



# **Ulti-Mate**

**Connector Inc.**

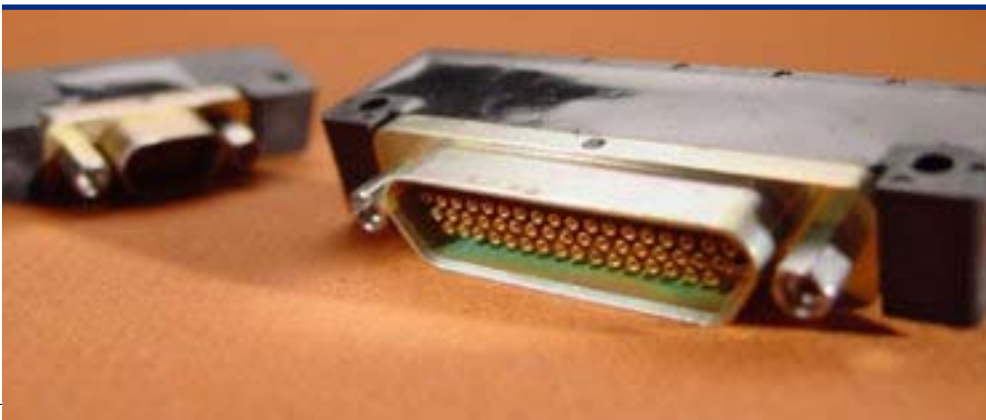
***“Your Connection  
To The Future”***

# Micro-Miniature Interconnect Solutions

Ulti-Mate Connector, Inc. has been producing world class Micro-miniature connectors and interconnect systems since 1977. Our expertise in the design and production of customized solutions to the most demanding customer requirements has made Ulti-Mate a valued supplier to the electronic OEM Marketplace. Providing a broad range of Micro-miniature products, our engineering team is ready to work with you in designing the most cost effective solution to your interconnect needs.

Ulti-Mate specializes in serving the unique connector needs of military, space, aviation, medical and geophysical exploration electronic marketplaces. Our reputation for innovation and quality has placed Ulti-Mate connectors in many of our countries most advanced missile systems, manned space and satellite vehicles, and guidance and navigation systems. Our ability to meet the demanding environmental requirements of the geophysical exploration industry has made Ulti-Mate a leading supplier to the largest and most advanced companies in the field. Ulti-Mate has a long history of meeting the rigorous specifications of invasive and non-invasive medical imaging, patient monitoring and measured drug delivery markets.

Located in Orange, Calif. for over 25 years, Ulti-Mate prides itself on providing the highest levels of customer service and value with its "Made in America" Micro-miniature connectors. Our experienced staff is dedicated to serving your interconnect needs with the latest design tools, state of the art test equipment and a customer support staff ready to assist you in all of your Micro-miniature connector requirements.



# Quality Assurance Is Peace Of Mind



*Ulti-Mate Connector, Inc. is committed to the highest levels of product and process quality assurance. We are dedicated to providing highly reliable Micro-D connector and cable assemblies to support various industry needs and specifications. Our quality system is based on ISO 9000:2000 and Mil-DTL-83513.*

*We have the latest in inspection equipment technology including OGP Smart Scope Field of View optical measuring system for visual and dimensional inspection, Cirris Touch I cable testers for point to point cable hipot testing and Connector Test International equipment for DWV and IR testing. All of our instruments are calibrated and traceable to NIST and are in full compliance with ANSI/NCSL Z540-1. Additionally, we have SPC capabilities for monitoring process quality of critical characteristics.*

*Through continuous improvement, operator training and education, corrective and prevention action techniques and commitment to excellence, we are confident we will become your sole source for high quality interconnect products now and in the future.*



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## Performance Data For All Connectors

### Electrical

**Contact Resistance:** @ 2.5 amperes is 8 milliohms max.

**Current Rating:** 3.0 amperes max.

**Dielectric Withstanding Voltage:** 900 VAC at sea level, 300 VAC @ 70,000 ft.; Soldercups & shielded cable same as MIL-DTL-83513; 600 VAC at sea level, 150 VAC at 70,000 ft.

**Insulation Resistance:** 5,000 megohms minimum.

### Mechanical

**Contact Engaging and Separating Forces:** 6 oz. max. per MIL-DTL-83513 (contact average is 3 oz.), Separation force is 0.5 oz. minimum;

**Contact Mating and Unmating Forces per MIL-DTL-83513:** Mate= 10 oz. X number of contacts maximum.

Unmate= 10.5 oz. X number of contacts minimum.

### Size 16 Power/ Coax Contacts

**Current Rating (16 ga. Power):** 10 amps

**Impedance Data (Coax):** 37 ohms +/- 5%.

### Shock & Vibration

**Vibration:** No damage or interruption detected (one microsecond sensitivity) when subjected to Method 2005, Test Condition IV of MIL-STD-1344.

**Shock:** No damage or interruption detected (one microsecond sensitivity) when subjected to Test Condition E, Method 2004 of MIL-STD-1344.

**Durability:** No mechanical defects after 500 matings; Test criteria are mating force, contact resistance, contact engagement and separation forces.

