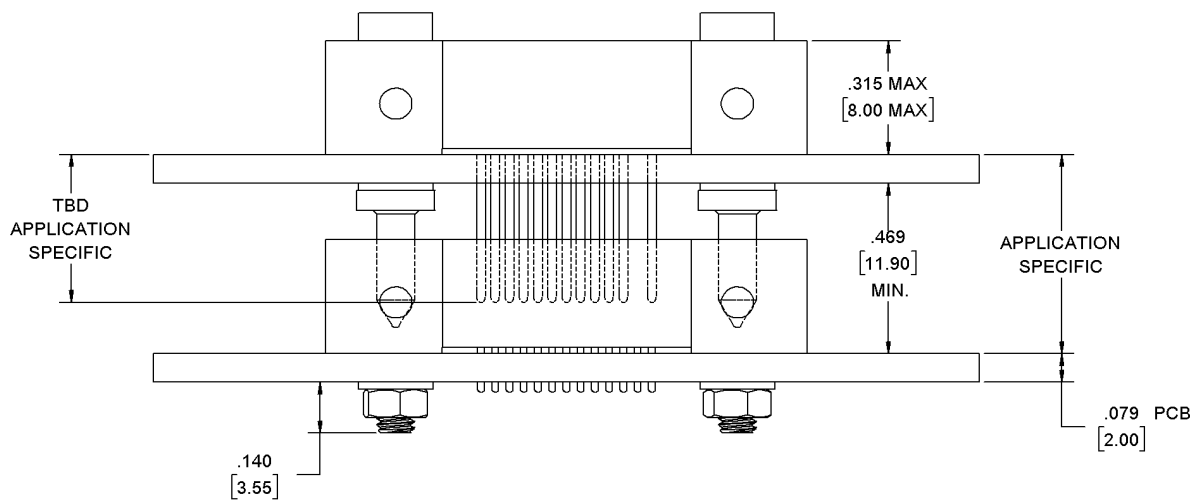
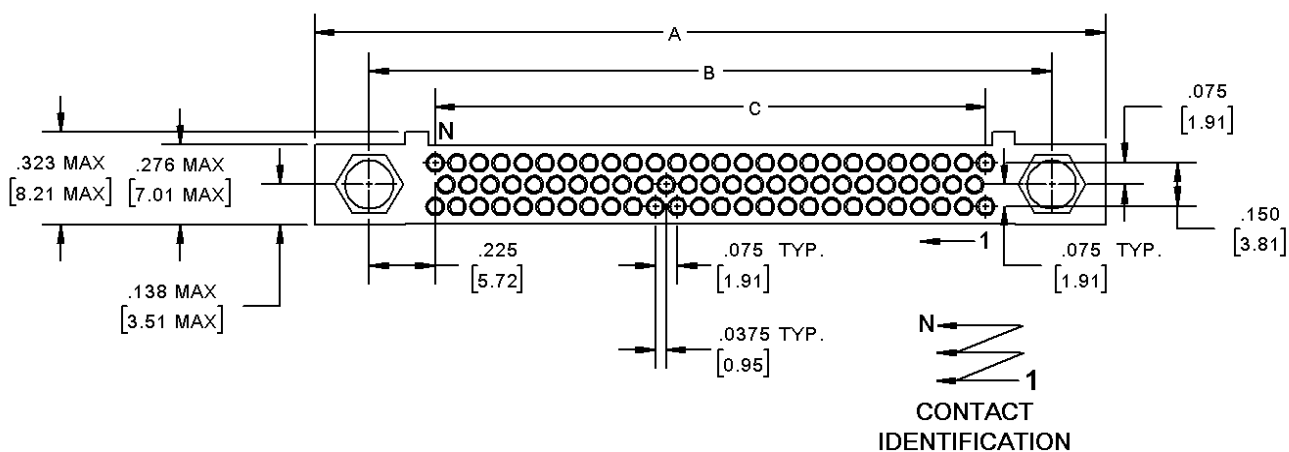
IEH warrants its products to be free of defects affecting normal use. If any shipment is found to be defective we will accept return for repair or replacement at our option within one year of shipment. IEH is not responsible for incidental or consequential damages arising out of the use of our products.

ORDERING CHART

Series	HMP	050	FDE	1	X	71	3	020
Contact Capacity (Use All 3 Places)								
Body Style								
Receptacle								
FAE	Stacking							
FDE	Dip Solder Straight							
FEE	Dip Solder Right Angle							
FSE	Solder Cup							
Plug								
MAE	Stacking							
MDE	Dip Solder Straight							
MEE	Dip Solder Right Angle							
MSE	Solder Cup							
MPE	Shrouded Pin Carrier							
Termination Length - "L"								
Code	Dip Solder	Solder Dip Right Angle						
1	0.177[4.50]	0.112[2.85]						
2	0.264[6.70]	0.157[4.00]						
9	User Defined							
0	Use For Solder Cup							
A	Use For Stacking Extension							
Variation Code - Factory Assigned								
000	No Variation							
020	Solder Dip Terminals							
0C0	Epoxy Termination Sealed							
0C2	Epoxy Sealed & Solder Dipped							
Row Designation								
3	3 Row Series							
4	4 Row Series							
5	5 Row Series							
6	6 Row Series							
Hardware Arrangement								
00	No Hardware							
01-36	Keyed Shaped Guide (See Appendix)							
71	Non Polarized Hardware							
98	Hardware Unassembled							

Hardware Style (refer to pages 33-37)			
A	Guide Socket w/ Guide Pin (stacking)	P	Keyed Pin w/ Mtg Stud (Polarizing, Right Angle, 6 Row)
B	Guide Socket w/ Guide Pin (stacking to stacking)	Q	Keyed Pin w/L-Bracket (Polarizing, Right Angle, 3,4,5 Row)
C	Guide Socket w/ Mounting Pin (stacking)	R	Keyed Pin w/L-Bracket (Polarizing, Right Angle, 6 Row)
D	Keyed Socket w/ Mtg Stud (Polarizing)	S	Rotating Pin (Jacking)
E	Keyed Socket w/ Mtg Stud (Polarizing)	T	Rotating Pin (Jacking) w/ Mtg. Stud
F	Keyed Socket w/ Mtg Stud (Polarizing)	U	Guide Pin (Shrouded Pin Carrier)
G	Fixed Socket (Jacking) w/ Mtg. Stud	V	Keyed Pin w/ Mtg Stud (Polarizing)
H	Fixed Socket (Jacking) w/ Mtg Stud (Right Angle, 3 Row)	W	Keyed Pin w/ Mtg Stud (Polarizing)
J	Fixed Socket (Jacking) w/ Mtg Stud (Right Angle, 4,5 Row)	X	Keyed Pin w/ Mtg Stud (Polarizing, Right Angle, 3,4,5 Row)
K	Guide Socket (Shrouded Pin Carrier)	Y	Keyed Pin w/ Mtg Stud (Polarizing, Right Angle, 3,4,5 Row)
L	Guide Pin w/ Guide Pin (stacking)	Z	Keyed Pin w/ Mtg Stud (Polarizing, Right Angle, 6 Row)
M	Keyed Pin w/ Mtg Stud (Polarizing, Right Angle, 3,4,5 Row)	0	No Hardware Supplied
N	Keyed Pin w/ Mtg Stud (Polarizing, Right Angle, 3,4,5 Row)		

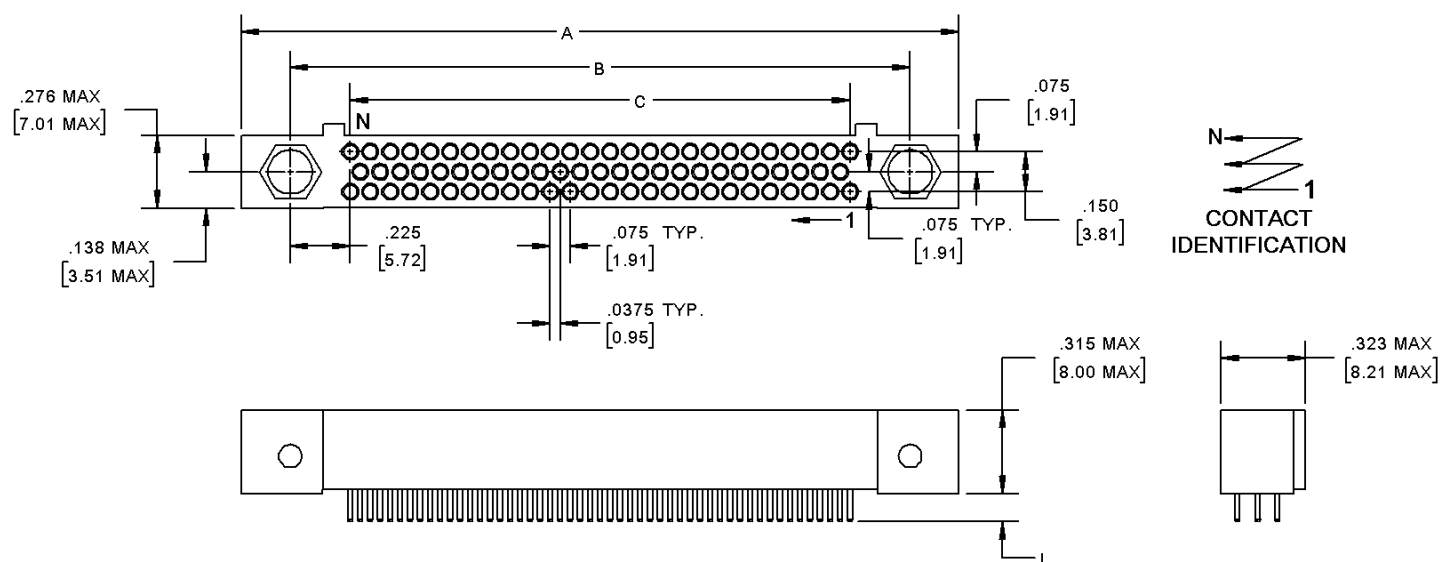
RECEPTACLE, STACKING STYLE FAE9



No. of Contacts	A MAX	B	C
20	1.267 [32.18]	0.900 [22.86]	0.450 [11.43]
50	2.017 [51.23]	1.650 [41.91]	1.200 [30.48]
77	2.692 [68.38]	2.325 [59.06]	1.875 [47.63]
119	3.742 [95.05]	3.375 [85.73]	2.925 [74.26]
152	4.586 [116.48]	4.200 [106.68]	3.750 [95.25]

REFER TO APPENDIX FOR TERMINATION
DETAILS, HARDWARE STYLES, POLAR-
IZATION CHART, AND PWB PATTERNS

RECEPTACLE, STRAIGHT STYLE FDE, FSE

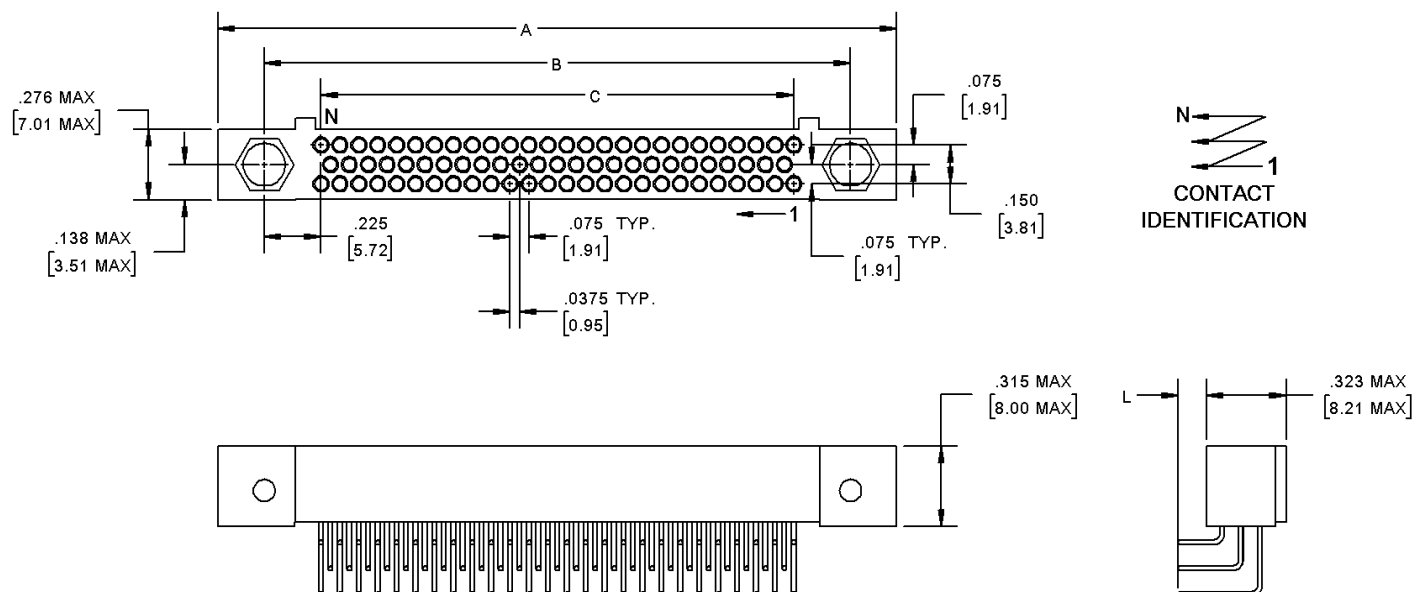


FOR DIMENSION "L" SEE TERMINATION LENGTH ON PAGE #5

No. of Contacts	A MAX	B	C
20	1.267 [32.18]	0.900 [22.86]	0.450 [11.43]
50	2.017 [51.23]	1.650 [41.91]	1.200 [30.48]
77	2.692 [68.38]	2.325 [59.06]	1.875 [47.63]
119	3.742 [95.05]	3.375 [85.73]	2.925 [74.26]
152	4.586 [116.48]	4.200 [106.68]	3.750 [95.25]

**REFER TO APPENDIX FOR TERMINATION
DETAILS, HARDWARE STYLES, POLAR-
IZATION CHART, AND PWB PATTERNS**

RECEPTACLE, RIGHT ANGLE STYLE FEE

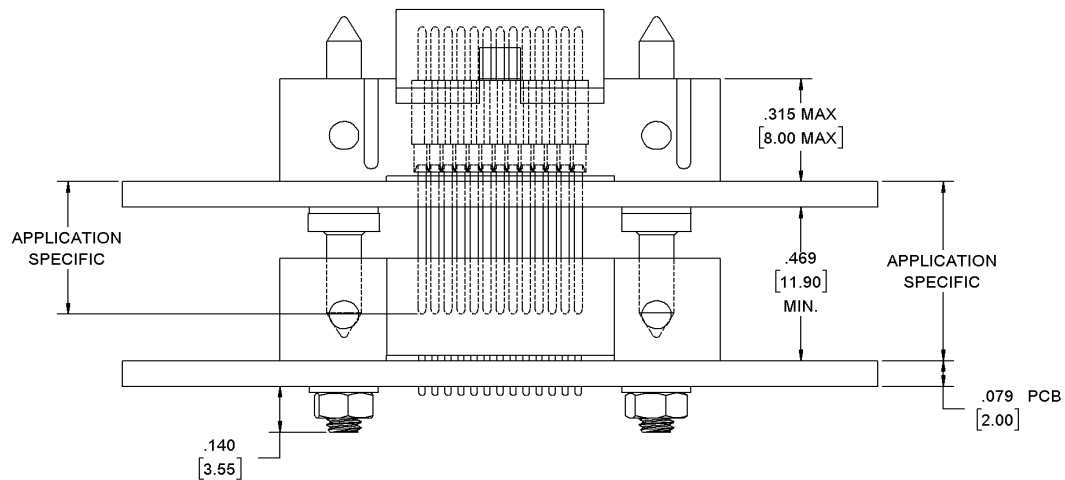
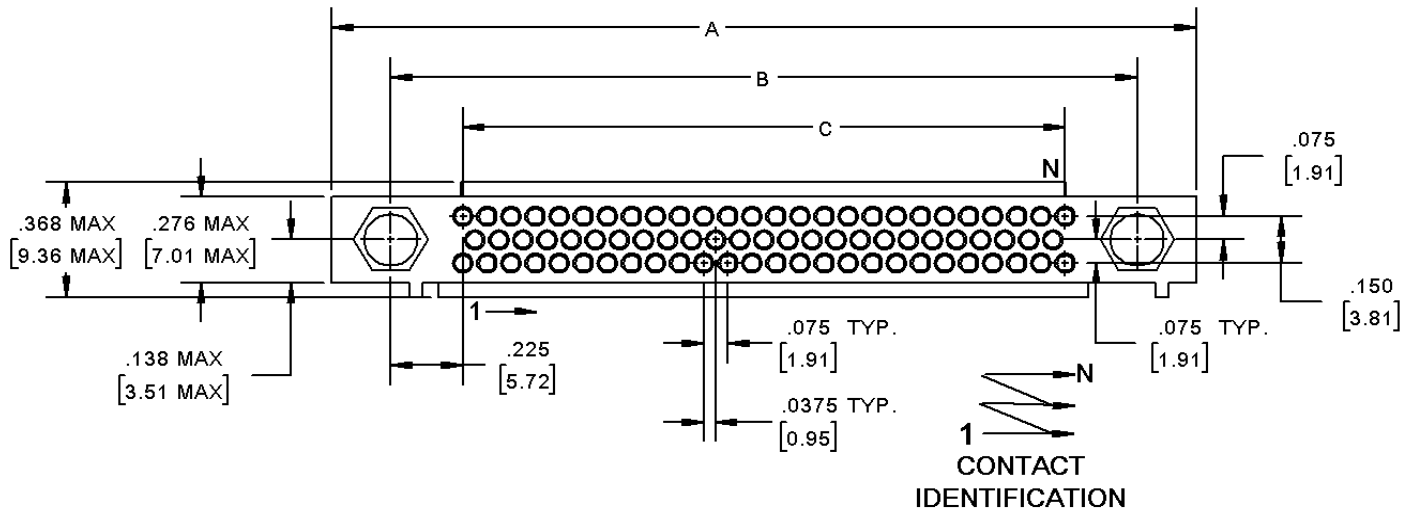


FOR DIMENSION "L" SEE TERMINATION LENGTH ON PAGE #5

No. of Contacts	A MAX	B	C
20	1.267 [32.18]	0.900 [22.86]	0.450 [11.43]
50	2.017 [51.23]	1.650 [41.91]	1.200 [30.48]
77	2.692 [68.38]	2.325 [59.06]	1.875 [47.63]
119	3.742 [95.05]	3.375 [85.73]	2.925 [74.26]
152	4.586 [116.48]	4.200 [106.68]	3.750 [95.25]