**Salt Spray:** No exposure of base metal due to corrosion; no loss of performance as in durability above.

### Materials & Finishes

**Pin Contacts:** Beryllium Copper (C17200) per QQ-C-533.

**Socket Contacts:** Copper alloy (C21000) or leaded commercial bronze (C-314000).

**Contact Plating:** Gold plated per MIL-G-45204. 50 microinches is the standard thickness.

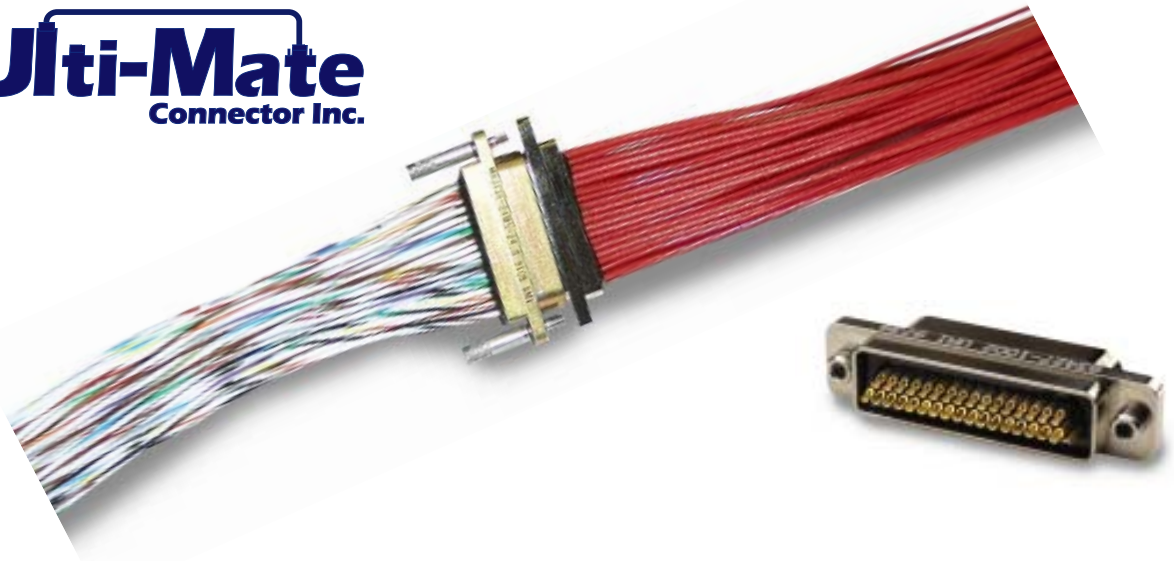
**Metal Shells:** Aluminum alloy per QQ-A200/8, type 6061-T6. Finish is cadmium per QQ-P-416 with yellow chromate.

**Insulator Material:** Preferred material is Polyphenylene sulfide per MIL-M-24519 GST 40F. Color: Black

LCP: Liquid Crystal Polymer-Vectra 130 (optional)

**Interfacial Seals:** Fluorosilicone elastomer per MIL-R-25988. Standard on "M" Series socket face.

**Hardware:** Stainless Steel, passivated.



## How To Order Micro D Connectors

**M R 25 P 05-26 E 5-18.0 S01-HT**

### Series Designation

M= Rugged Metal Shell  
B= Rugged Plastic Shell  
A= Low Profile Metal Shell  
P= Low Profile Plastic Shell

### Insulator Material

R= PPS per MIL-M-24519 GST-40F  
L= LCP Vectra I30 (Consult Factory)

### Size

Standard Configurations  
9, 15, 21, 31, 37, 51-3, 100  
For other sizes in 2 row  
from 5-65 consult factory

### Contact Type

P= Pin, Crimp      N= Pin, Solder Cup  
S= Socket, Crimp    T= Socket, Solder Cup

### Mounting/Coupling Hardware

0= None

#### For 5 thru 65 sizes

02=	Jackscrew Assy., Low Allen Head *	=12
03=	Jackscrew Assy., High Allen Head	=13
05=	Jackscrew Assy., Low Slotted*	=15
06=	Jackscrew Assy., High Slotted	=16
07=	Jackpost Assy.*	=17

#### For 100 Size

### Temp Range

Blank= 125°C\*  
HT=200°C  
(Special Order)

### Shell Finish

S01= Electroless Nickel\*  
Blank= Cadmium

### Wire Length

3 Digits (i.e. 18.0") or M46 (cm)

### Wire Color

1= All White\*  
2= All Yellow  
3= Tin Plated Solid Wire  
4= Gold Plated Solid Wire  
5= Color Coded per MIL-STD-681C  
6= Solid Colors Repeat/No Stripes

### Wire Type

C= Solid Copper (Un-insulated) QQ-W-343  
E= Type "E" Teflon per MIL-W-16878/4\*  
F= Type "ET" Teflon per MIL-W-16878/6  
M= Teflon per MIL-W-22759/11\*  
Y= Tefzel per MIL-W-22759/33

### Wire Size

24, 25, 26\*, 28, 30 AWG

\* = Indicates preferred standard

For float mount hardware please consult factory

# Micro D Selection Guide

Select the type of rectangular connector you require. Note the "P" series of MIL-DTL-83513 is not designed to mate with the MIL-DTL-83513 "M" series. P/C board-mount styles are shown at the bottom of the page.



**"P" Series**  
Low Profile Plastic  
MIL-DTL-83513

Also mates with



**"A" Series**  
Low Profile Metal  
No MIL Spec.



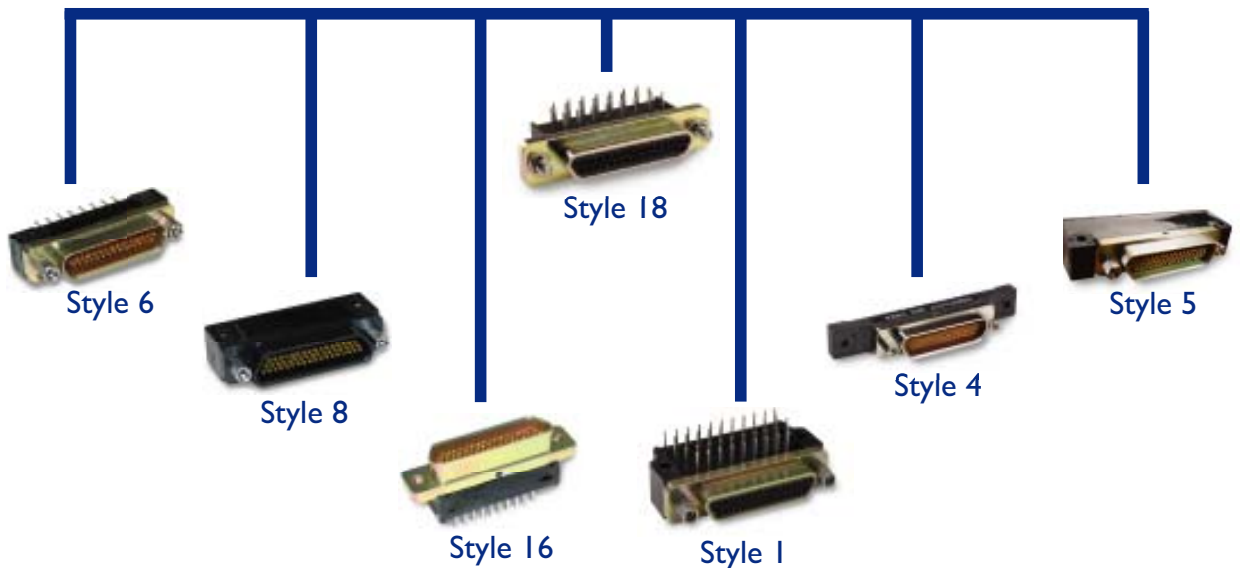
**"M" Series**  
Rugged Metal  
MIL-DTL-83513  
(Factory Standard)