REFER TO APPENDIX FOR TERMINATION
DETAILS, HARDWARE STYLES, POLAR-
IZATION CHART, AND PWB PATTERNS

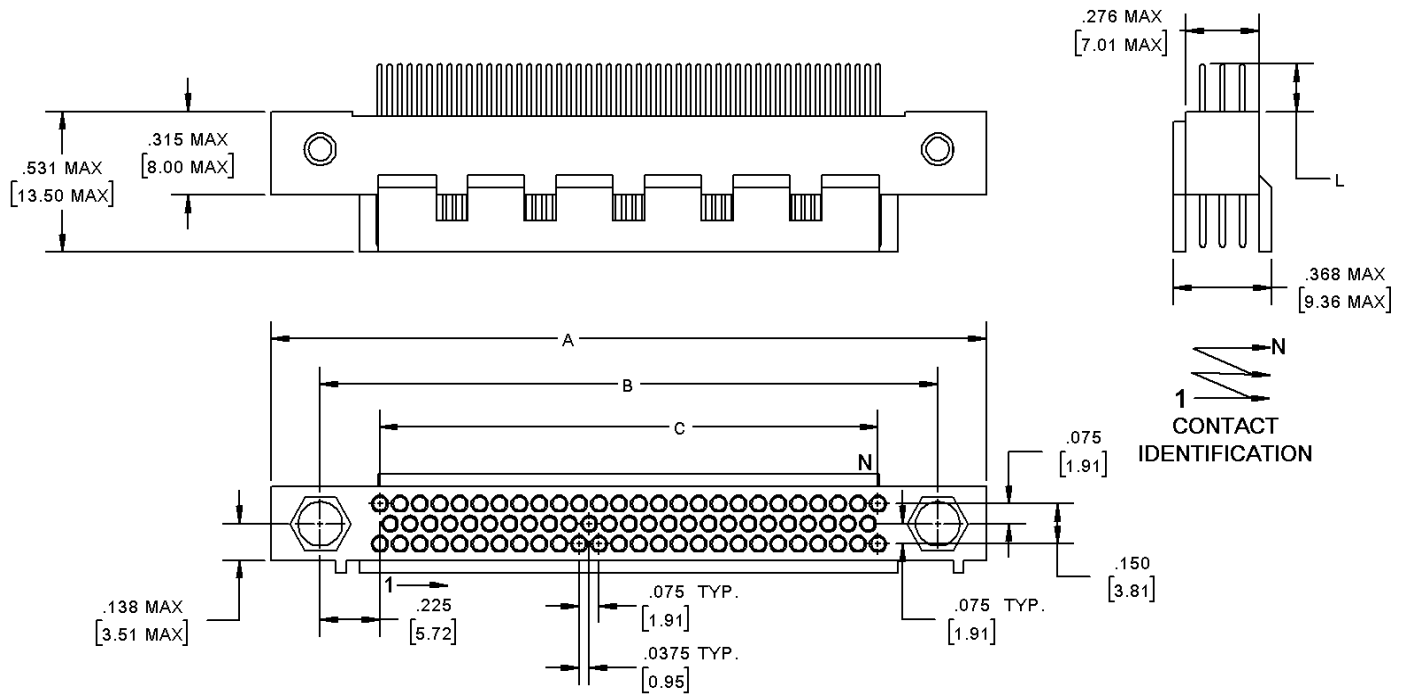
RECEPTACLE, STACKING STYLE MAE9



No. of Contacts	A MAX	B	C
20	1.267 [32.18]	0.900 [22.86]	0.450 [11.43]
50	2.017 [51.23]	1.650 [41.91]	1.200 [30.48]
77	2.692 [68.38]	2.325 [59.06]	1.875 [47.63]
119	3.742 [95.05]	3.375 [85.73]	2.925 [74.26]
152	4.586 [116.48]	4.200 [106.68]	3.750 [95.25]

**REFER TO APPENDIX FOR TERMINATION
DETAILS, HARDWARE STYLES, POLAR-
IZATION CHART, AND PWB PATTERNS**

PLUG, STRAIGHT STYLE MDE, MSE

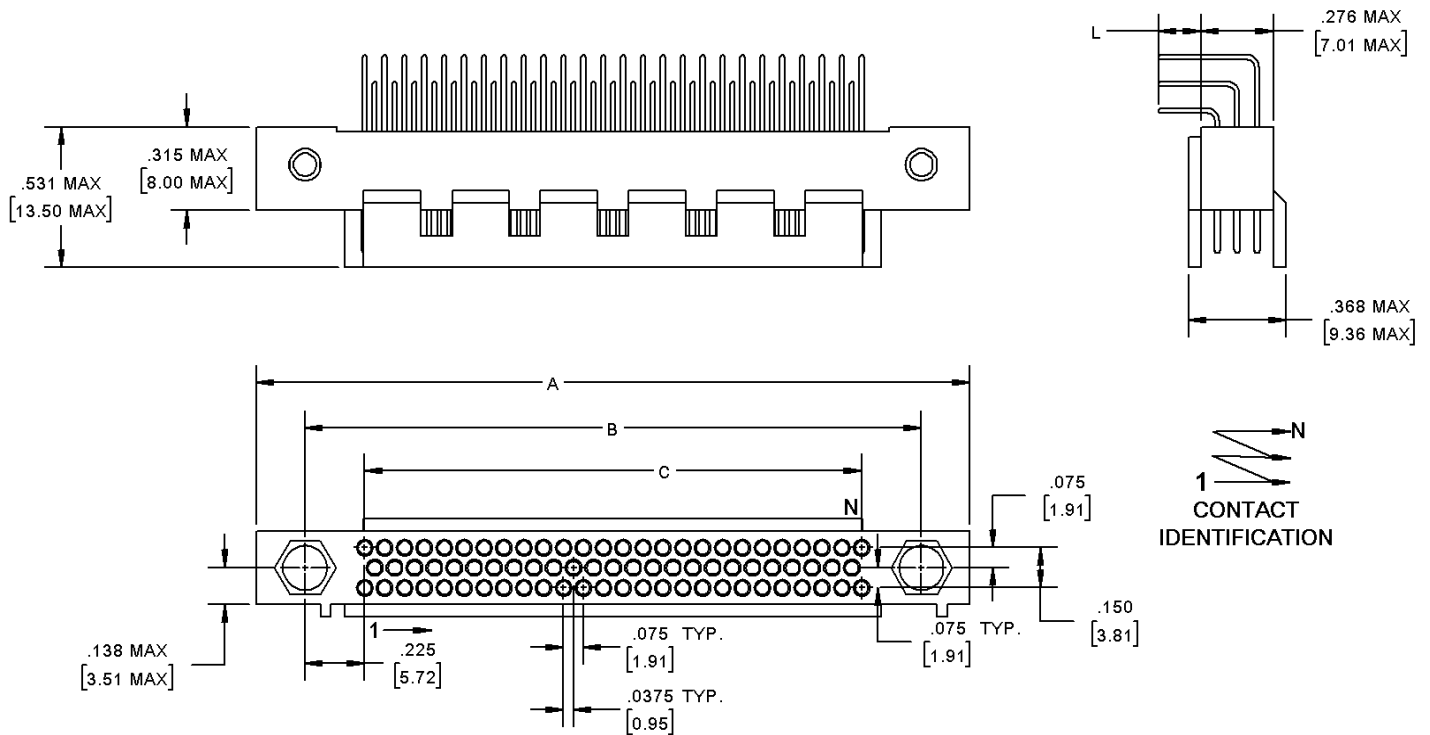


FOR DIMENSION "L" SEE TERMINATION LENGTH ON PAGE #5

No. of Contacts	A MAX	B	C
20	1.267 [32.18]	0.900 [22.86]	0.450 [11.43]
50	2.017 [51.23]	1.650 [41.91]	1.200 [30.48]
77	2.692 [68.38]	2.325 [59.06]	1.875 [47.63]
119	3.742 [95.05]	3.375 [85.73]	2.925 [74.26]
152	4.586 [116.48]	4.200 [106.68]	3.750 [95.25]

***REFER TO APPENDIX FOR TERMINATION
DETAILS, HARDWARE STYLES, POLAR-
IZATION CHART, AND PWB PATTERNS**

PLUG, RIGHT ANGLE STYLE MEE

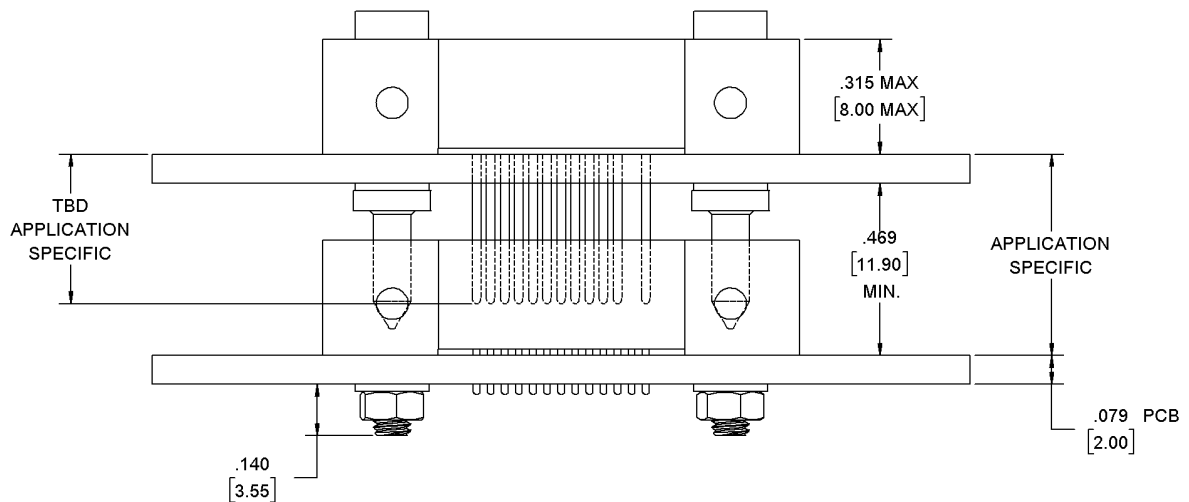
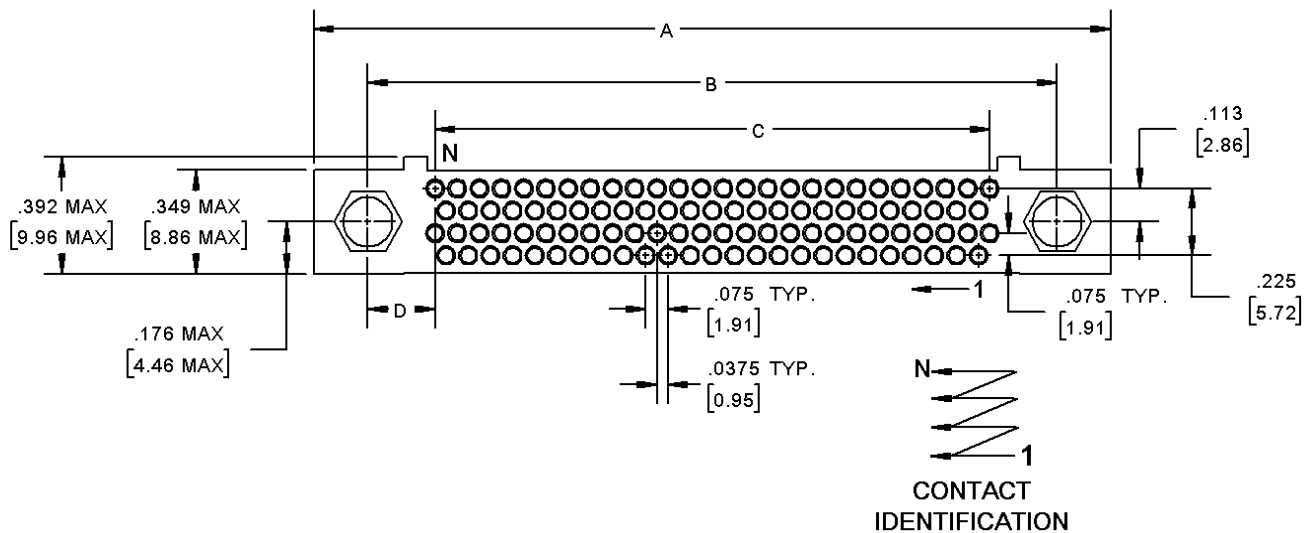


FOR DIMENSION "L" SEE TERMINATION LENGTH ON PAGE #5

No. of Contacts	A MAX	B	C
20	1.267 [32.18]	0.900 [22.86]	0.450 [11.43]
50	2.017 [51.23]	1.650 [41.91]	1.200 [30.48]
77	2.692 [68.38]	2.325 [59.06]	1.875 [47.63]
119	3.742 [95.05]	3.375 [85.73]	2.925 [74.26]
152	4.586 [116.48]	4.200 [106.68]	3.750 [95.25]

REFER TO APPENDIX FOR TERMINATION
DETAILS, HARDWARE STYLES, POLAR-
IZATION CHART, AND PWB PATTERNS

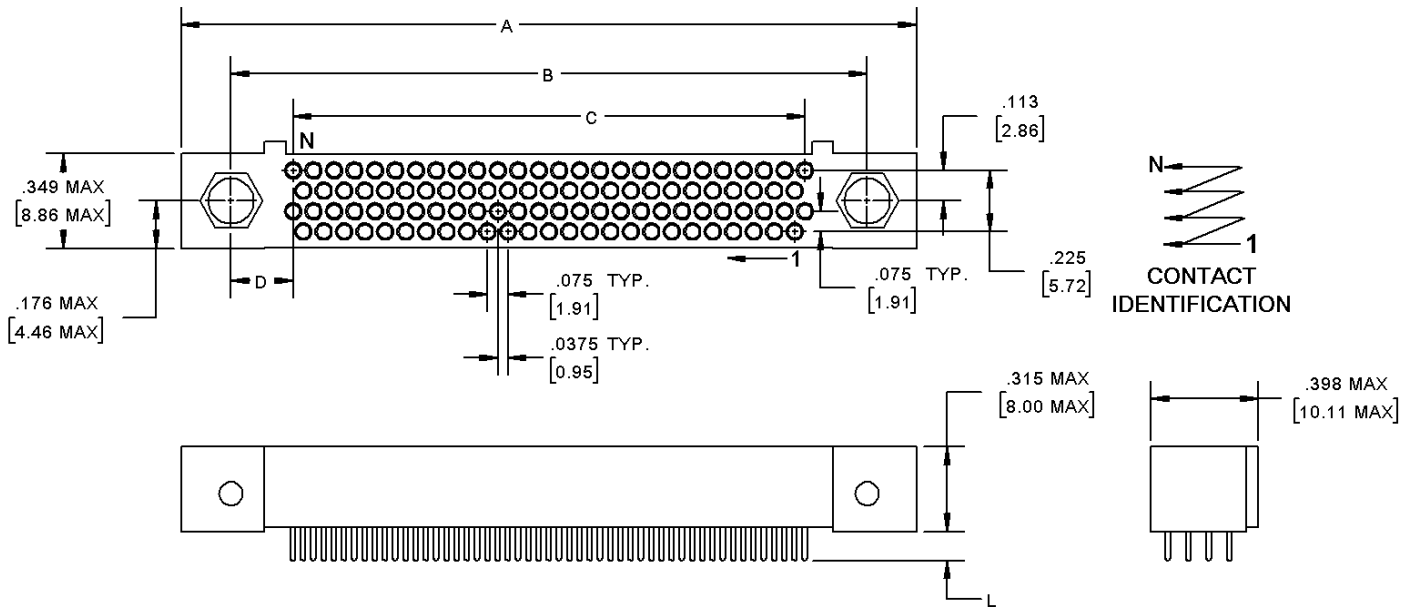
RECEPTACLE, STACKING STYLE FAE9



No. of Contacts	A MAX	B	C	D
102	2.697 [68.50]	2.330 [59.18]	1.875 [47.625]	.228 [5.78]
202	4.567 [116.00]	4.200 [106.68]	3.750 [95.25]	.225 [5.72]

***REFER TO APPENDIX FOR TERMINATION
DETAILS, HARDWARE STYLES, POLAR-
IZATION CHART, AND PWB PATTERNS**

RECEPTACLE, STRAIGHT STYLE FDE, FSE

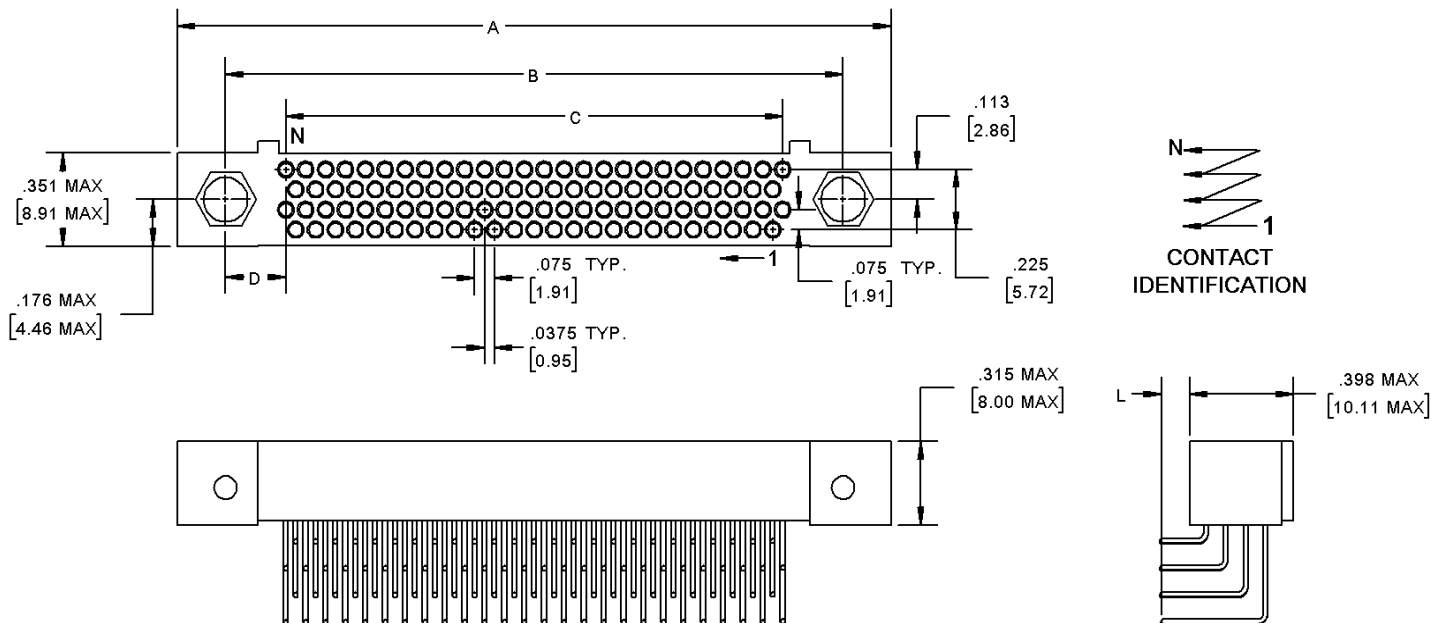


FOR DIMENSION "L" SEE TERMINATION LENGTH ON PAGE #5

No. of Contacts	A MAX	B	C	D
102	2.697 [68.50]	2.330 [59.18]	1.875 [47.625]	.228 [5.78]
202	4.567 [116.00]	4.200 [106.68]	3.750 [95.25]	.225 [5.72]

**REFER TO APPENDIX FOR TERMINATION
DETAILS, HARDWARE STYLES, POLAR-
IZATION CHART, AND PWB PATTERNS**

RECEPTACLE, RIGHT ANGLE STYLE FEE

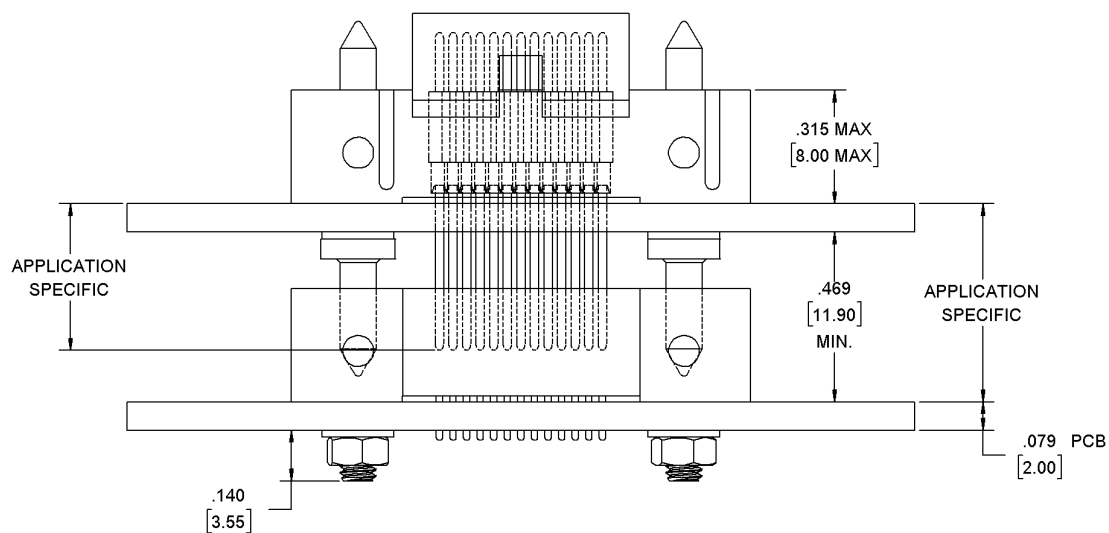
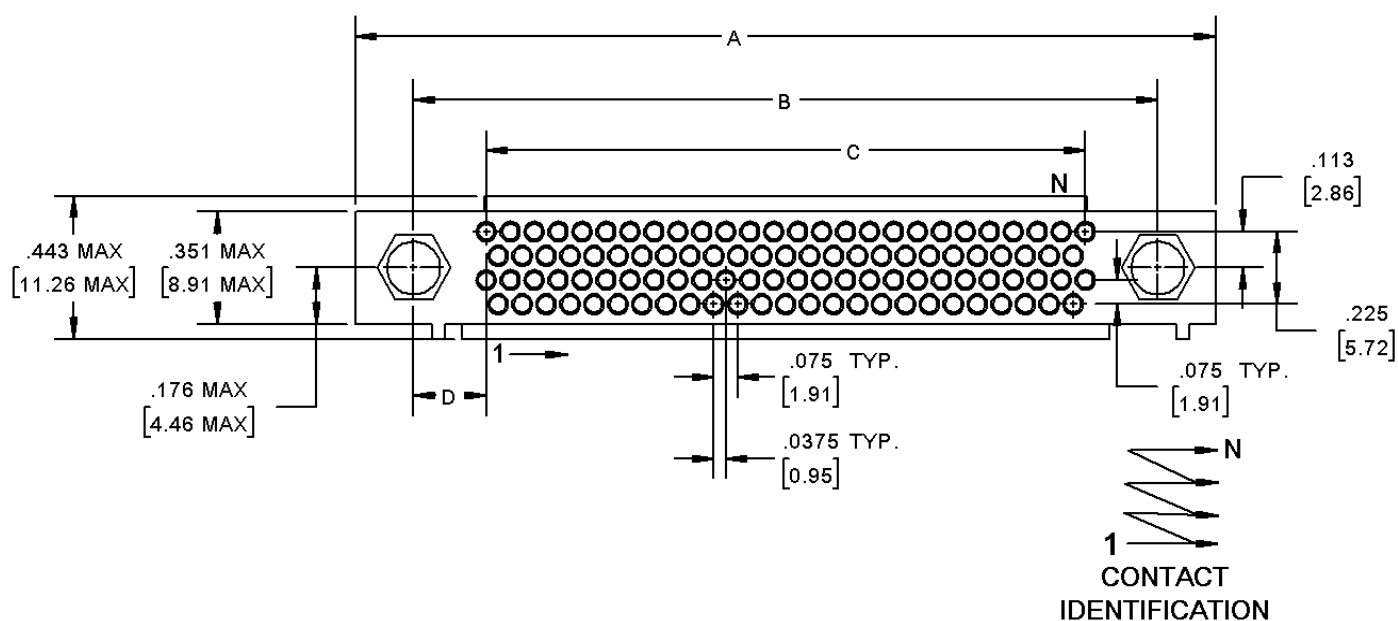


FOR DIMENSION "L" SEE TERMINATION LENGTH ON PAGE #5

No. of Contacts	A MAX	B	C	D
102	2.697 [68.50]	2.330 [59.18]	1.875 [47.625]	.228 [5.78]
202	4.567 [116.00]	4.200 [106.68]	3.750 [95.25]	.225 [5.72]

***REFER TO APPENDIX FOR TERMINATION
DETAILS, HARDWARE STYLES, POLAR-
IZATION CHART, AND PWB PATTERNS**

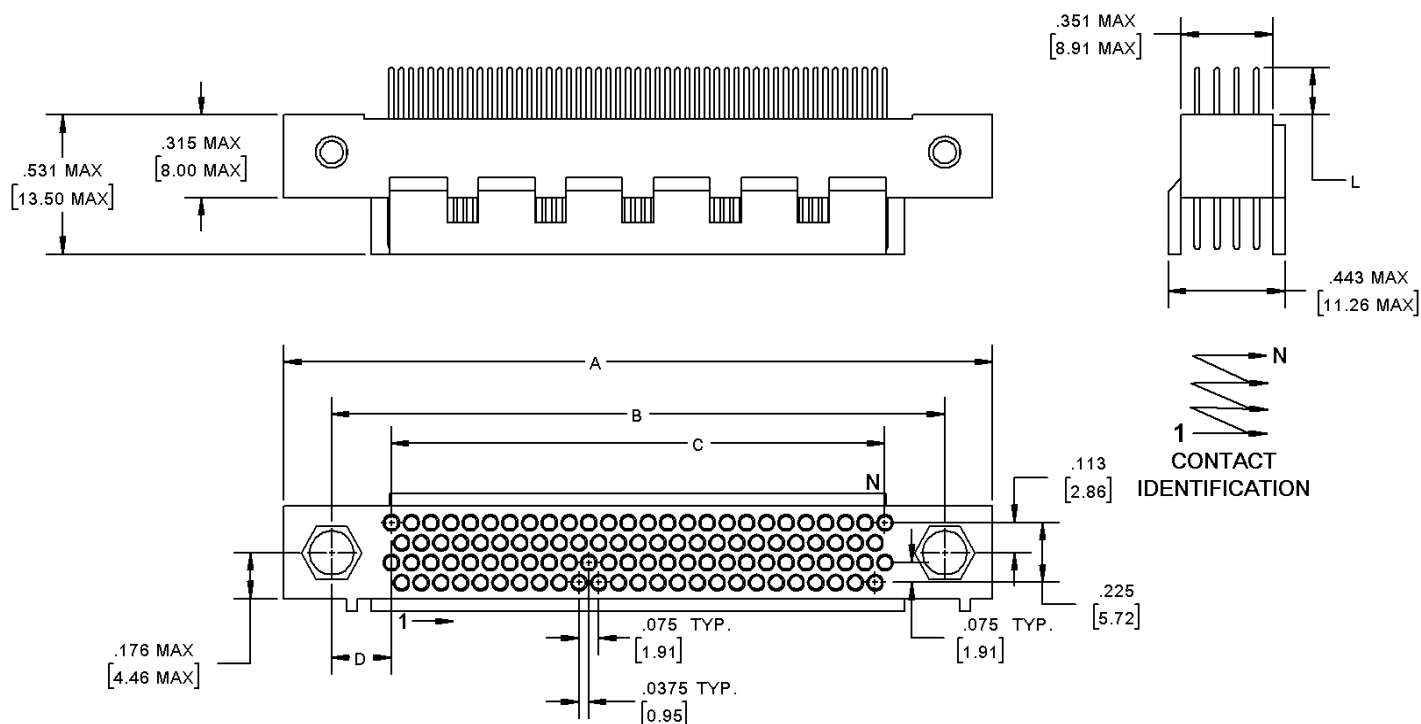
PLUG, STACKING STYLE MAE9



No. of Contacts	A MAX	B	C	D
102	2.697 [68.50]	2.330 [59.18]	1.875 [47.625]	.228 [5.78]
202	4.567 [116.00]	4.200 [106.68]	3.750 [95.25]	.225 [5.72]

***REFER TO APPENDIX FOR TERMINATION
DETAILS, HARDWARE STYLES, POLAR-
IZATION CHART, AND PWB PATTERNS**

PLUG, STRAIGHT STYLE MDE, MSE

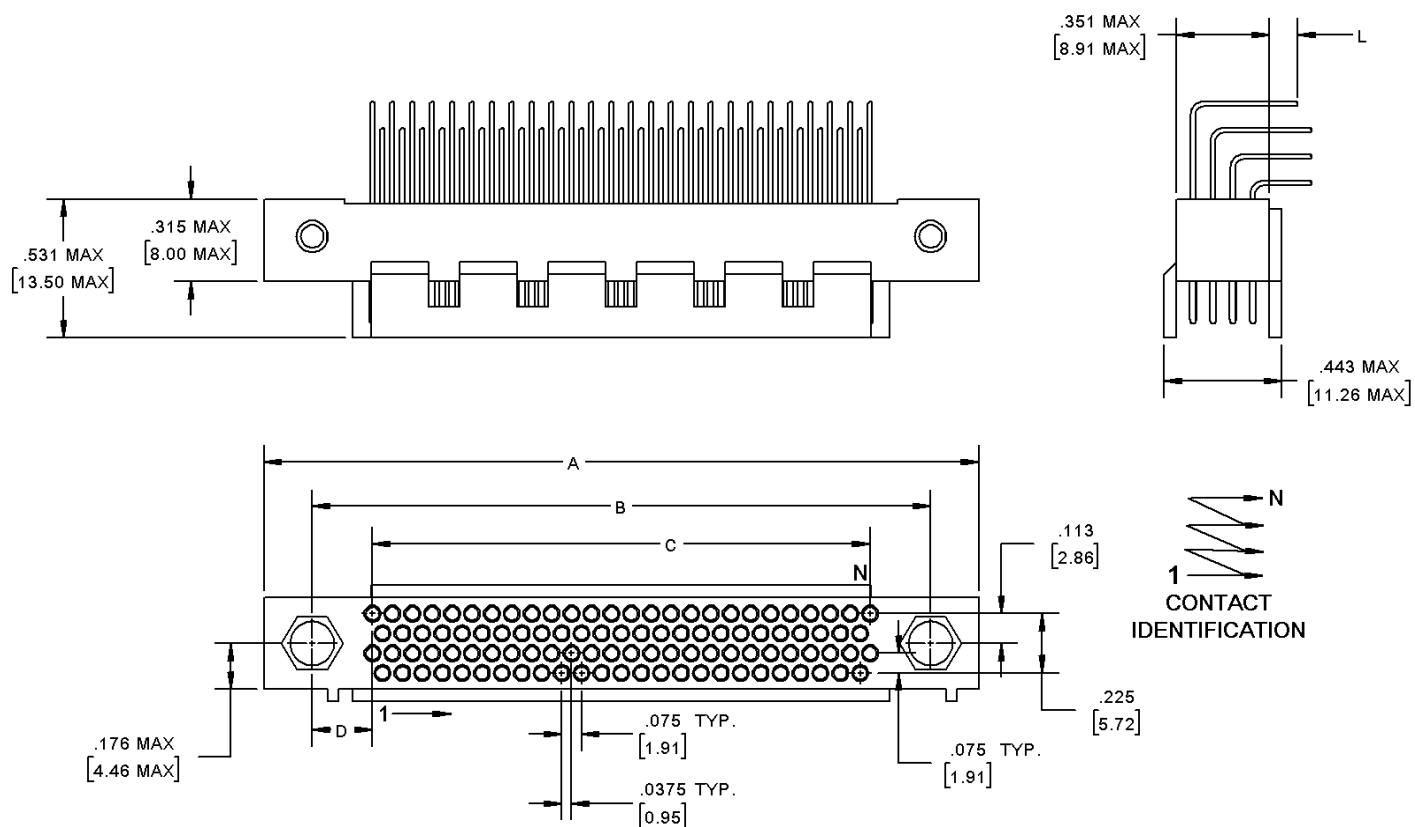


FOR DIMENSION "L" SEE TERMINATION LENGTH ON PAGE #5

No. of Contacts	A MAX	B	C	D
102	2.697 [68.50]	2.330 [59.18]	1.875 [47.625]	.228 [5.78]
202	4.567 [116.00]	4.200 [106.68]	3.750 [95.25]	.225 [5.72]

**REFER TO APPENDIX FOR TERMINATION
DETAILS, HARDWARE STYLES, POLAR-
IZATION CHART, AND PWB PATTERNS**

PLUG, RIGHT ANGLE STYLE MEE

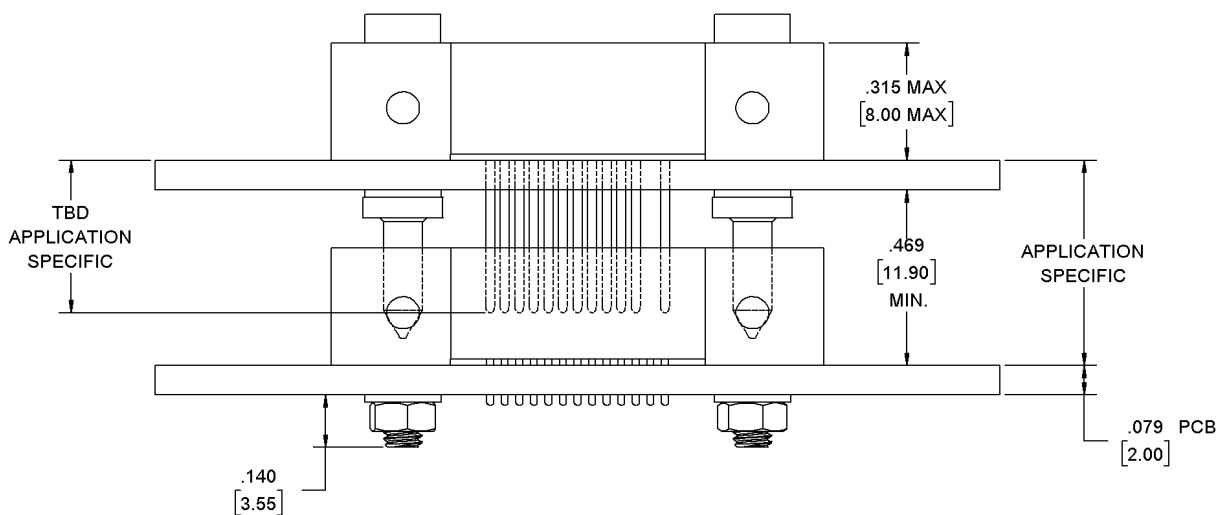
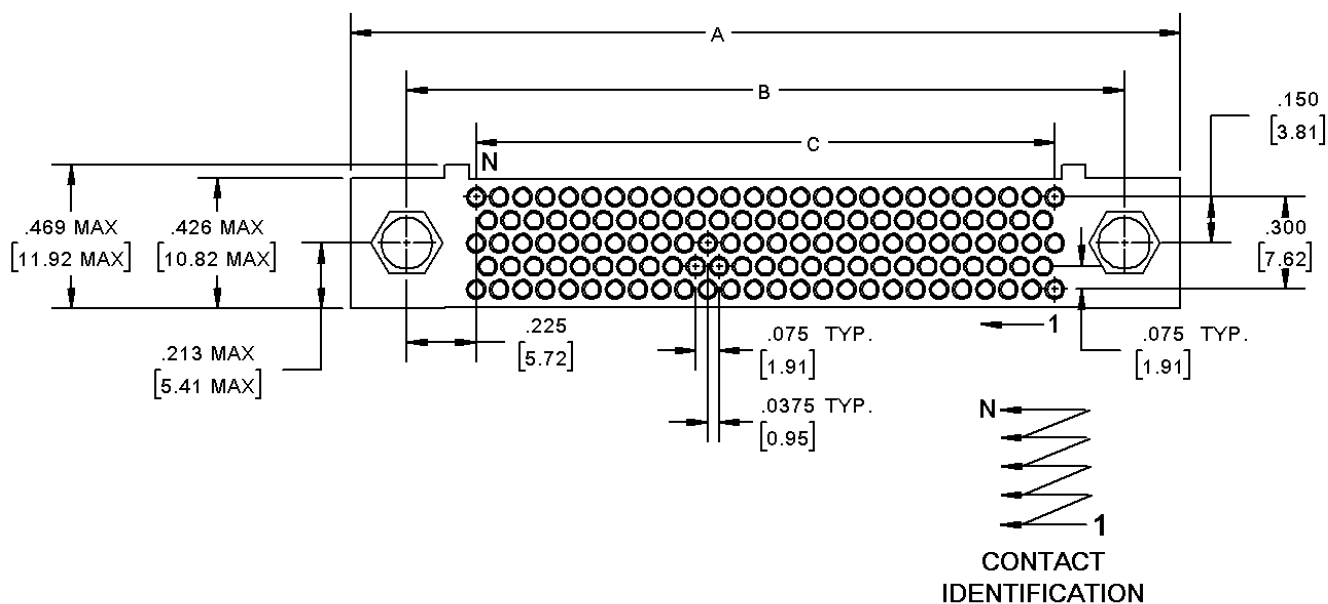


FOR DIMENSION "L" SEE TERMINATION LENGTH ON PAGE #5

No. of Contacts	A MAX	B	C	D
102	2.697 [68.50]	2.330 [59.18]	1.875 [47.625]	.228 [5.78]
202	4.567 [116.00]	4.200 [106.68]	3.750 [95.25]	.225 [5.72]

***REFER TO APPENDIX FOR TERMINATION
DETAILS, HARDWARE STYLES, POLAR-
IZATION CHART, AND PWB PATTERNS**

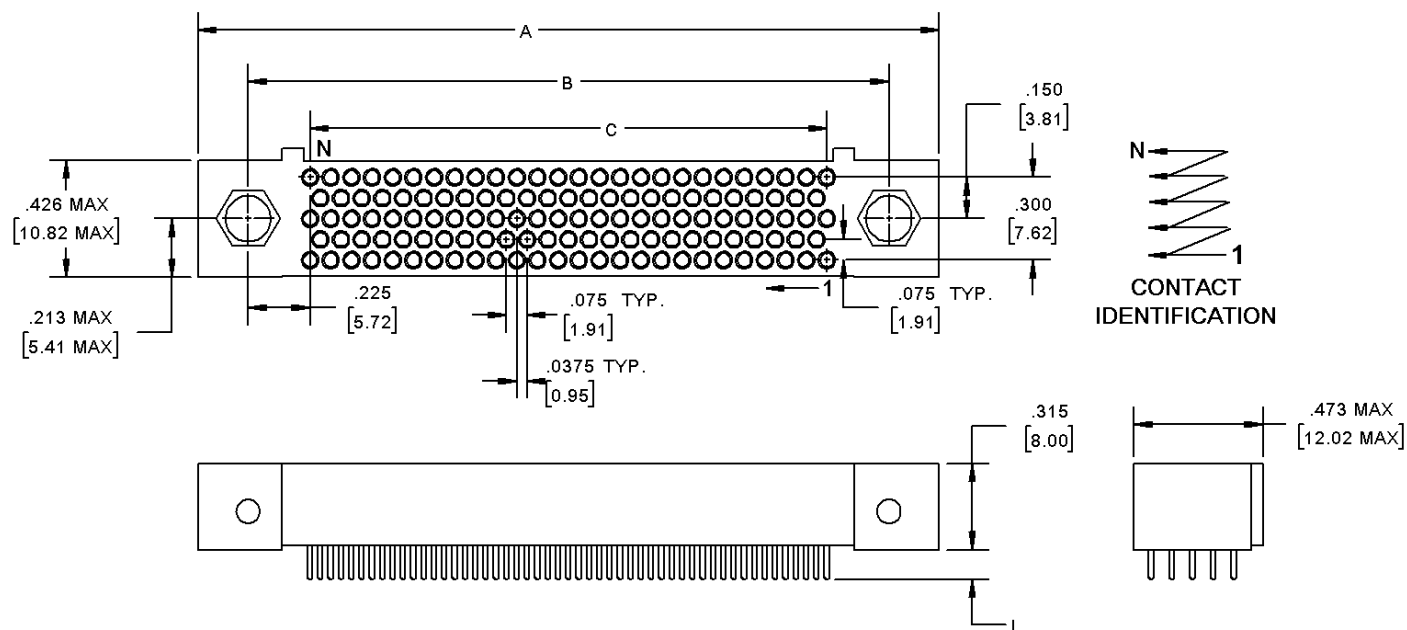
RECEPTACLE, STACKING STYLE FAE9



No. of Contacts	A MAX	B	C
128	2.690 [68.33]	2.322 [58.98]	1.875 [47.625]
253	4.567 [116.00]	4.200 [106.68]	3.750 [95.25]