Also mates with



**"B" Series**  
Rugged Plastic  
No MIL Spec.  
(Factory Standard)

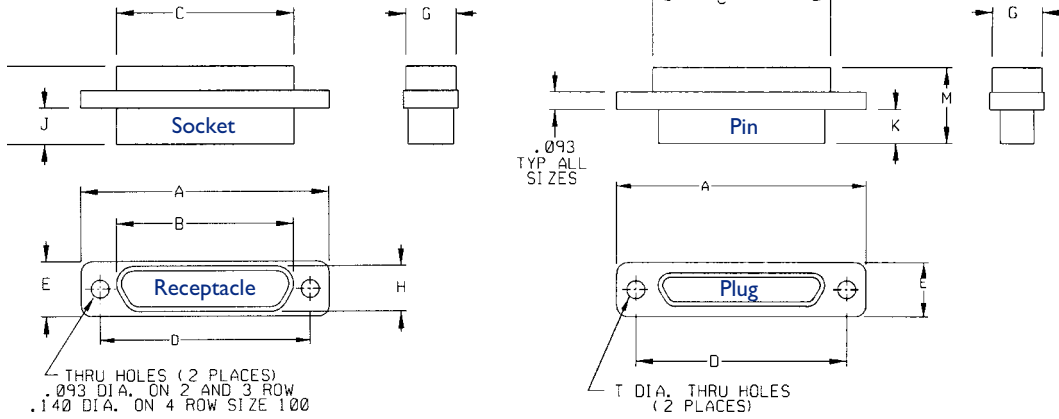
The above series will mate with the Circuit Series shown here



# Micro D

## Dimensional Data

A, P, M & B Series 50 mil Rectangular Connectors.  
 P & M series are in accordance with MIL-DTL-83513.

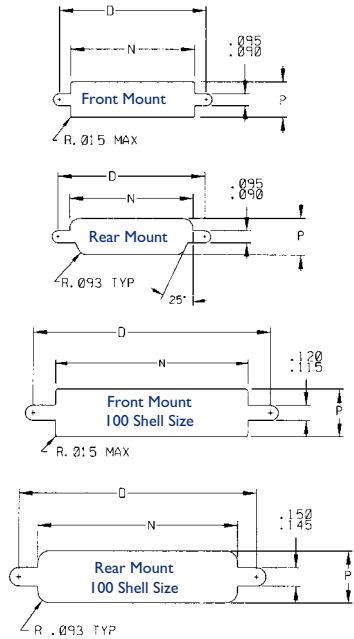


Micro-D Shell Dimensions (inches)

Size	A & P Series				M & B Series		
	A Max.	B Max.	C Max.	H Max.	B Max.	C Max.	H Max.
9	.777	.371	.399	.209	.402	.393	.248
15	.927	.521	.549	.209	.552	.543	.248
21	1.077	.671	.699	.209	.702	.693	.248
25	1.177	.771	.799	.209	.802	.793	.248
31	1.327	.921	.949	.209	.952	.943	.248
37	1.477	1.071	1.099	.209	1.102	1.093	.248
51	1.428	1.019	1.046	.250	1.054	1.041	.290
100	2.162	N/A	N/A	N/A	1.503	1.433	.391

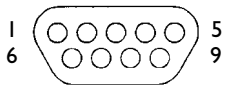
Micro-D Shell Dimensions (inches)

Rows	Series	E Max.	G Max.	J Max. Skt	K Max. Pin	L Max. Skt	M Max. Pin
2	A & P	.213	.171	.182	.202	.365	.385
2	M & B	.299	.272	.199	.187	.427	.415
3	A & P	.251	.220	.182	.202	.365	.385
3	M & B	.340	.310	.199	.187	.427	.415
4	M & B	.391	.349	.199	.187	.427	.415

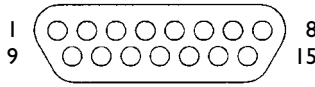


Micro-D Panel Mounting Dimensions

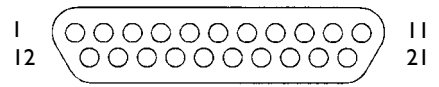
Size	A & P Series					M & B Series				
	D Max.	Front Mount		Rear Mount		D Max.	Front Mount		Rear Mount	
		N+.006/-.00	P	N+.006/-.00	P		N+.006/-.00	P	N+.006/-.00	P
9	.565	.405	.175	.377	.219	.565	.399	.280	.408	.265
15	.715	.555	.175	.527	.219	.715	.549	.280	.558	.265
21	.865	.705	.175	.677	.219	.865	.699	.280	.708	.265
25	.965	.805	.175	.777	.219	.965	.799	.280	.808	.265
31	1.115	.955	.175	.927	.219	1.115	.949	.280	.958	.265
37	1.265	1.105	.175	1.077	.219	1.265	1.099	.280	1.108	.265
51	1.215	1.052	.225	1.025	.265	1.215	1.046	.320	1.060	.305
100	N/A	N/A	N/A	N/A	N/A	1.800	1.439	N/A	1.509	N/A



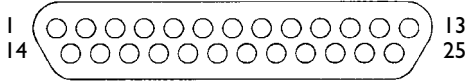
**9**



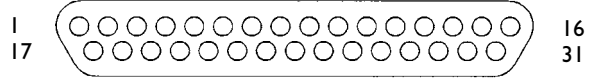
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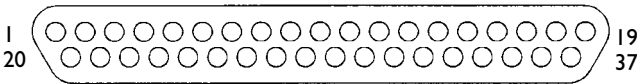
**21**



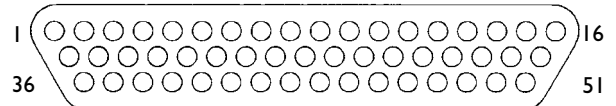
**25**



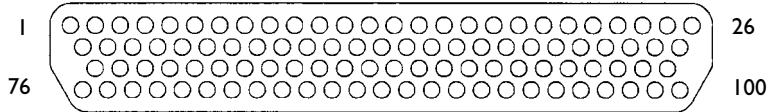
**31**



**37**



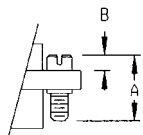
**51-3**



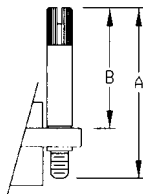
**100**

Note: Contact numbers are for reference only and do not appear on the insulator or connector body. Layouts are enlarged for clarity. Socket sides of connector are a mirror image.