REFER TO APPENDIX FOR TERMINATION
DETAILS, HARDWARE STYLES, POLAR-
IZATION CHART, AND PWB PATTERNS

RECEPTACLE, STRAIGHT STYLE FDE, FSE

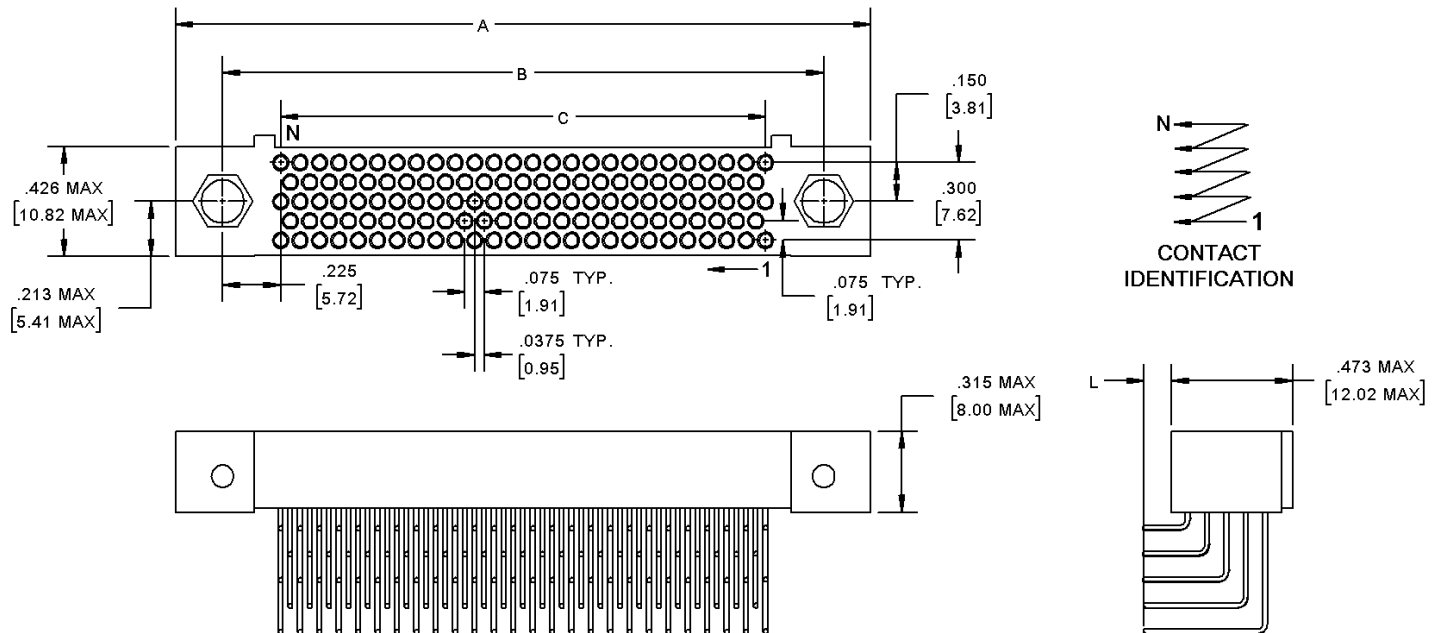


FOR DIMENSION "L" SEE TERMINATION LENGTH ON PAGE #5

No. of Contacts	A MAX	B	C
128	2.690 [68.33]	2.322 [58.98]	1.875 [47.625]
253	4.567 [116.00]	4.200 [106.68]	3.750 [95.25]

***REFER TO APPENDIX FOR TERMINATION DETAILS, HARDWARE STYLES, POLARIZATION CHART, AND PWB PATTERNS**

RECEPTACLE, RIGHT ANGLE STYLE FEE

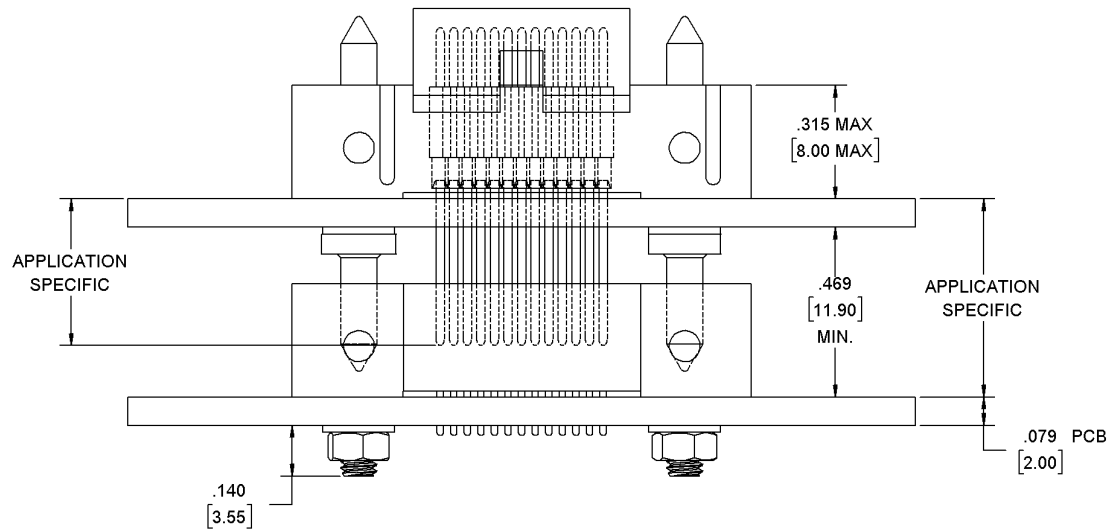
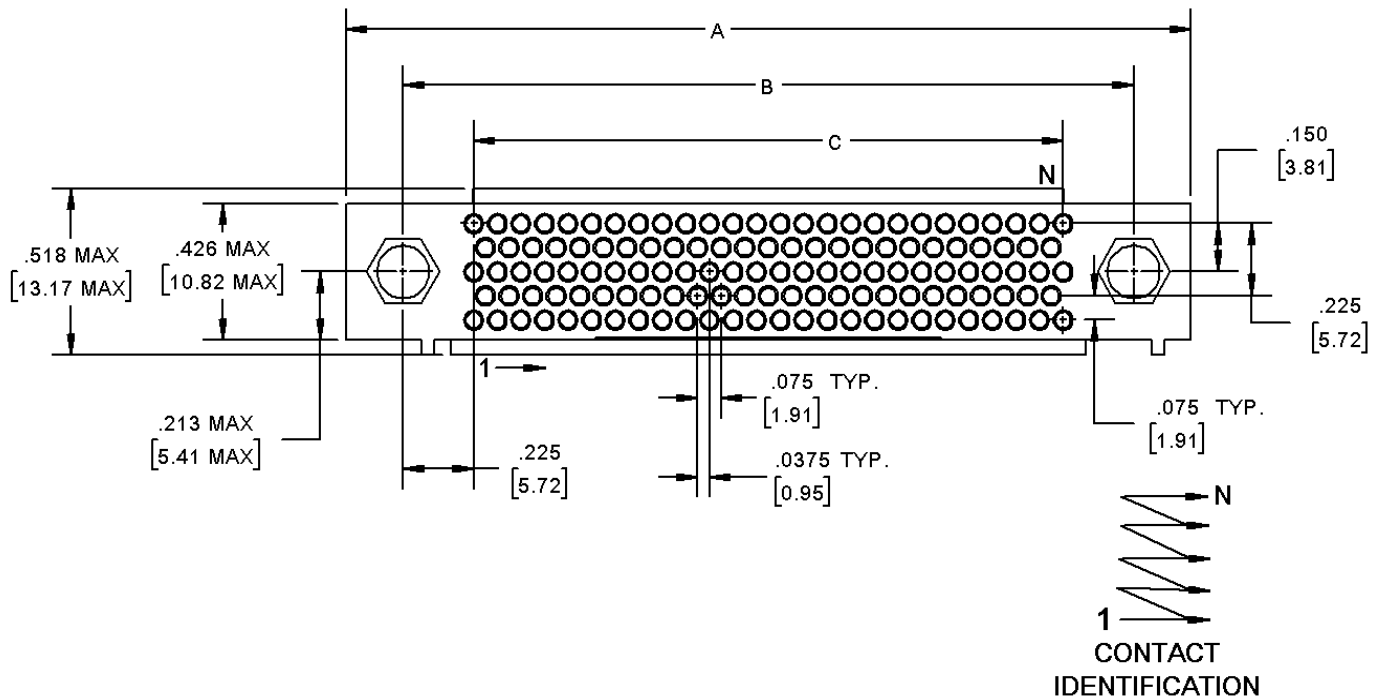


FOR DIMENSION "L" SEE TERMINATION LENGTH ON PAGE #5

No. of Contacts	A MAX	B	C
128	2.690 [68.33]	2.322 [58.98]	1.875 [47.625]
253	4.567 [116.00]	4.200 [106.68]	3.750 [95.25]

REFER TO APPENDIX FOR TERMINATION
DETAILS, HARDWARE STYLES, POLAR-
IZATION CHART, AND PWB PATTERNS

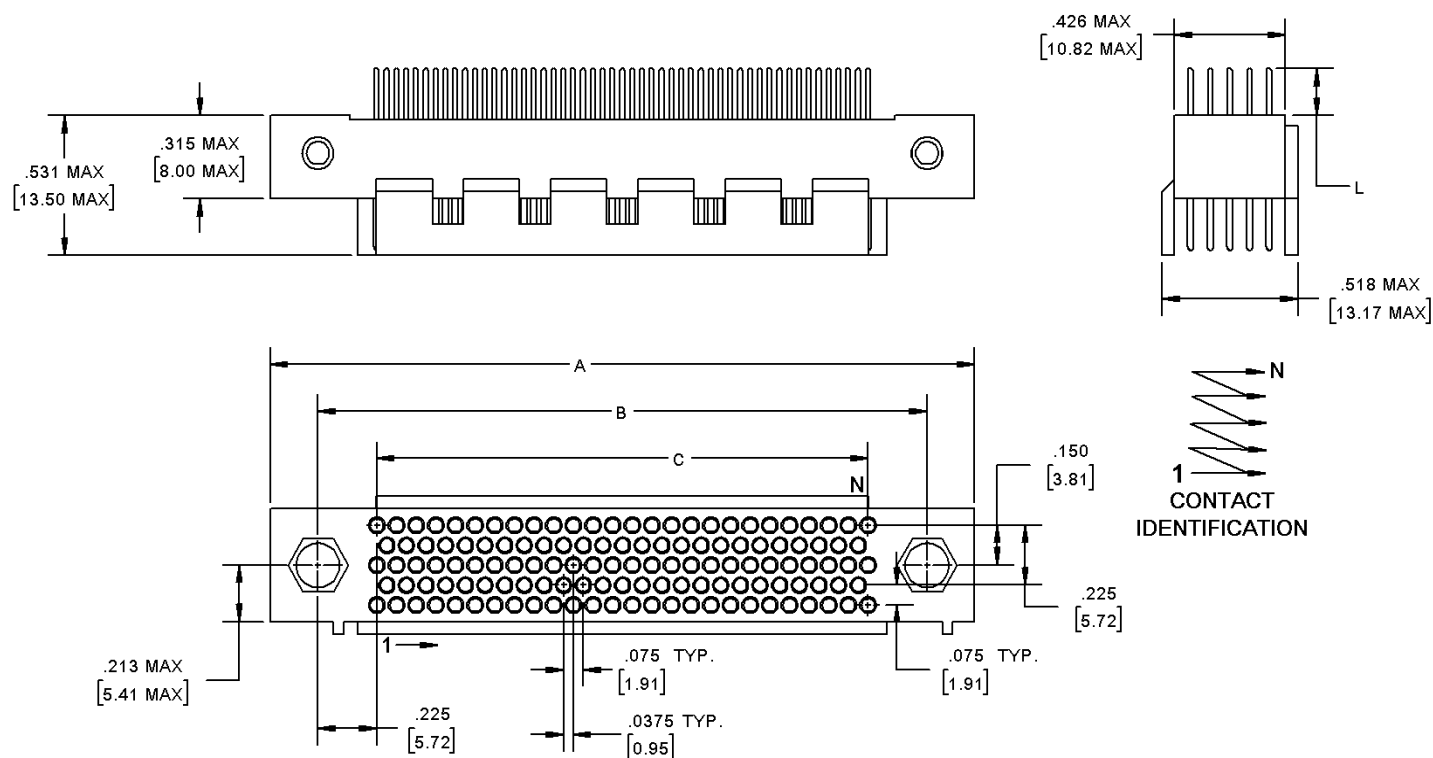
PLUG, STACKING STYLE MAE9



No. of Contacts	A MAX	B	C
128	2.690 [68.33]	2.325 [59.06]	1.875 [47.625]
253	4.567 [116.00]	4.200 [106.68]	3.750 [95.25]

***REFER TO APPENDIX FOR TERMINATION DETAILS, HARDWARE STYLES, POLARIZATION CHART, AND PWB PATTERNS**

PLUG, STRAIGHT STYLE MDE, MSE

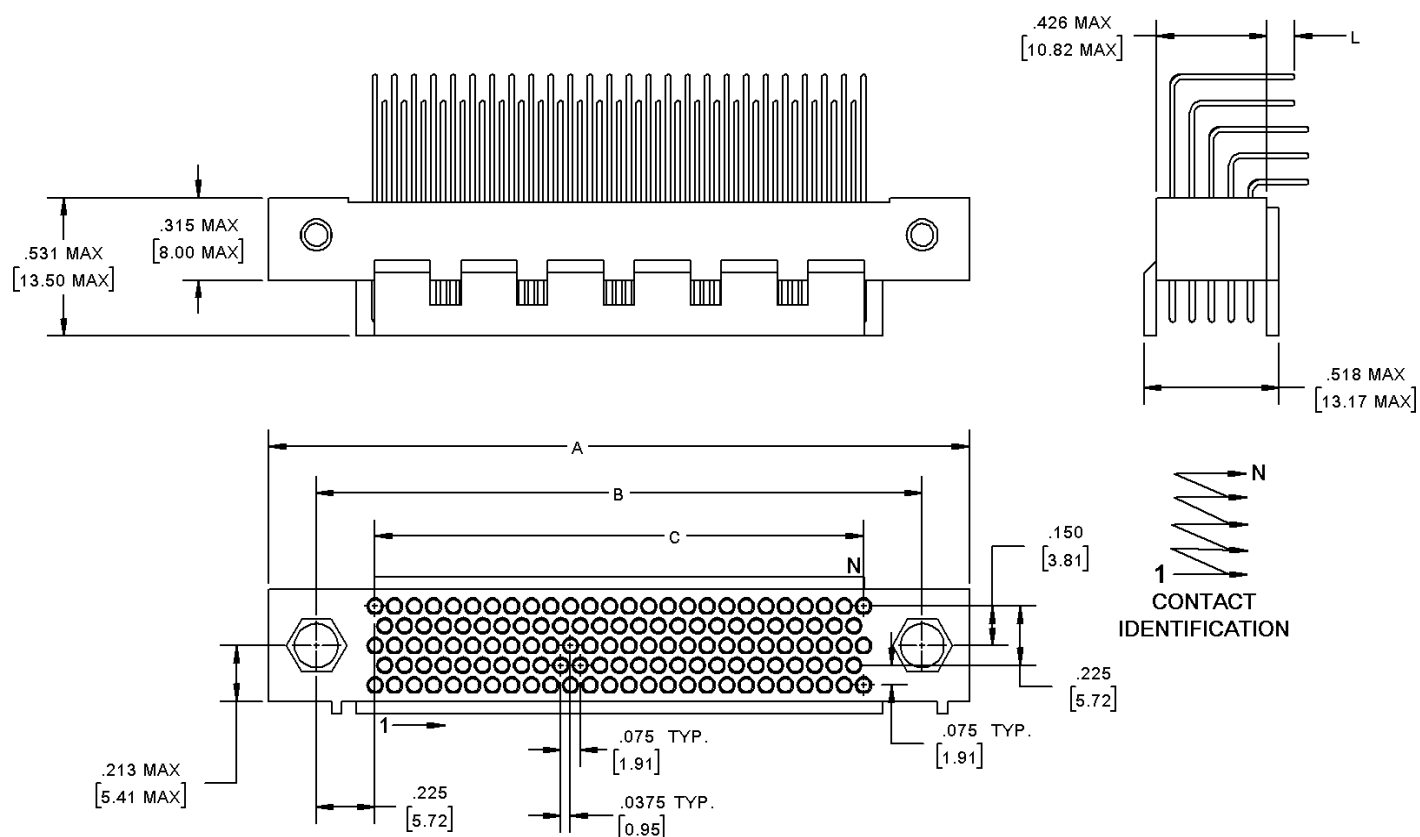


FOR DIMENSION "L" SEE TERMINATION LENGTH ON PAGE #5

No. of Contacts	A MAX	B	C
128	2.690 [68.33]	2.322 [58.98]	1.875 [47.625]
253	4.567 [116.00]	4.200 [106.68]	3.750 [95.25]

***REFER TO APPENDIX FOR TERMINATION
DETAILS, HARDWARE STYLES, POLAR-
IZATION CHART, AND PWB PATTERNS**

PLUG, RIGHT ANGLE STYLE MEE

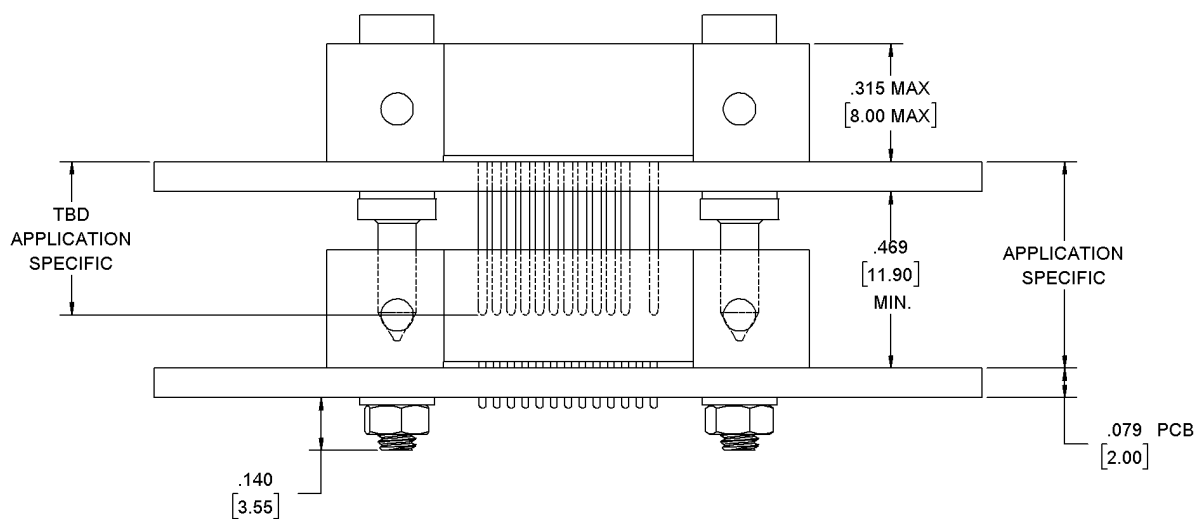
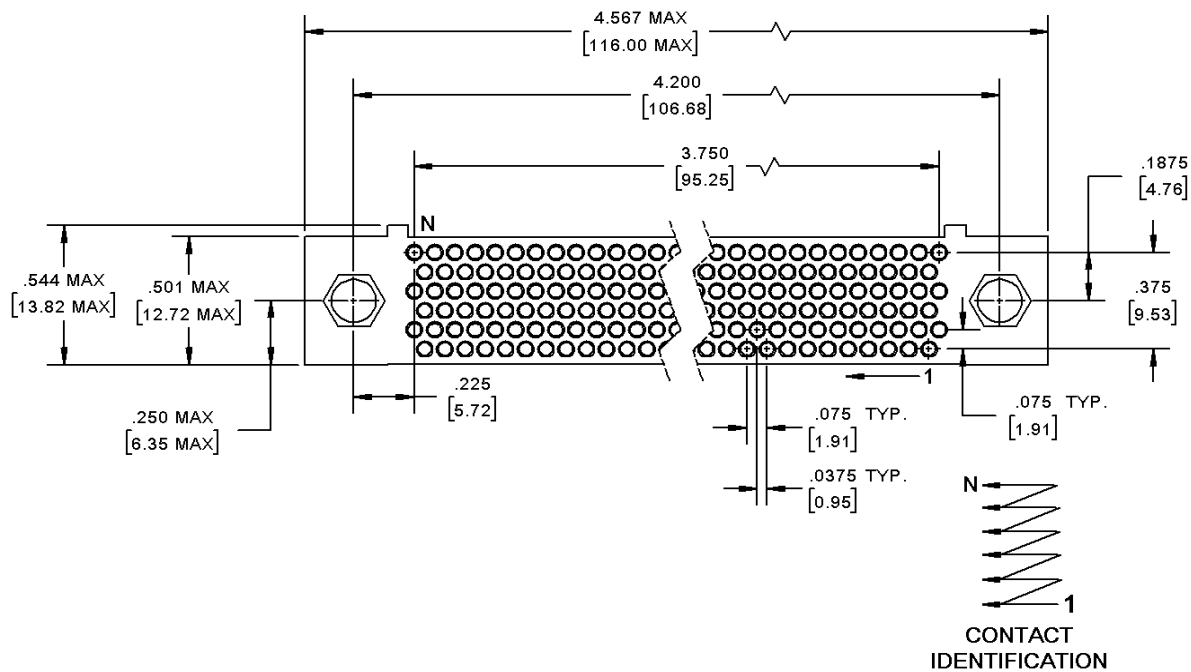