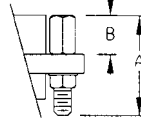
## Mounting/Coupling Hardware



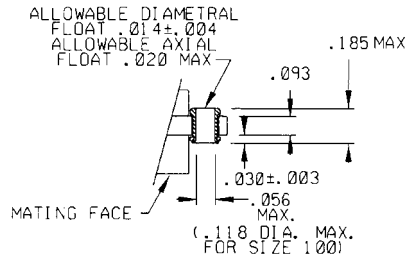
Jackscrew  
Low Profile



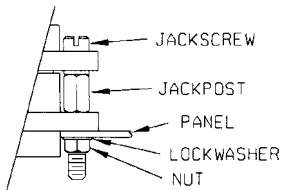
Jackscrew  
High Profile



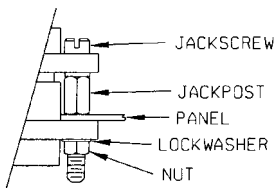
Jackpost



Float Mount



Front Panel Mount



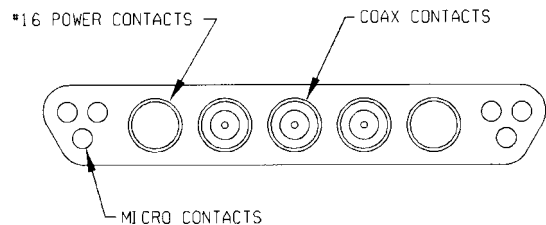
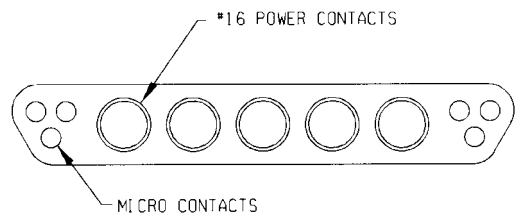
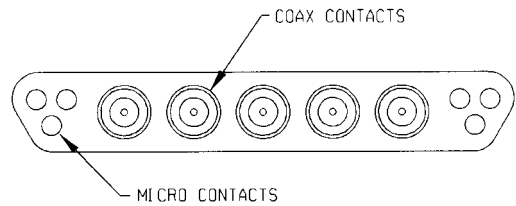
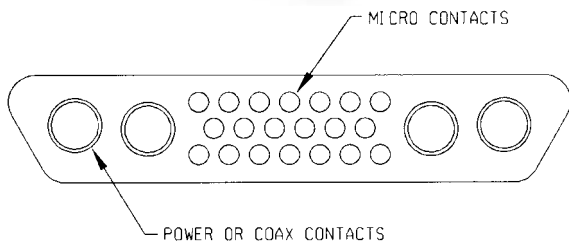
Rear Panel Mount  
(Consult Factory)

Description	Part Number	A Max.	B Max.	Thread	Rows
Jackscrew Lo Allen	M83513/05-02	.361	.103	2-56 UNC-2A	
Jackscrew Hi Allen	M83513/05-03	.868	.610	2-56 UNC-2A	2 Row
Jackscrew Lo Slot	M83513/05-05	.361	.103	2-56 UNC-2A	&
Jackscrew Hi Slot	M83513/05-06	.868	.610	2-56 UNC-2A	3 Row
Jackpost	M83513/05-07	.500	.190	2-56 UNC-2B	
Jackscrew Lo Allen	M83513/05-12	.390	.103	4-40 UNC-2A	
Jackscrew Hi Allen	M83513/05-13	.902	.610	4-40 UNC-2A	4
Jackscrew Lo Slot	M83513/05-15	.390	.103	4-40 UNC-2A	Row
Jackscrew Hi Slot	M83513/05-16	.902	.610	4-40 UNC-2A	100
Jackpost	M83513/05-17	.500	.185	4-40 UNC-2B	

# Micro D Combo Series

## Combination Power/Coax/Micro Contacts

Expandable tooling allows Ulti-Mate to offer any combination of Micro, Coax and Power contacts in any of our standard 2 row shells. For example, a size 21 connector can have 2 power and 7 micro contacts. Coaxial contacts are for use with RG 178/U and RG 196/U miniature cables.



## Three Row Configuration

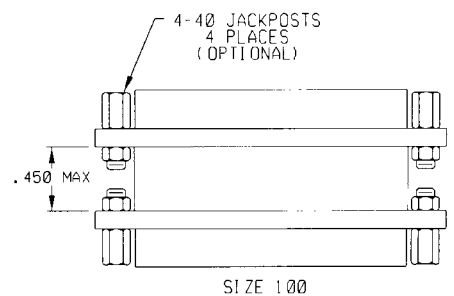
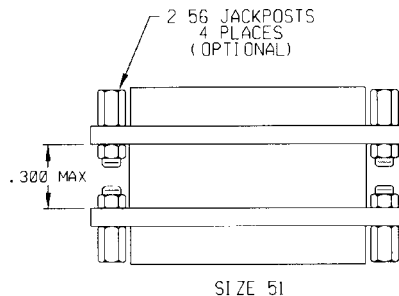
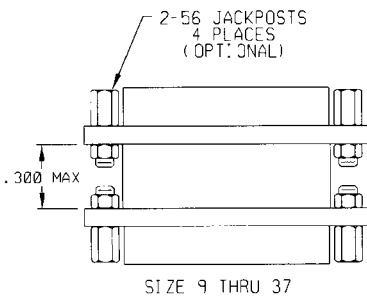
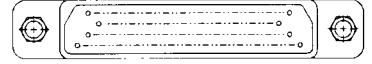
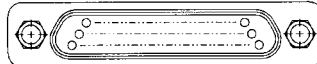
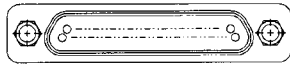
In addition to the variable 2 row configurations up to 65 positions, there is an available 3 row 51 shell connector with 4 power and / or coax combinations accompanied by 20 micro contacts.



(Consult Factory For Specific Configurations)

## Connector Saver Series

Micro D Connector Savers are a “back to back” Pin to Socket configuration. Great for protecting test equipment or expensive electronic boxes from high mating cycles and excessive wear.



### How To Order

### M R 25 CS 07- S01

#### Series Designation

M= Rugged Metal Shell  
B= Rugged Plastic Shell  
A= Low Profile Metal Shell  
P= Low Profile Plastic Shell

#### Insulator Material

R= PPS per MIL-M-24519 GST 40F  
L= LCP Vectra 130 (Consult Factory)

#### Contact Arrangement

9,15,21,25,31,37,51-3,100

#### Shell Finish

S01= Electroless Nickel\*  
Blank= Cadmium

#### Mounting/Coupling Hardware

0= None  
For 9 thru 51-3 sizes      For 100 Size  
07= Jackpost Assy.,      =17

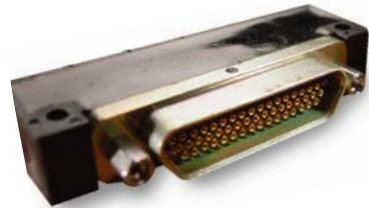
#### Connector Saver Series “CS”

\* = Indicates preferred standard

# Micro D Circuit Series



UlTi-Mate offers the widest variety of thru-hole solder tail connectors, of which seven styles are currently available. All have mating interfaces per MIL-DTL-83513 and 24 AWG (.020 dia. ) exit leads. Styles 6 and 16 are available in the Mil Spec. "M" and the intermateable plastic "B" series. The other styles are available in the "M", "B", the narrower plastic "P" series and its intermateable metal shell "A" series. Style 1,4 and 5 are in accordance with MIL-DTL-83513 ("M" series only).



## How To Order Circuit Series

**C M 8 R 37 P 07 T- S01- HT**

**Circuit Series "C"**

**Interface**

**Connector Series**

M= Rugged Metal Shell  
B= Rugged Plastic Shell  
A= Low Profile Metal Shell  
P= Low Profile Plastic Shell

**Style**

6= Vertical                      16= Vertical  
8= Right Angle                18= Right Angle  
1= Right Angle                4= Vertical  
5= Right Angle

**Insulator Material**

R= PPS per MIL-M-24519 GST-40F  
L= LCP Vectra 130 (consult factory)

**Size**

Number of Contacts 9,15,21,25,31,37,51-3,100

**Temp Range**

Blank= 125°C\*  
HT= 200°C  
(Special Order)

**Shell Finish**

S01= Electroless Nickel\*  
Blank= Cadmium

**Threaded Insert**

T= Threaded Insert  
Blank= Thru Hole

**Mounting/Coupling Hardware**

0= None  
For 9 thru 51-3 sizes      For 100 Size  
07= Jackpost Assy.,                      =17

**Contact Type**

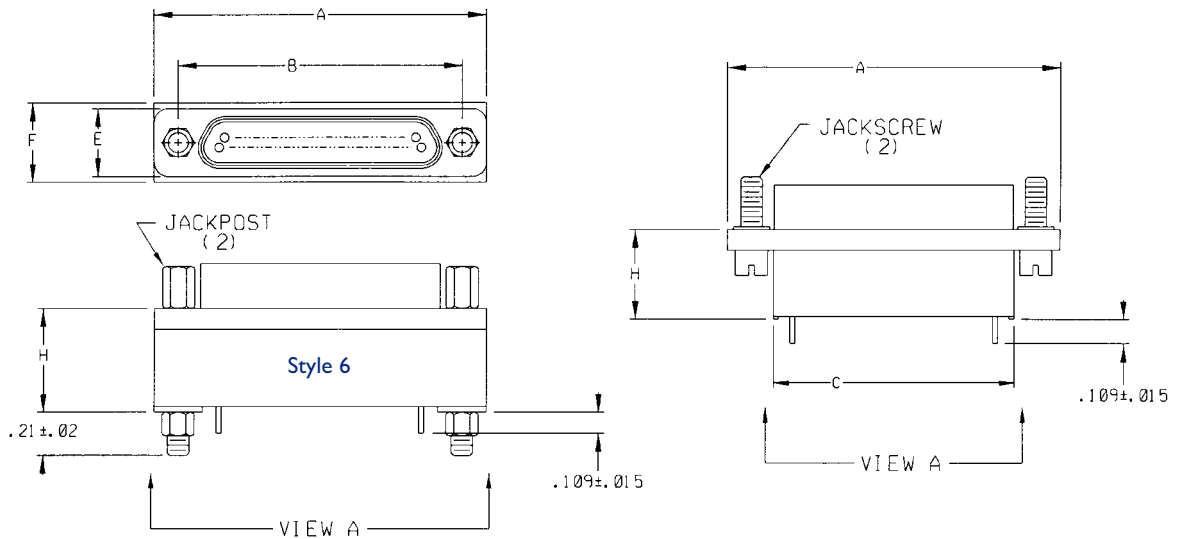
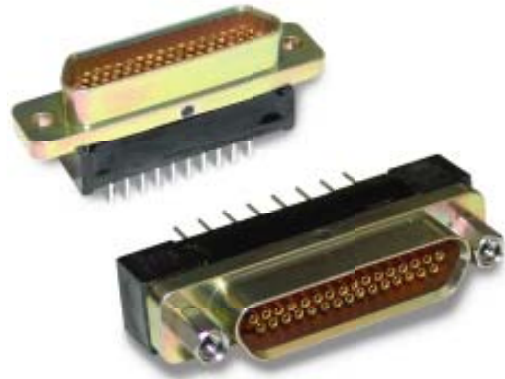
P= Pin  
S= Socket

\* = Indicates preferred standard.