FOR DIMENSION "L" SEE TERMINATION LENGTH ON PAGE #5

No. of Contacts	A MAX	B	C
128	2.690 [68.33]	2.322 [58.98]	1.875 [47.625]
253	4.567 [116.00]	4.200 [106.68]	3.750 [95.25]

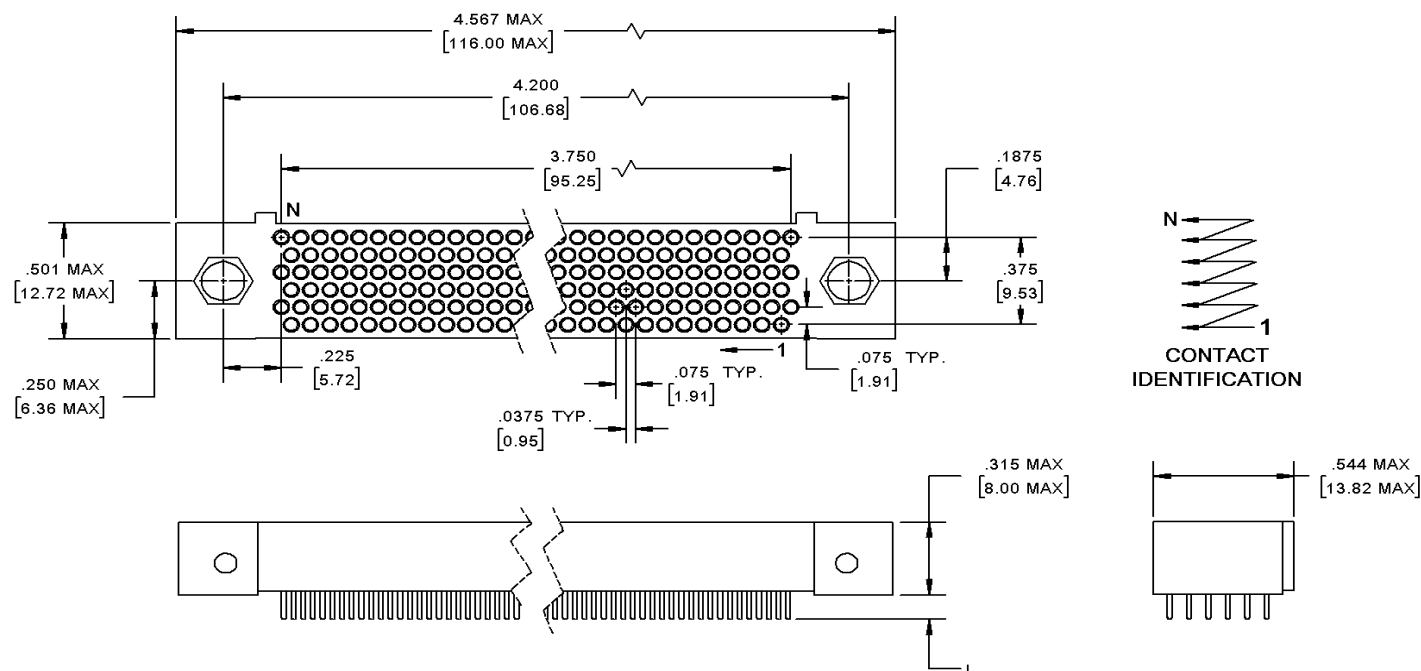
REFER TO APPENDIX FOR TERMINATION
DETAILS, HARDWARE STYLES, POLAR-
IZATION CHART, AND PWB PATTERNS

RECEPTACLE, STACKING 303 STYLE FAE9



***REFER TO APPENDIX FOR TERMINATION
DETAILS, HARDWARE STYLES, POLAR-
IZATION CHART, AND PWB PATTERNS**

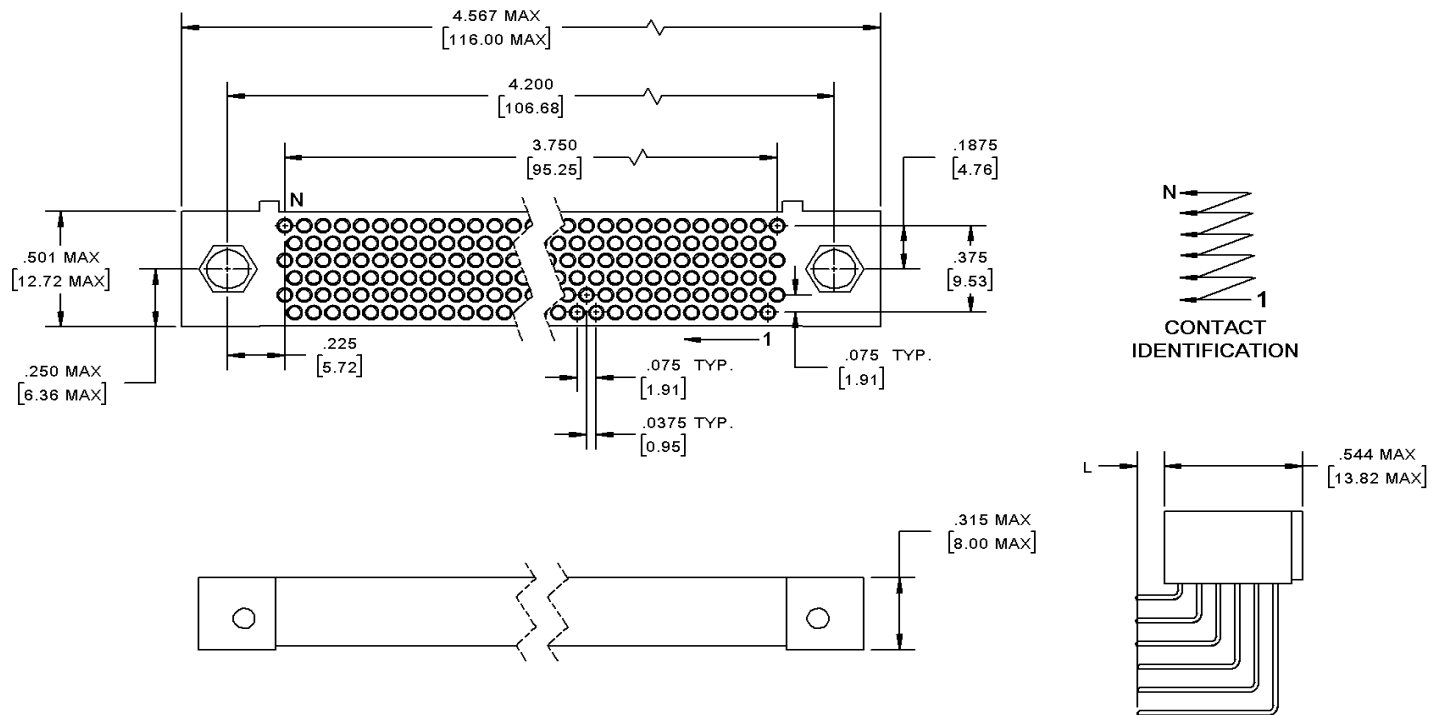
RECEPTACLE, STRAIGHT 303 STYLE FDE, FSE



FOR DIMENSION "L" SEE TERMINATION LENGTH ON PAGE #5

REFER TO APPENDIX FOR TERMINATION
DETAILS, HARDWARE STYLES, POLAR-
IZATION CHART, AND PWB PATTERNS

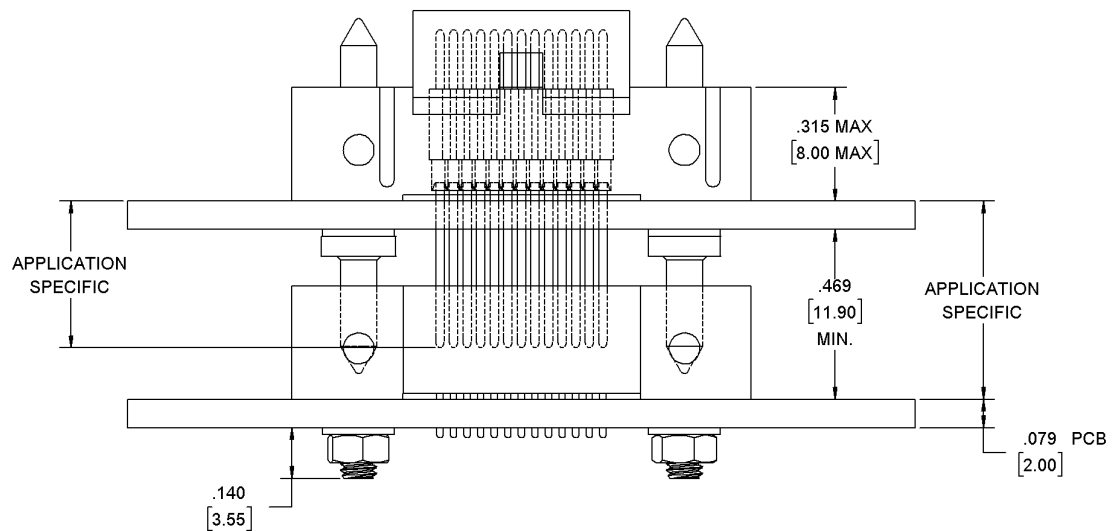
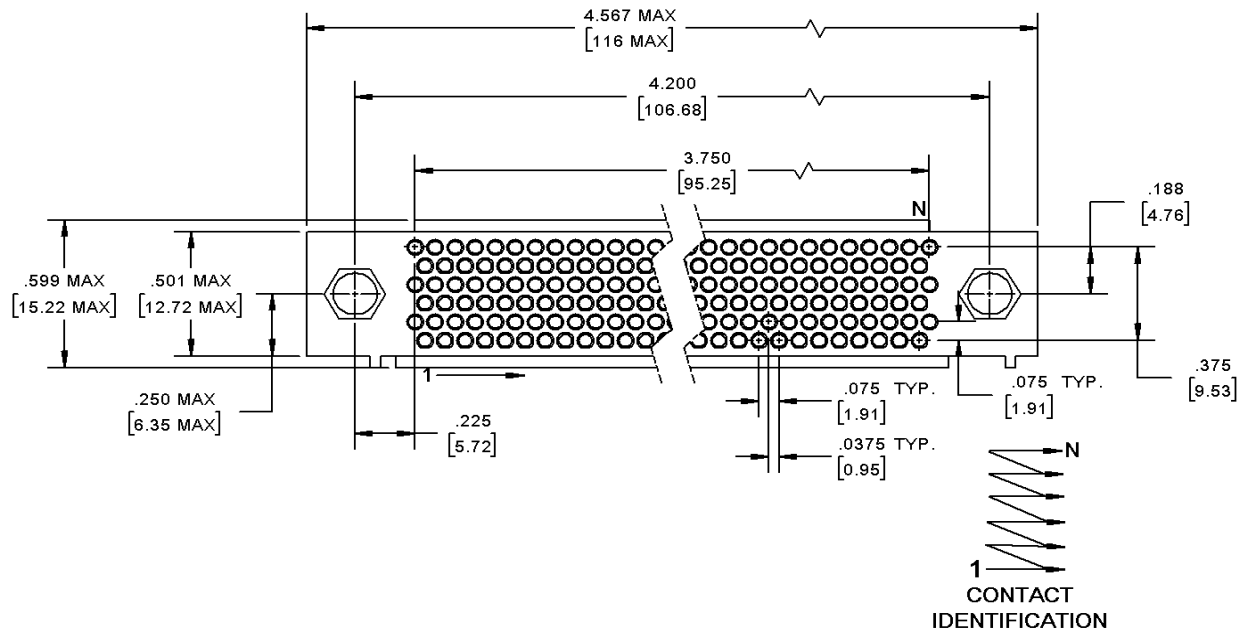
RECEPTACLE, RIGHT ANGLE 303 STYLE FEE



FOR DIMENSION "L" SEE TERMINATION LENGTH ON PAGE #5

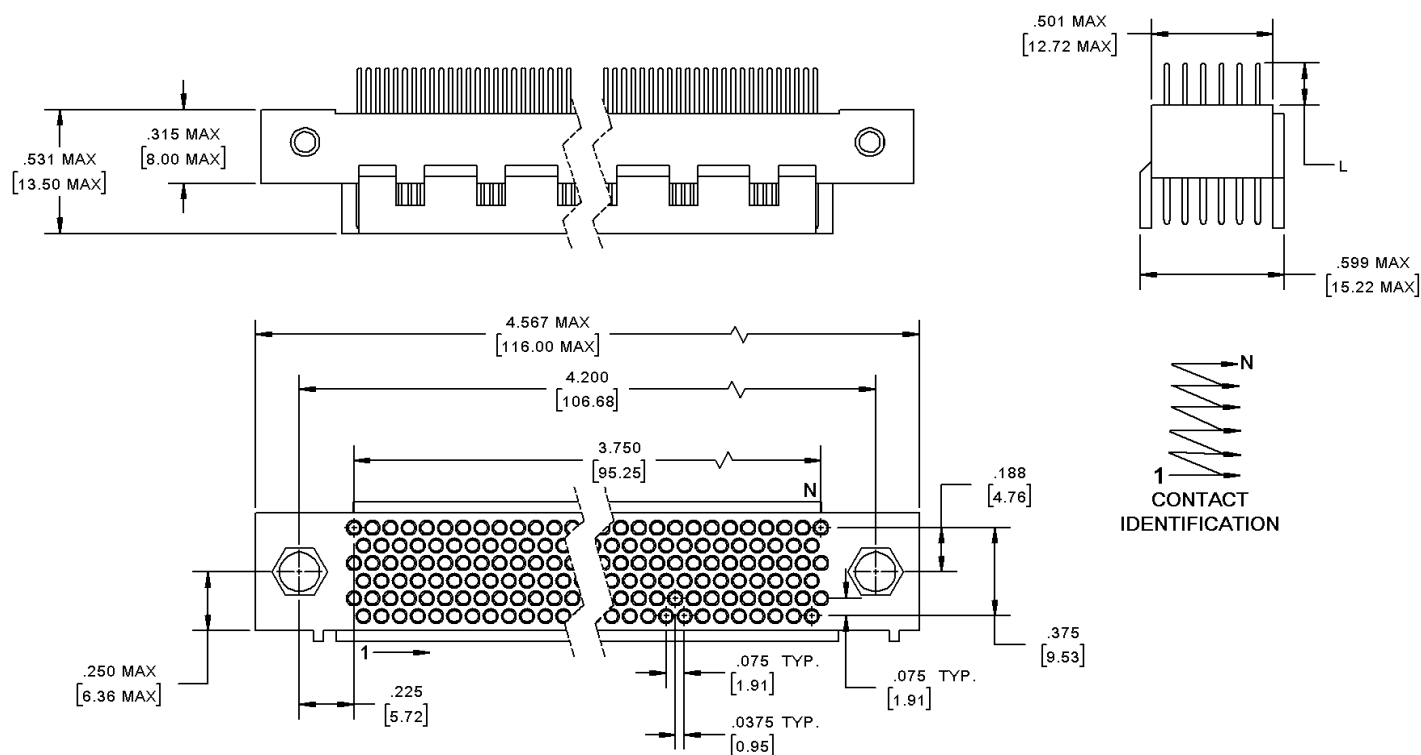
***REFER TO APPENDIX FOR TERMINATION
DETAILS, HARDWARE STYLES, POLAR-
IZATION CHART, AND PWB PATTERNS**

PLUG STACKING 303 STYLE MAE9



***REFER TO APPENDIX FOR TERMINATION
DETAILS, HARDWARE STYLES, POLAR-
IZATION CHART, AND PWB PATTERNS**

PLUG, STRAIGHT 303 STYLE MDE, MSE



FOR DIMENSION "L" SEE TERMINATION LENGTH ON PAGE #5

REFER TO APPENDIX FOR TERMINATION
DETAILS, HARDWARE STYLES, POLAR-
IZATION CHART, AND PWB PATTERNS

Technical drawing of the 100-pin connector showing top, side, and detail views with dimensions in inches and millimeters.

Top View Dimensions:

- Overall width: 4.567 MAX [116.00 MAX]
- Distance from left edge to center of first pin: 4.200 [106.68]
- Distance between pin centers: 3.750 [95.25]
- Distance from center of last pin to right edge: 3.750 [95.25]
- Pin pitch: .075 TYP. [1.91]
- Pin diameter: .0375 TYP. [0.95]
- Distance from left edge to center of first pin (alternative): 4.200 [106.68]
- Distance from center of last pin to right edge (alternative): 3.750 [95.25]
- Distance from left edge to center of first pin (alternative): 4.200 [106.68]
- Distance from center of last pin to right edge (alternative): 3.750 [95.25]

Side View Dimensions:

- Overall height: .531 MAX [13.50 MAX]
- Distance from top edge to center of first pin: .315 MAX [8.00 MAX]
- Distance from bottom edge to center of first pin: .501 MAX [12.72 MAX]
- Distance from top edge to center of last pin: .599 MAX [15.22 MAX]
- Distance from bottom edge to center of last pin: .501 MAX [12.72 MAX]

Detail View Dimensions:

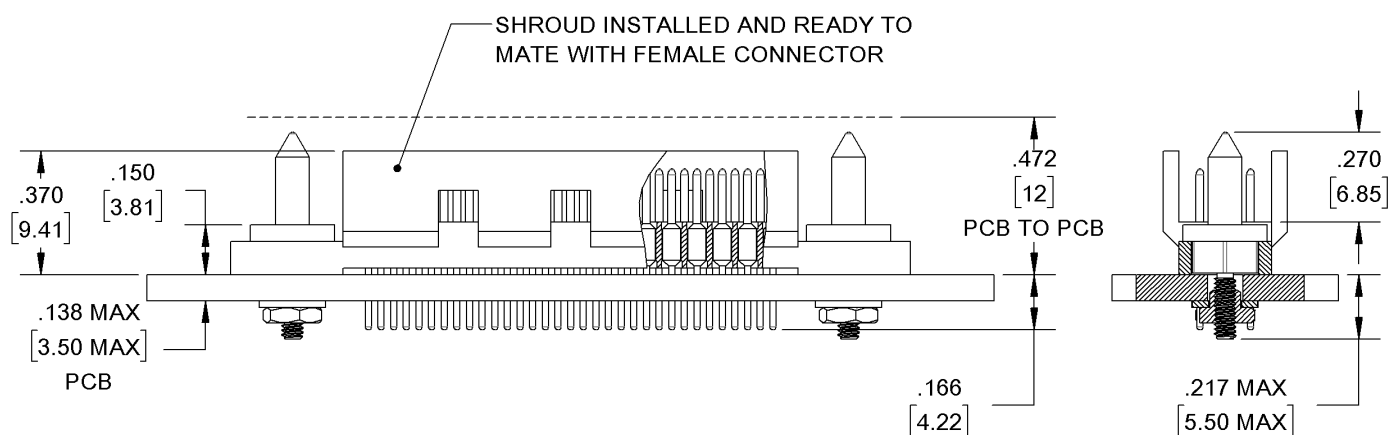
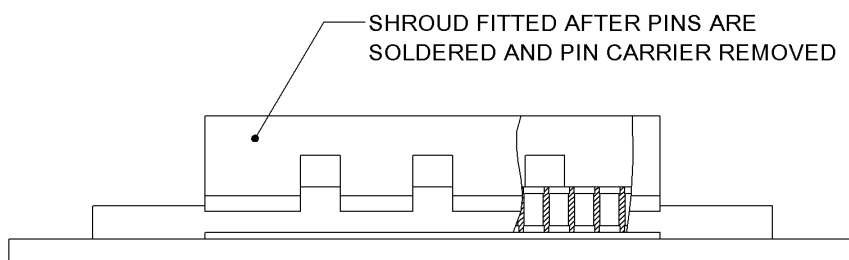
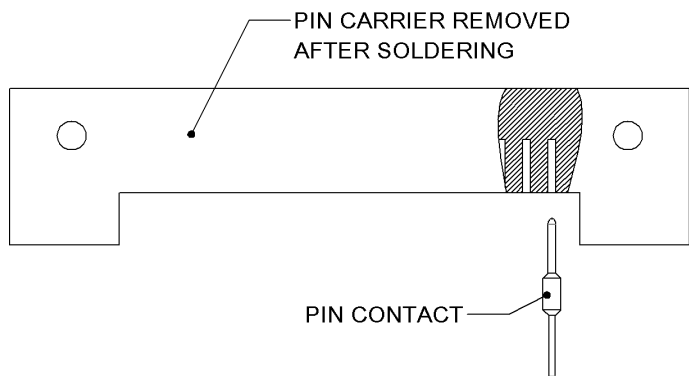
- Distance from left edge to center of first pin: .250 MAX [6.36 MAX]
- Distance from center of last pin to right edge: .225 [5.72]
- Distance from left edge to center of first pin (alternative): .250 MAX [6.36 MAX]
- Distance from center of last pin to right edge (alternative): .225 [5.72]

CONTACT IDENTIFICATION:

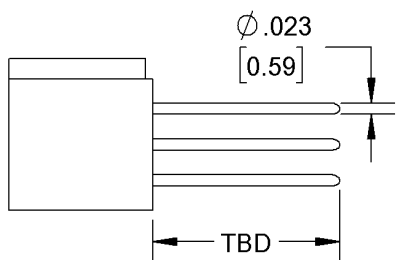
- 1: Contact 1
- N: Contact N

***REFER TO APPENDIX FOR TERMINATION
DETAILS, HARDWARE STYLES, POLAR-
IZATION CHART, AND PWB PATTERNS**

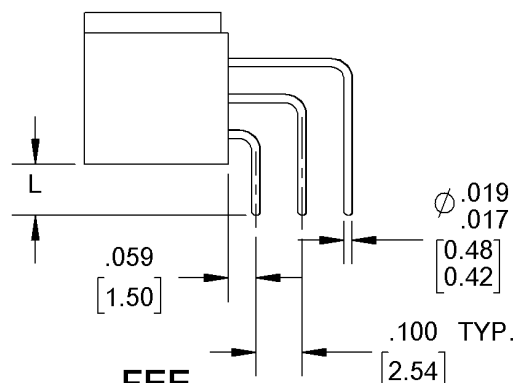
PLUG, PIN CARRIER, SHROUD STYLE MPE



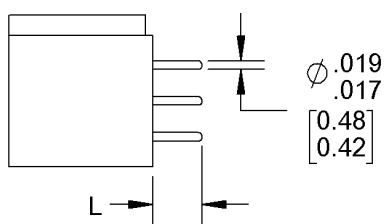
TERMINATION STYLES RECEPTACLE HARDWARE OMITTED FOR CLARITY



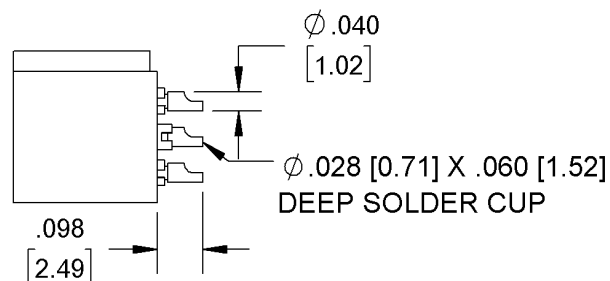
**FAE9
STACKING**



**FEE
DIP SOLDER
RIGHT ANGLE**



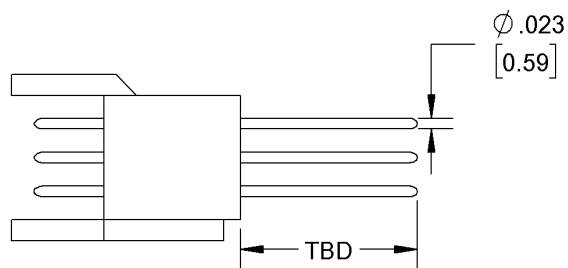
**FDE
DIP SOLDER
STRAIGHT**



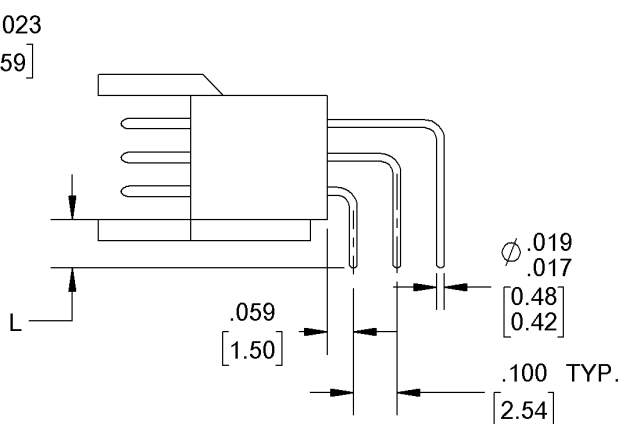
**FSE
SOLDER CUP**

FOR DIMENSION "L" SEE TERMINATION LENGTH ON PAGE #5

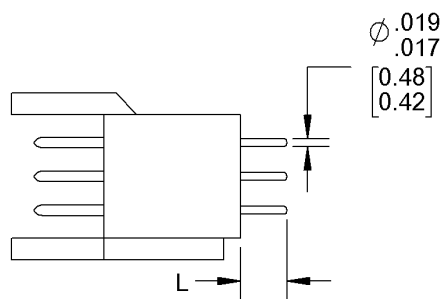
TERMINATION STYLES **PLUG** **HARDWARE OMITTED FOR CLARITY**



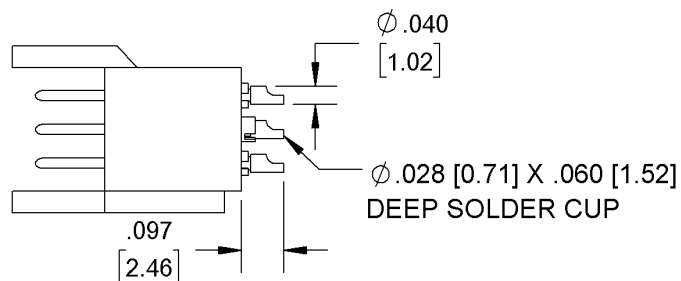
**FAE9
STACKING**



**FEE
DIP SOLDER
RIGHT ANGLE**



**FDE
DIP SOLDER
STRAIGHT**

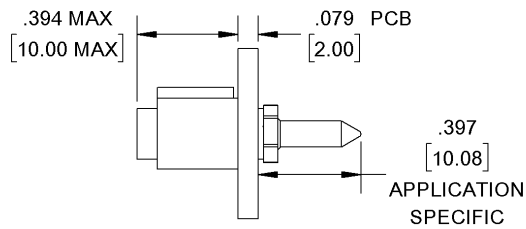


**FSE
SOLDER CUP**

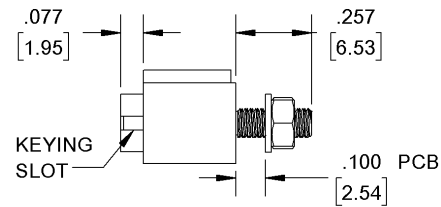
FOR DIMENSION "L" SEE TERMINATION LENGTH ON PAGE #5

HARDWARE STYLES

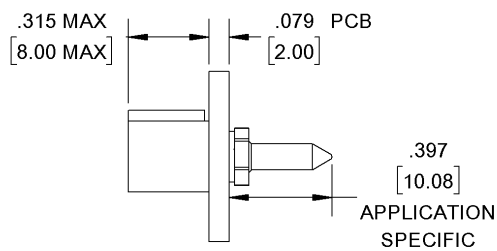
GUIDE SOCKETS



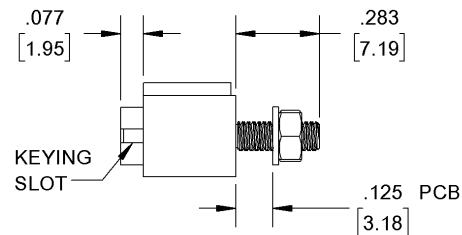
A
GUIDE SOCKET WITH GUIDE
PIN (STACKING)



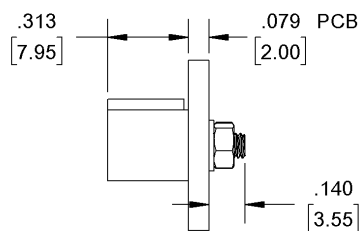
D
KEYED SOCKET WITH
MOUNTING STUD



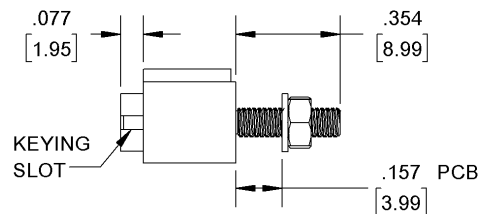
B
GUIDE SOCKET WITH GUIDE
PIN (STACKING TO
STACKING)



E
KEYED SOCKET WITH
MOUNTING STUD

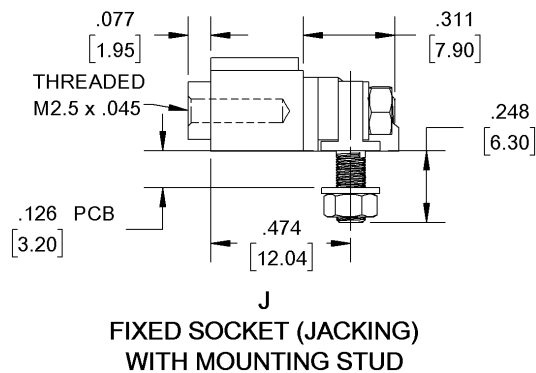
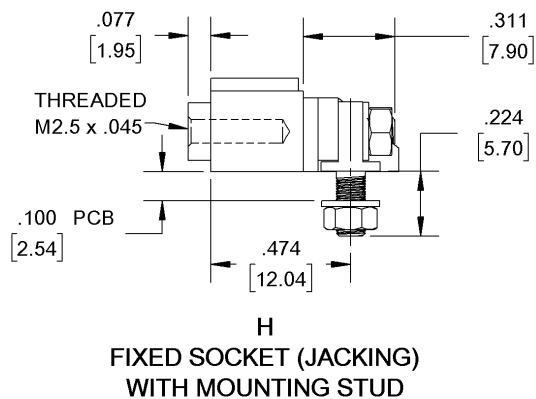
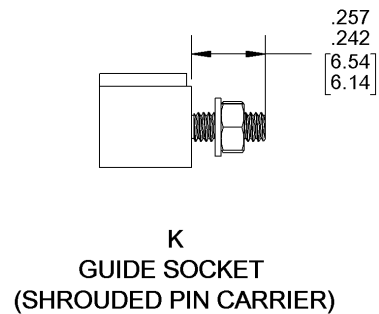
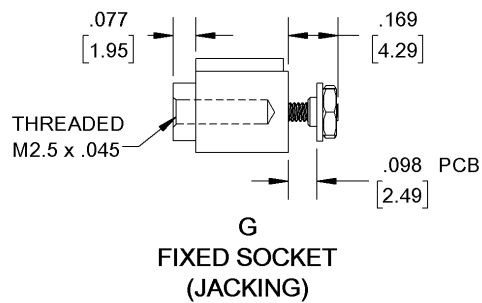


C
GUIDE SOCKET WITH
MOUNTING (STACKING)



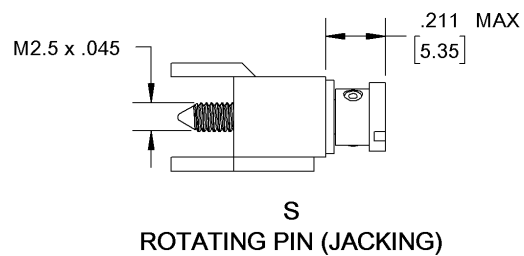
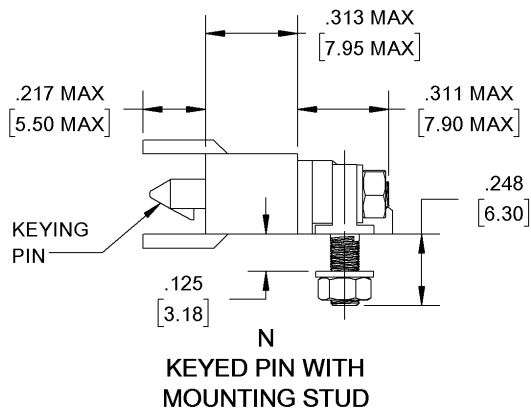
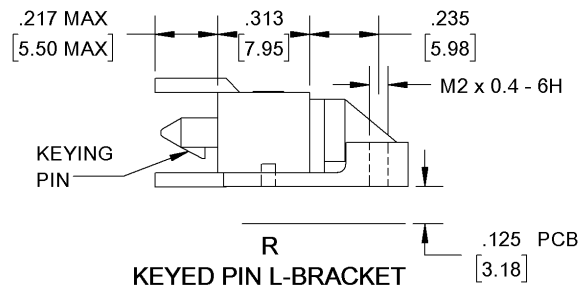
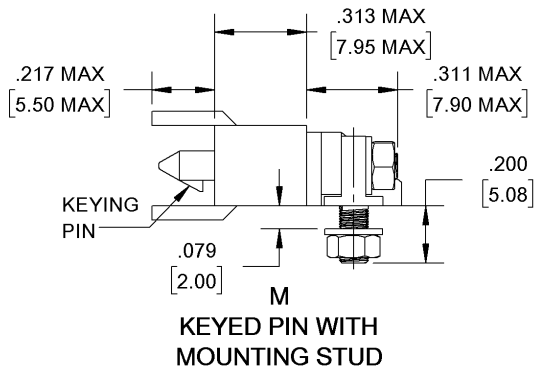
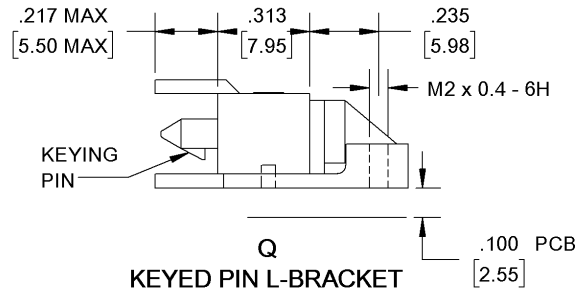
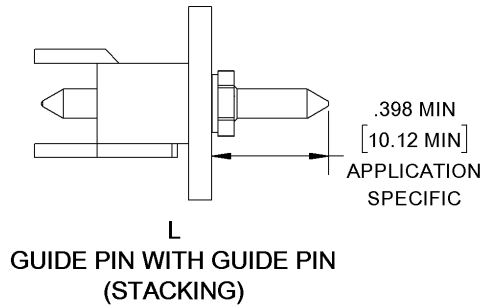
F
KEYED SOCKET WITH
MOUNTING STUD

HARDWARE STYLES GUIDE SOCKETS



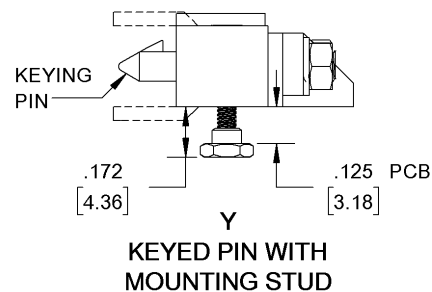
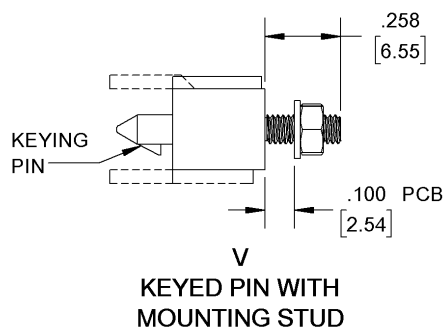
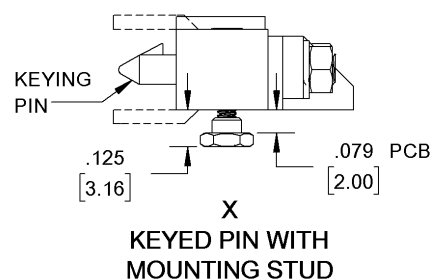
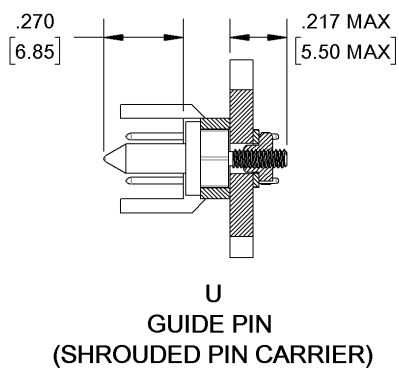
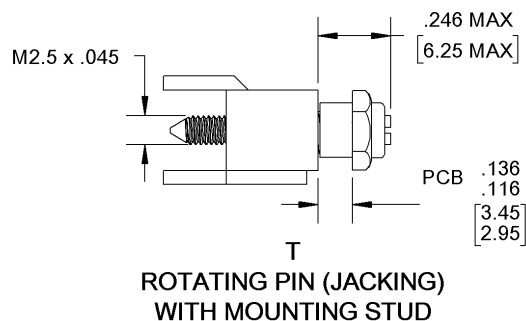
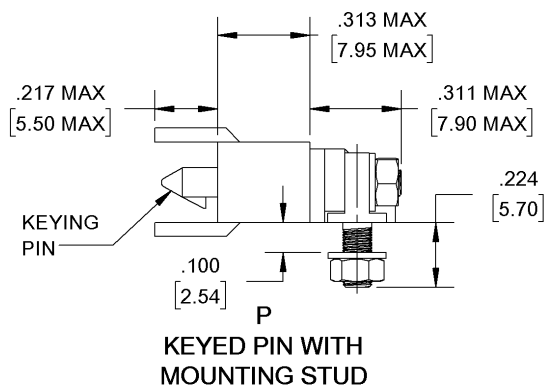
HARDWARE STYLES