Standard tail length is .109. (Consult factory for special lengths)

## Styles 6&16

Style 6 is a vertical mount utilizing jackposts (optional). Style 16 is a vertical mount utilizing jackscrews (optional). Both of these connectors are recommended for new designs over the older Style 4. The advantage over previous styles is the termination footprints are contained within the envelope of the connector body, for optimal space savings.



Size	A Max.	B Nominal	C Max	E Max.	F Max.	H Max.
9	.785	.565	.400	.308	.310	.330
15	.935	.715	.550	.308	.310	.330
21	1.085	.865	.700	.308	.310	.330
25	1.185	.965	.800	.308	.310	.330
31	1.335	1.115	.950	.308	.310	.330
37	1.485	1.265	1.100	.308	.310	.330
51-3	1.435	1.215	1.045	.351	.400	.345
100	2.170	1.800	1.550	.394	.510	.400

# Style 6&16

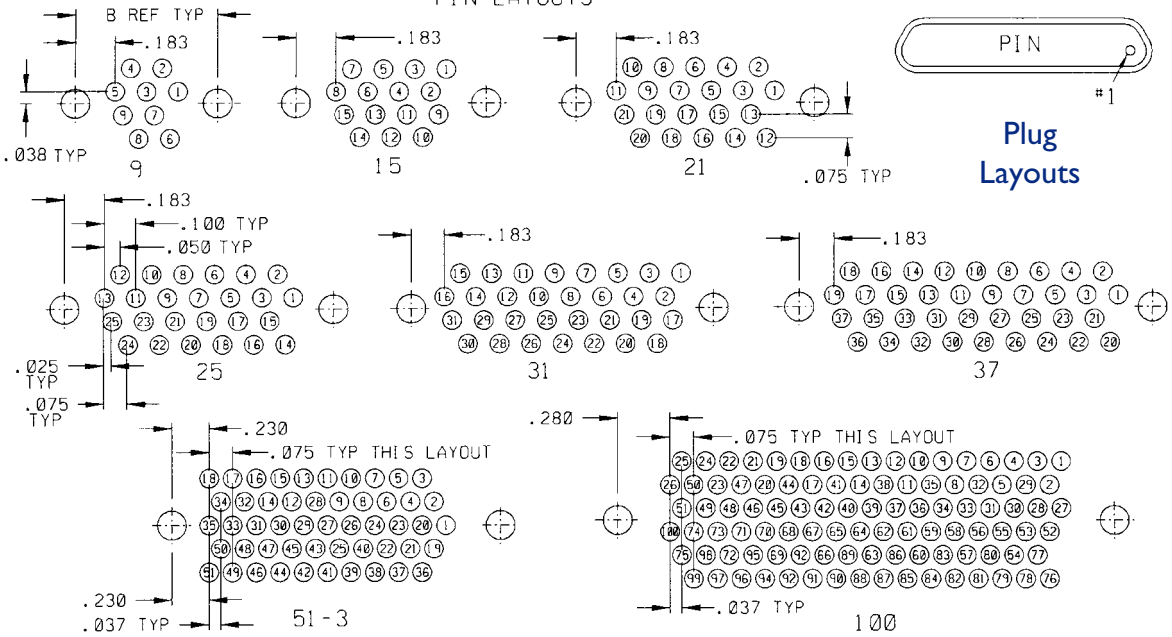
Spacing between rows is 0.075 on all layouts: spacing between contacts in any one row is 0.100 on the 9 thru 37 and 0.075 on the 51 and 100 layouts.