GUIDE PINS



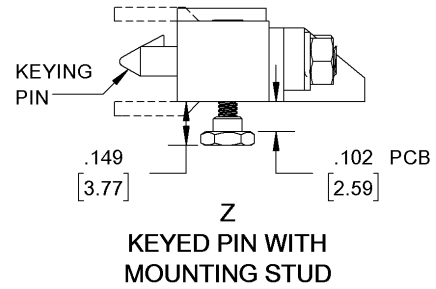
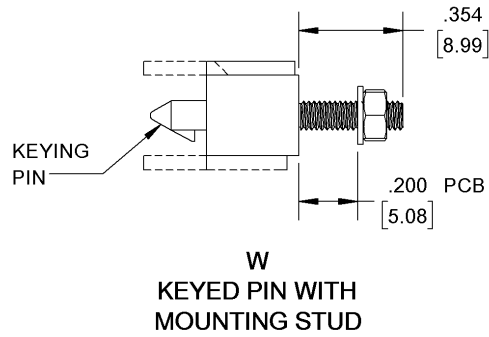
HARDWARE STYLES

GUIDE PINS



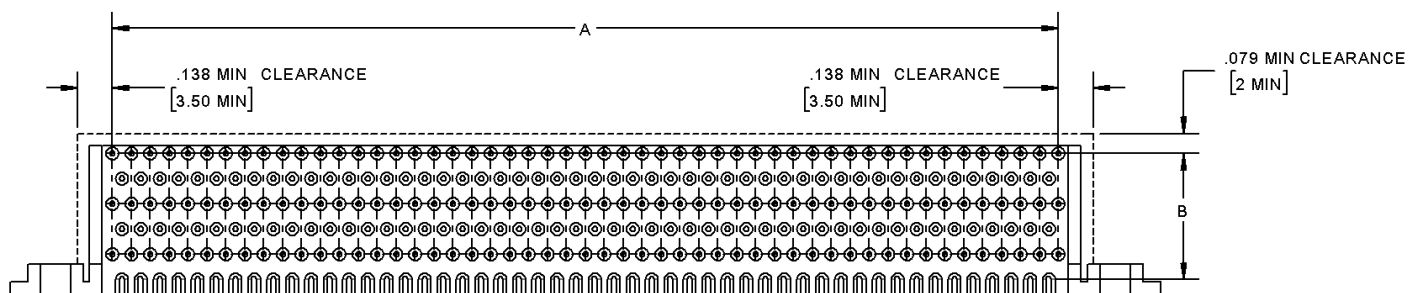
HARDWARE STYLES

GUIDE PINS



ALIGNMENT COMBS

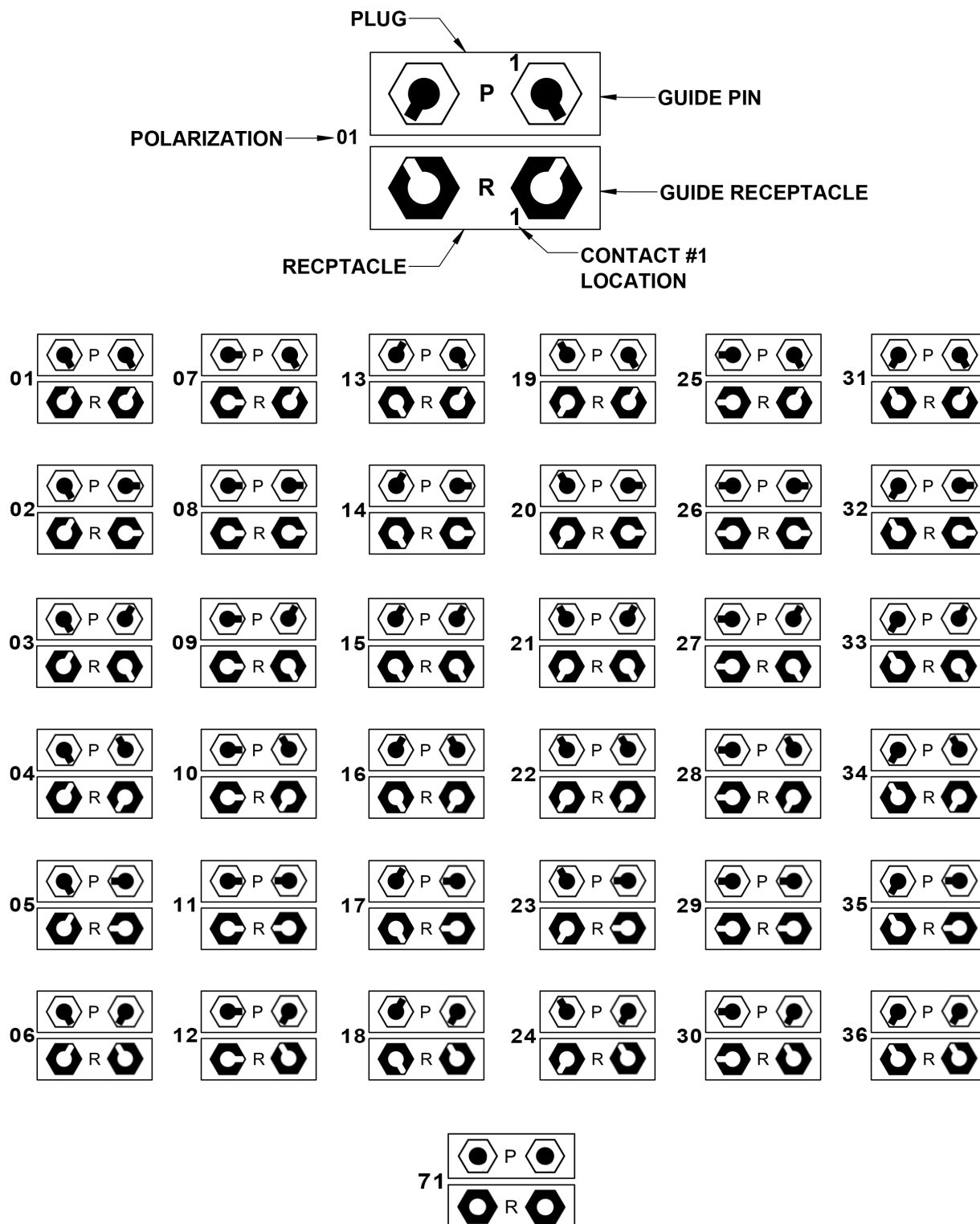
FOR ALL RIGHT ANGLE BODY STYLES



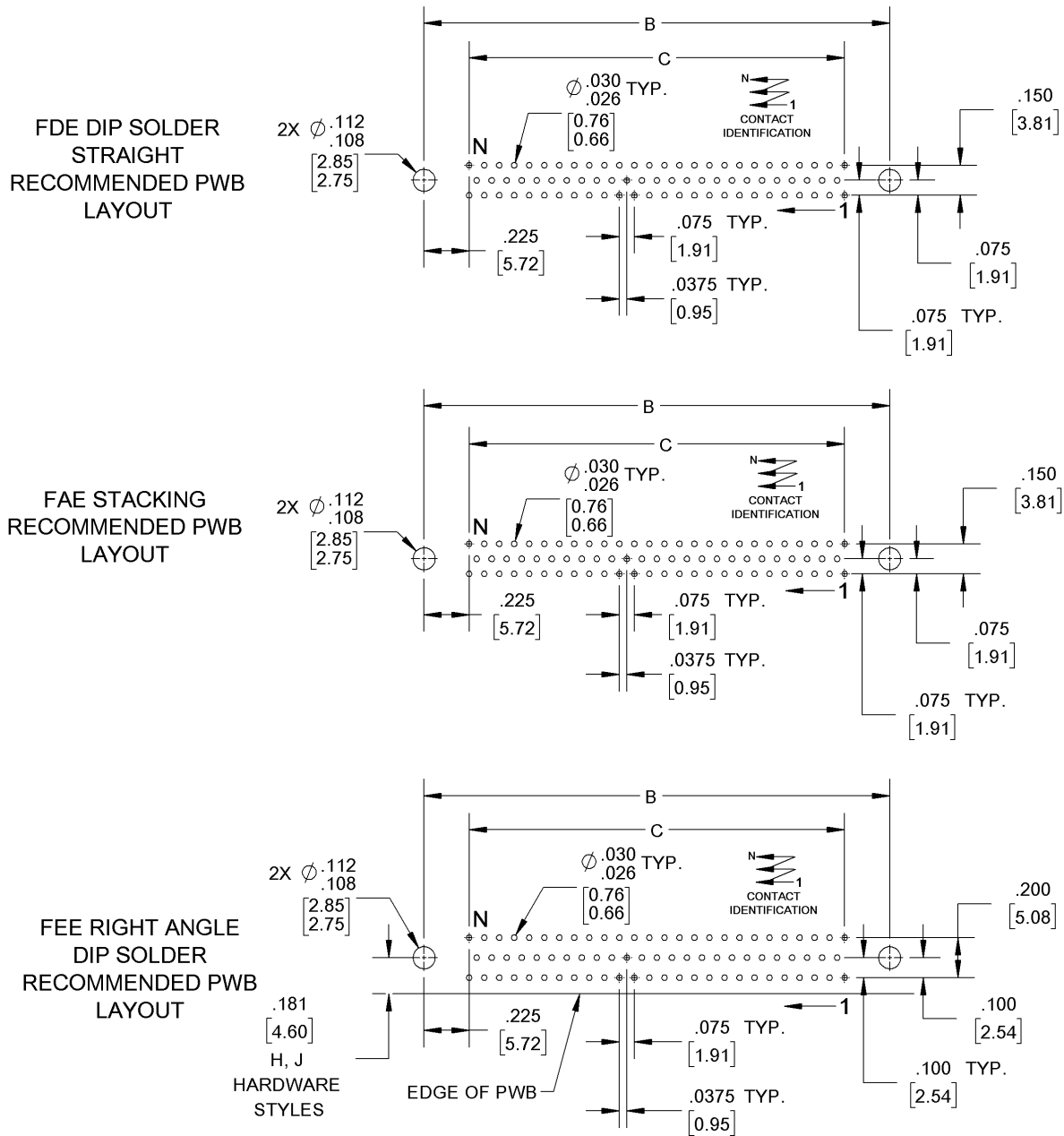
MAINTAIN CLEARANCES SHOWN FOR ALL RIGHT ANGLE BODY STYLES
TO ALLOW FOR ALIGNMENT COMB
(6 row 303 pin comb shown, applies to all right angle styles)

No. of Contacts	A	B
20	0.450 [11.43]	.200 [5.08]
50	1.200 [30.48]	.200 [5.08]
77	1.875 [47.63]	.200 [5.08]
102	1.875 [47.625]	.225 [5.72]
119	2.925 [74.26]	.200 [5.08]
128	1.875 [47.625]	.400 [10.16]
152	3.750 [95.25]	.200 [5.08]
202	3.750 [95.25]	.225 [5.72]
253	3.750 [95.25]	.400 [10.16]
303	3.750 [95.25]	.501 [12.72]

Polarization Chart AS VIEWED FROM THE MATING FACE



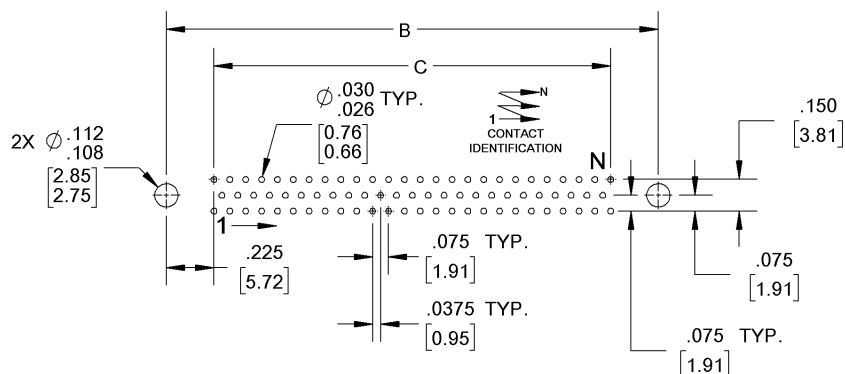
**PWB PATTERN
3 ROW RECEPTACLE
AS VIEWED FROM THE CONNECTOR SIDE**



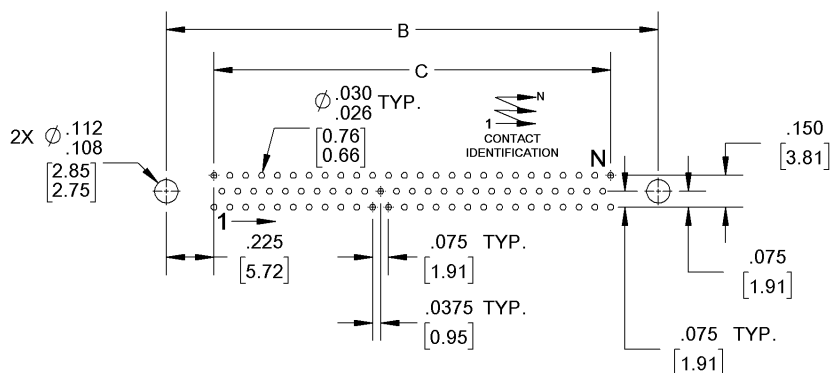
No. of Contacts	B	C
20	0.900 [22.86]	0.450 [11.43]
50	1.650 [41.91]	1.200 [30.48]
77	2.325 [59.06]	1.875 [47.63]
119	3.375 [85.73]	2.925 [74.26]
152	4.200 [106.68]	3.750 [95.25]

PWB PATTERN **3 ROW PLUG** *AS VIEWED FROM THE CONNECTOR SIDE*

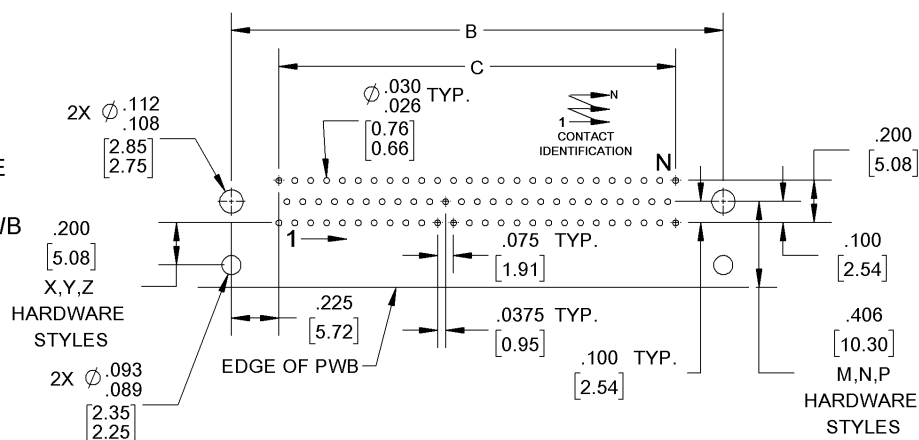
MDE DIP SOLDER
STRAIGHT
RECOMMENDED PWB
LAYOUT



MAE STACKING
RECOMMENDED PWB
LAYOUT



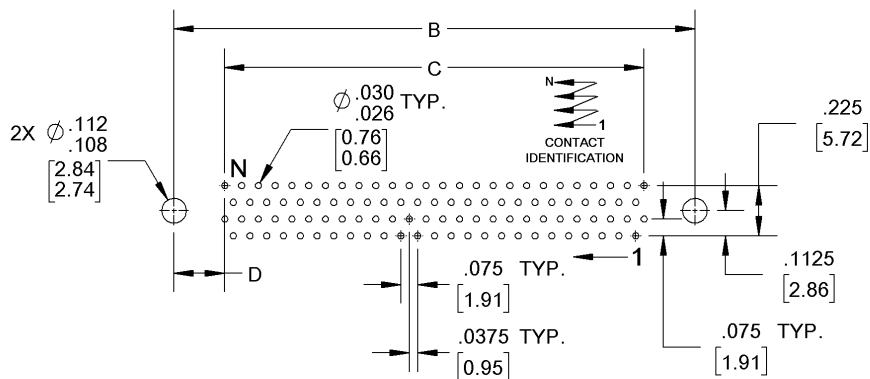
MEE RIGHT ANGLE
DIP SOLDER
RECOMMENDED PWB
LAYOUT



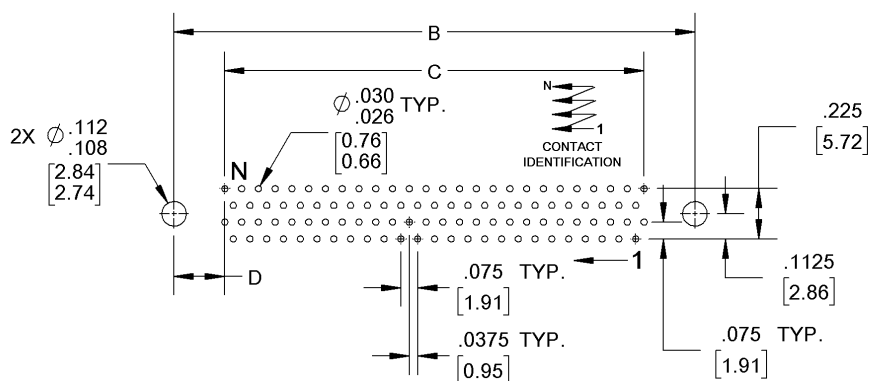
No. of Contacts	B	C
20	0.900 [22.86]	0.450 [11.43]
50	1.650 [41.91]	1.200 [30.48]
77	2.325 [59.06]	1.875 [47.63]
119	3.375 [85.73]	2.925 [74.26]
152	4.200 [106.68]	3.750 [95.25]

PWB PATTERN 4 ROW RECEPTACLE *AS VIEWED FROM THE CONNECTOR SIDE*

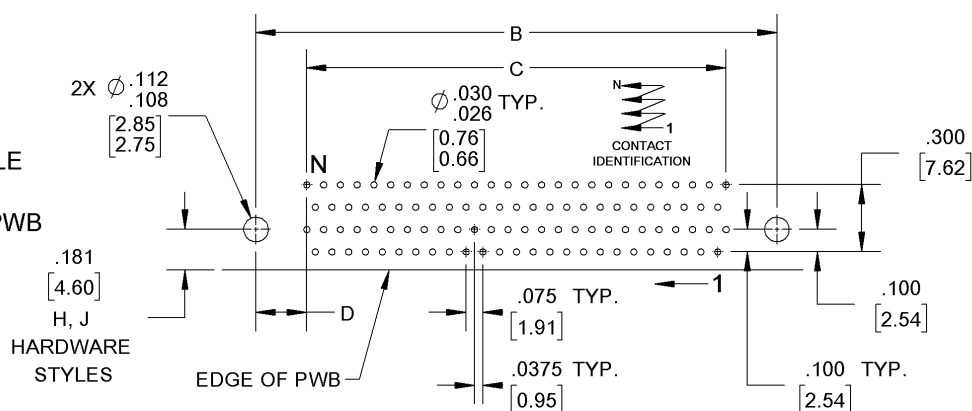
FDE DIP SOLDER
STRAIGHT
RECOMMENDED PWB
LAYOUT