## Termination footprints viewing connector, not circuit board. (View A)

### PIN LAYOUTS



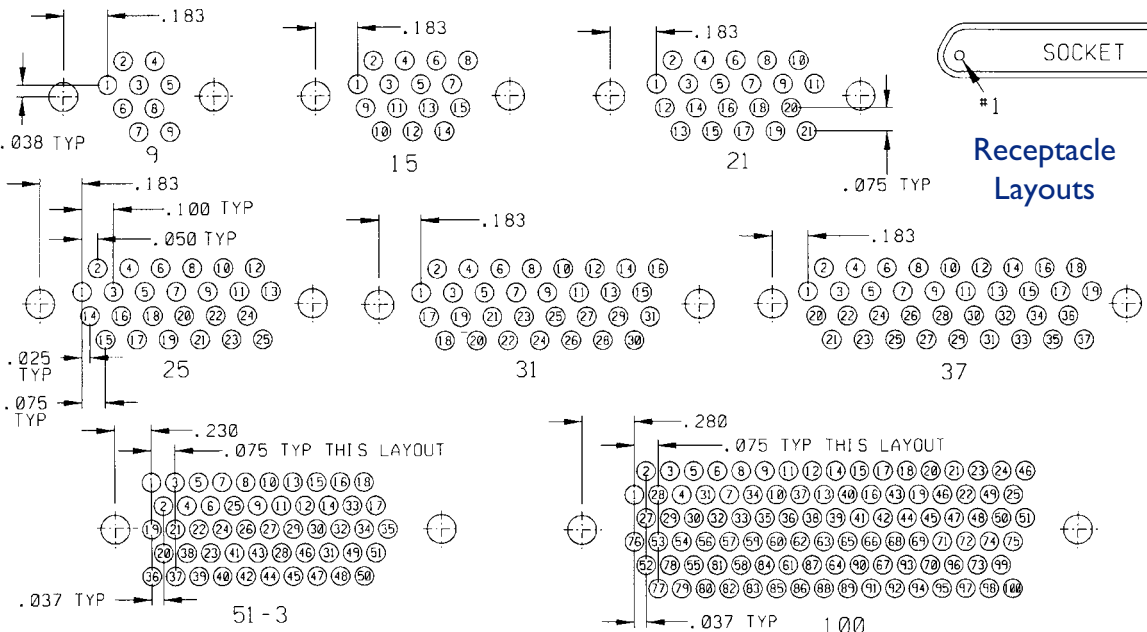
### Plug Layouts



### SOCKET LAYOUTS

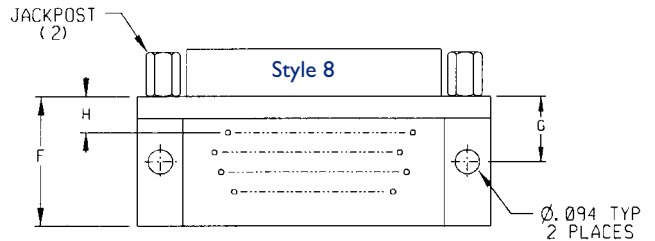
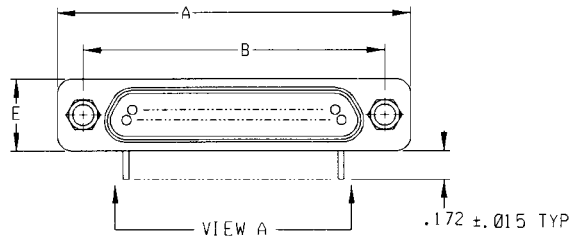
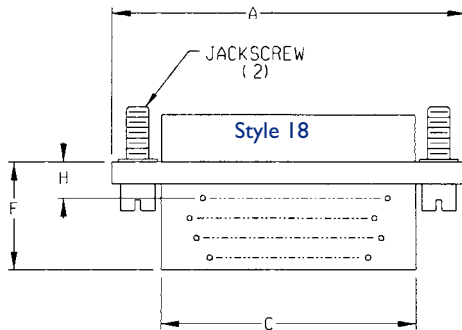


### Receptacle Layouts



## Styles 8 & 18

Style 8 is a right angle mount utilizing jackposts (optional). Style 18 is a right angle mount utilizing jackscrews (optional). Recommended for new designs over Styles 1 & 5. The advantage is the termination footprints are contained within the envelope of the connector body for optimal space savings.

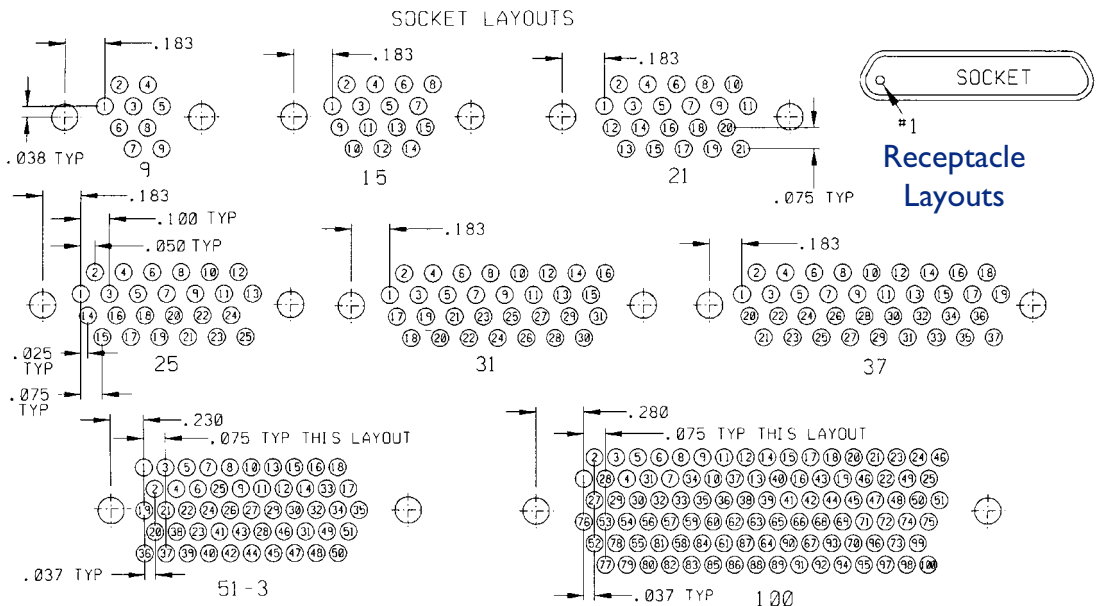
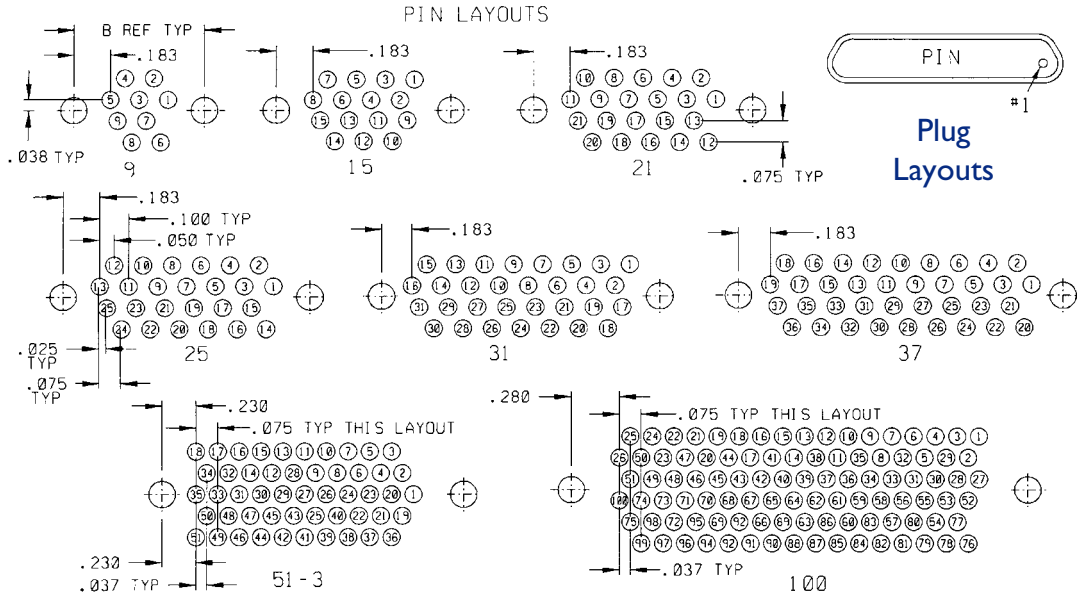