FAE STACKING
RECOMMENDED PWB
LAYOUT

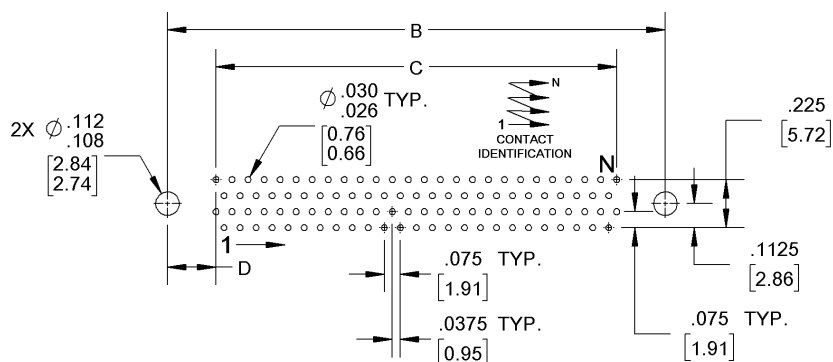


FEE RIGHT ANGLE
DIP SOLDER
RECOMMENDED PWB
LAYOUT

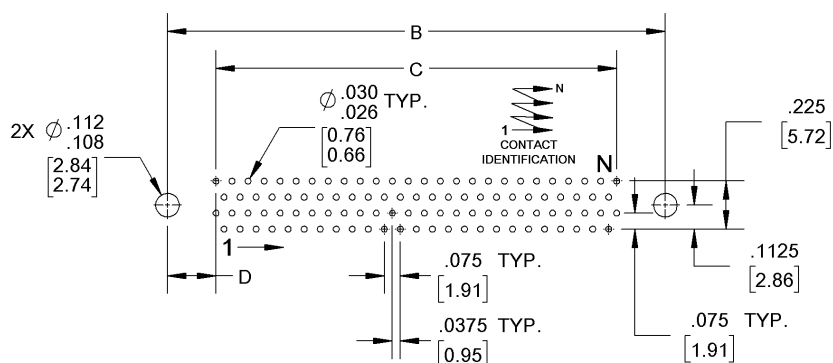


No. of Contacts	B	C	D
102	2.330 [59.18]	1.875 [47.625]	.228 [5.78]
202	4.200 [106.68]	3.750 [95.25]	.225 [5.72]

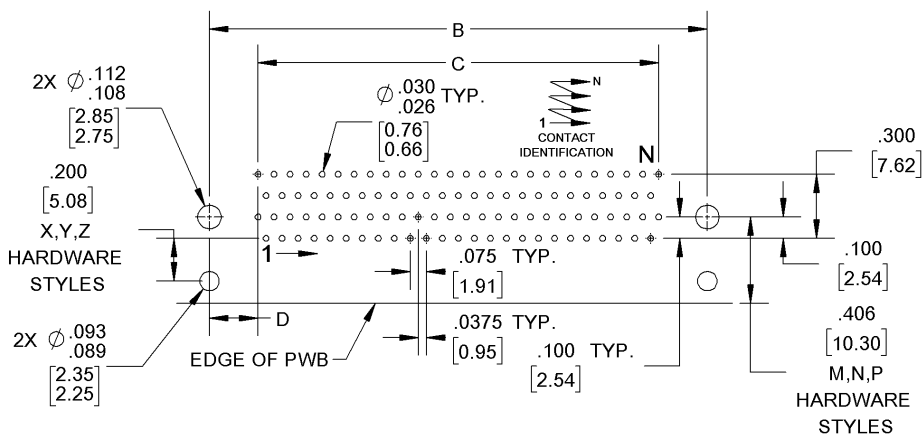
MDE DIP SOLDER
STRAIGHT
RECOMMENDED PWB
LAYOUT



MAE STACKING
RECOMMENDED PWB
LAYOUT



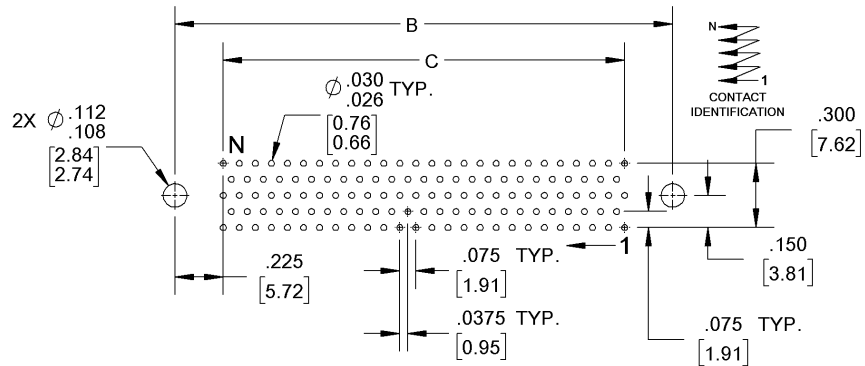
MEE RIGHT ANGLE
DIP SOLDER
RECOMMENDED PWB
LAYOUT



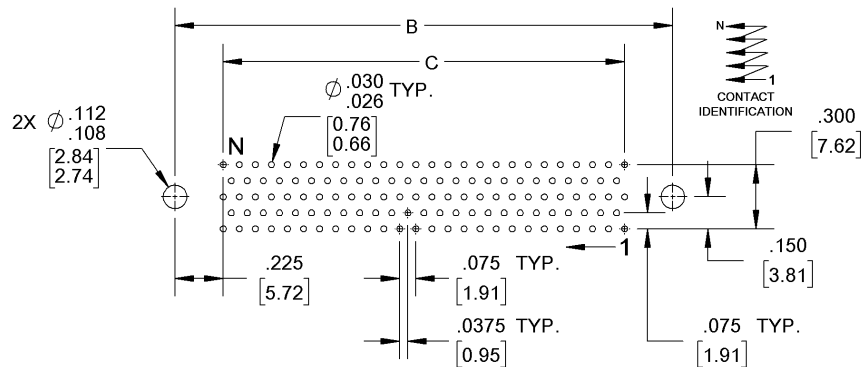
140 58th Street 8E, Brooklyn, NY 11220 Ph: (718) 492-4448 Fax: (718) 492-9898 www.iehcorp.com

PWB PATTERN 5 ROW RECEPTACLE *AS VIEWED FROM THE CONNECTOR SIDE*

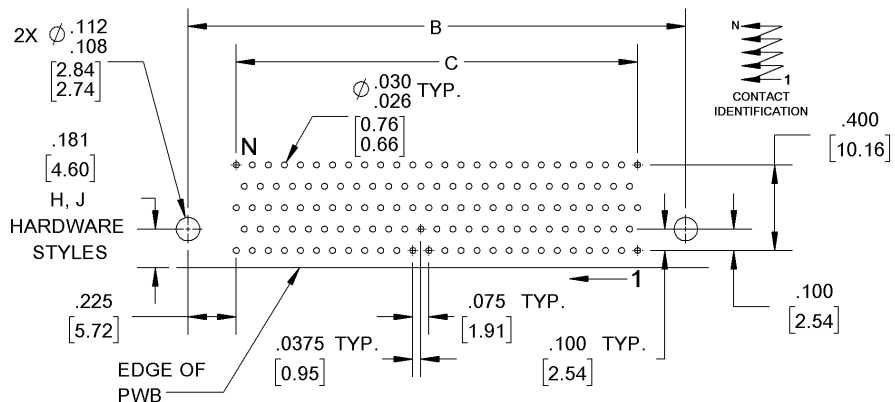
FDE DIP SOLDER
STRAIGHT
RECOMMENDED PWB
LAYOUT



FDE STACKING
RECOMMENDED PWB
LAYOUT



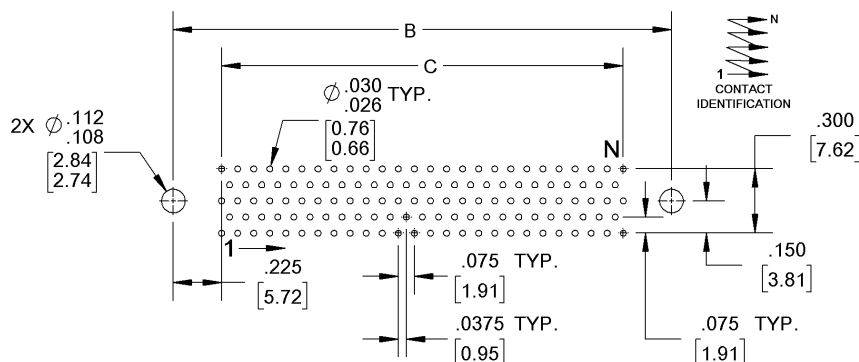
FDE RIGHT ANGLE
DIP SOLDER
RECOMMENDED PWB
LAYOUT



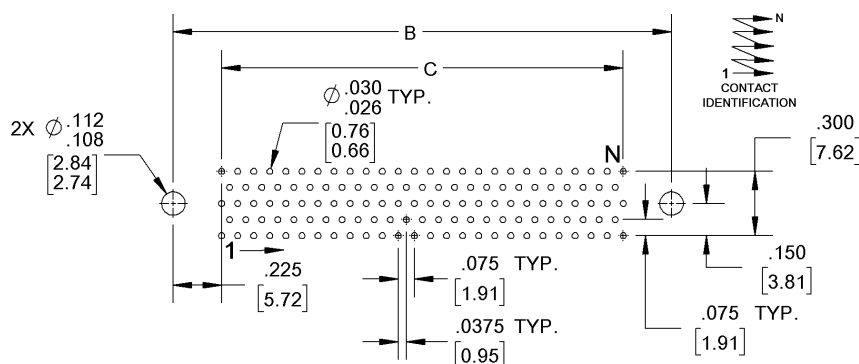
No. of Contacts	B	C
128	2.322 [58.98]	1.875 [47.625]
253	4.200 [106.68]	3.750 [95.25]

PWB PATTERN 5 ROW PLUG AS VIEWED FROM THE CONNECTOR SIDE

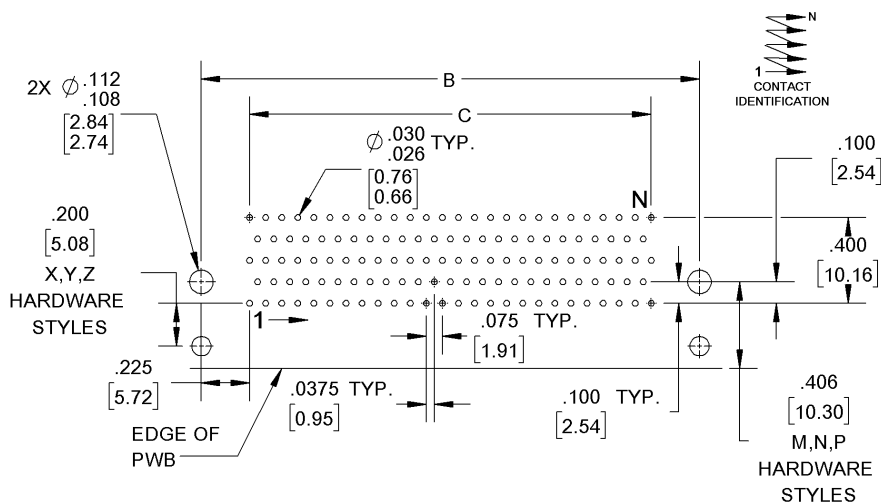
MDE DIP SOLDER
STRAIGHT
RECOMMENDED PWB
LAYOUT



MAE STACKING
RECOMMENDED PWB
LAYOUT

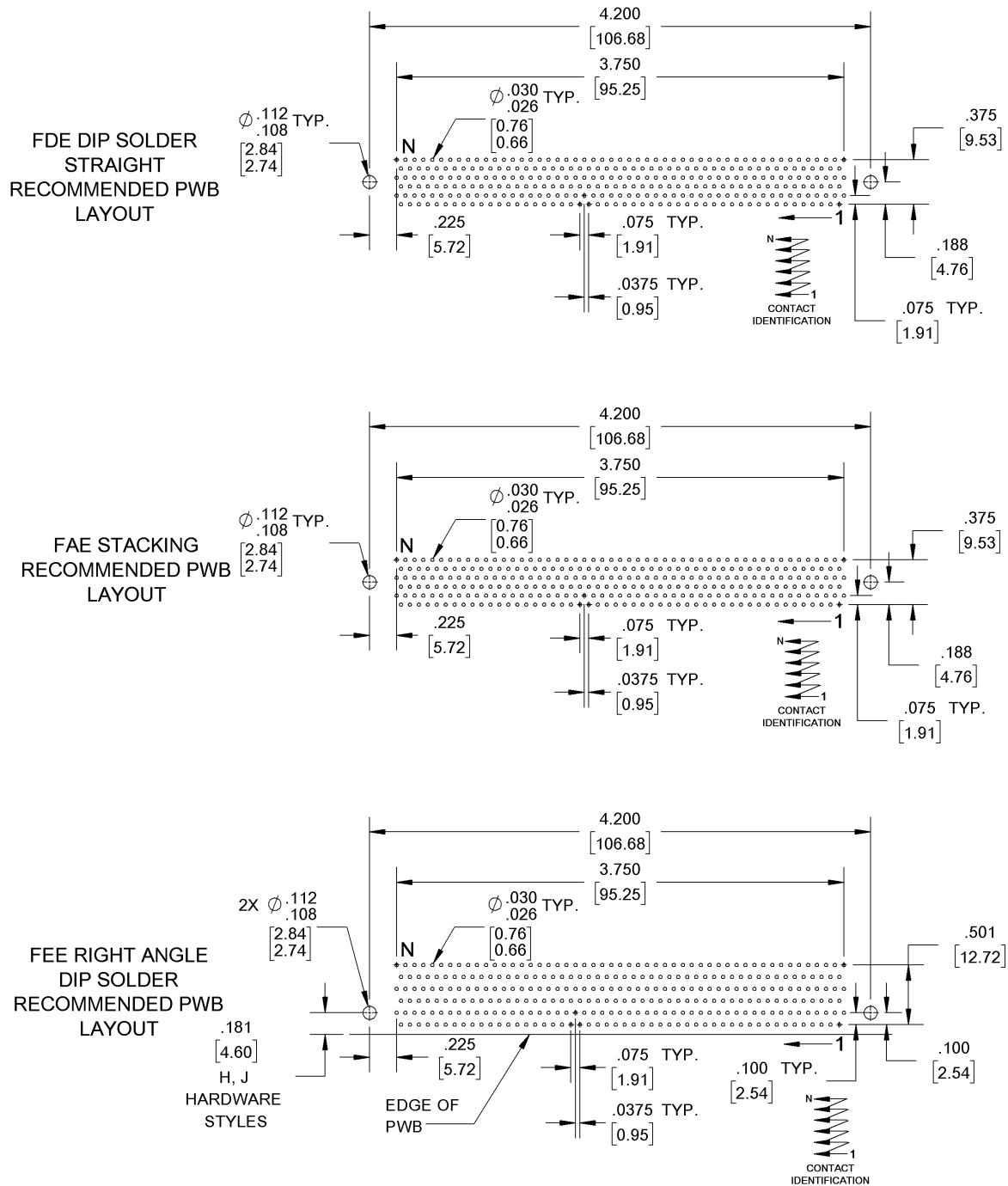


MEE RIGHT ANGLE
DIP SOLDER
RECOMMENDED PWB
LAYOUT



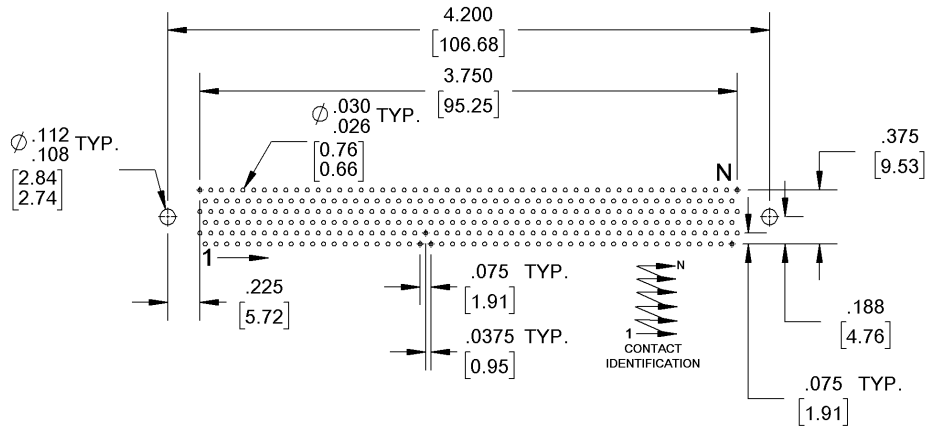
No. of Contacts	B	C
128	2.322 [58.98]	1.875 [47.625]
253	4.200 [106.68]	3.750 [95.25]

PWB PATTERN
6 ROW RECEPTACLE
AS VIEWED FROM THE CONNECTOR SIDE

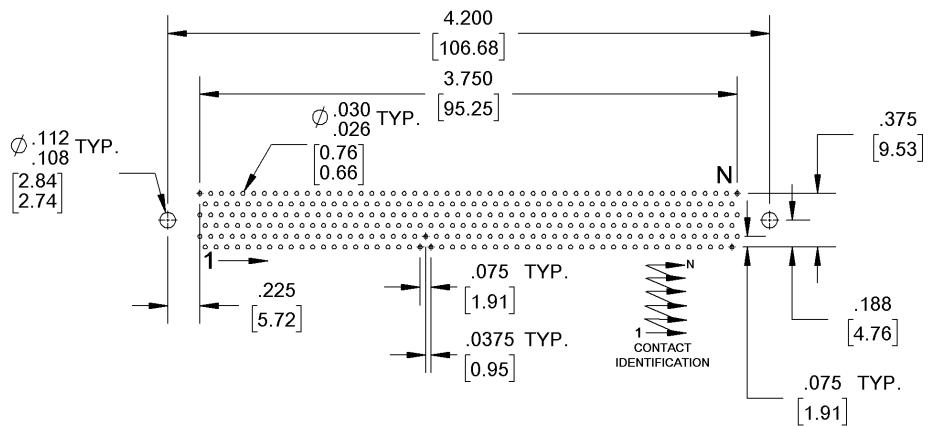


PWB PATTERN 6 ROW PLUG AS VIEWED FROM THE CONNECTOR SIDE

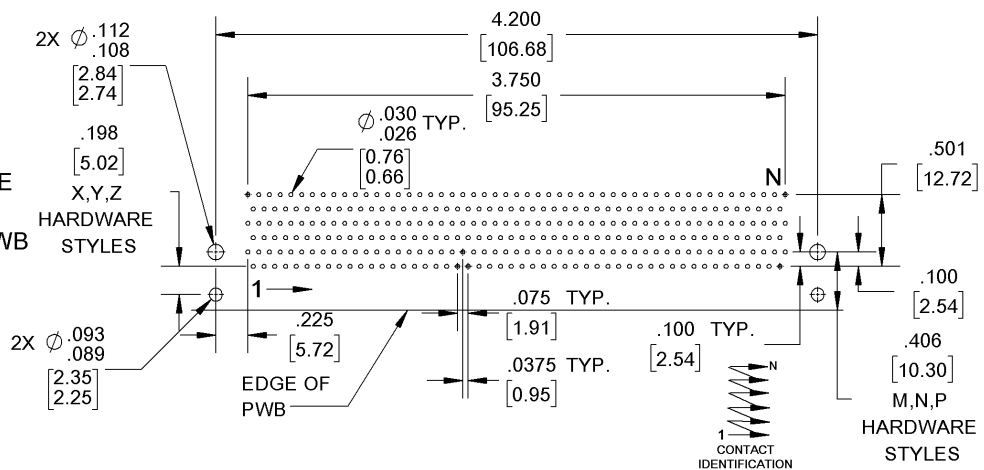
MDE DIP SOLDER
STRAIGHT
RECOMMENDED PWB
LAYOUT



MAE STACKING
RECOMMENDED PWB
LAYOUT



MEE RIGHT ANGLE
DIP SOLDER
RECOMMENDED PWB
LAYOUT



IEH Quality Statement

Listening to our customers and meeting their needs while
continuously improving our processes and services



IEH CORPORATION

140 58TH STREET, 8E, BROOKLYN, NY 11220

PHONE (718) 492-4448 • FAX (718) 492-9898

www.iehcorp.com • ieh@iehcorp.com

REV. A