Size	A Max.	B Nom.	C Max.	E Max. A & P	E Max. M & B	F Max.	G Max.	H Max.
9	.785	.565	.400	.218	.308	.410	.250	.138
15	.935	.715	.550	.218	.308	.410	.250	.138
21	1.085	.865	.700	.218	.308	.410	.250	.138
25	1.185	.965	.800	.218	.308	.410	.250	.138
31	1.335	1.115	.950	.218	.308	.410	.250	.138
37	1.485	1.265	1.100	.218	.308	.410	.250	.138
51-3	1.435	1.215	1.045	.260	.351	.500	.295	.145
100	2.170	1.800	1.550	---	.394	.615	.350	.163

# Styles 8&18

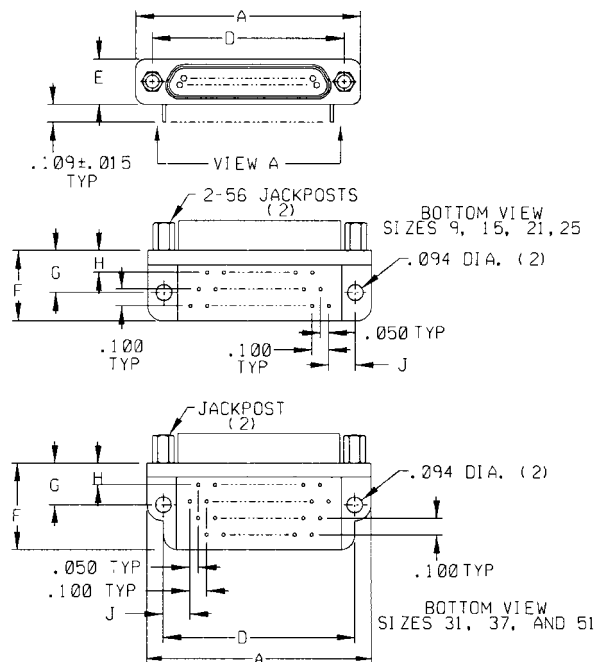
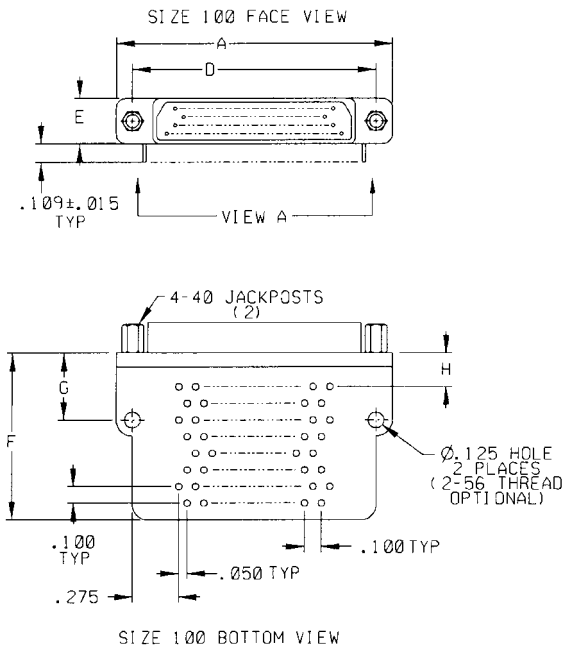
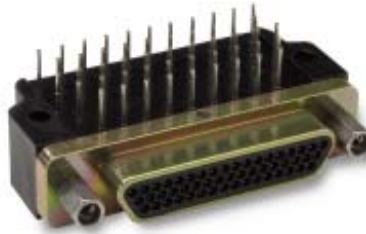
Spacing between rows is 0.075 on all layouts: spacing between contacts in any one row is 0.100 on the 9 thru 37 and 0.075 on the 51 and 100 layouts.

## Termination footprints viewing connector, not circuit board. (View A)



## Style I

Style I (CBR) is the original right angle mount p/c board connector with 90 degree termination exit leads on a .100 x .100 grid. Mounting thru holes are provided. Jackposts to receive Jackscrews are optional. Style I is in accordance with slash sheets 10 thru 15 of MIL-DTL-83513. ("M" series only)

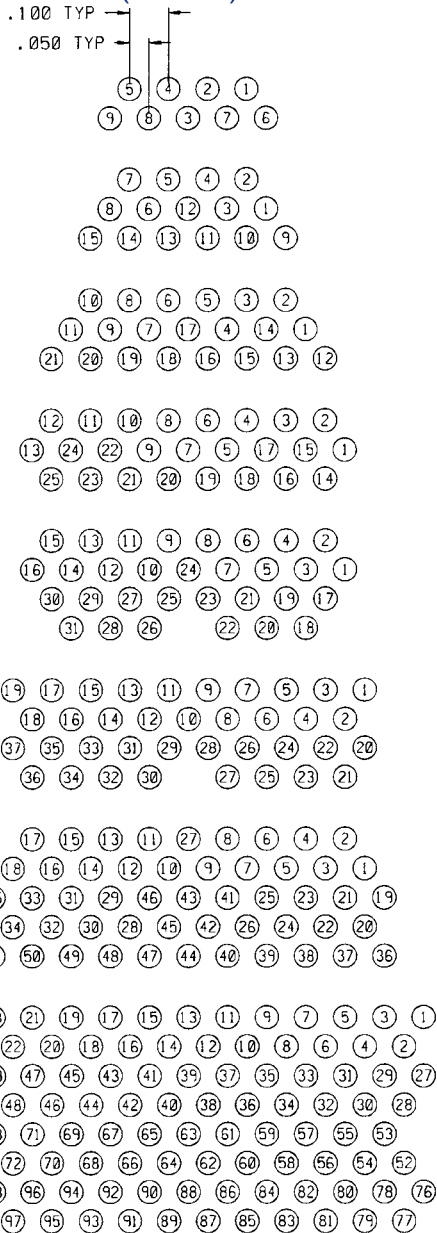


Size	A Max.	D +/- .005	E Max. M & B	E Max. A & P	F Max.	G +/- .010	H +/- .010	J +/- .005
9	.785	.565	.308	.218	.420	.250	.230	.083
15	.935	.715	.308	.218	.420	.250	.130	.108
21	1.085	.865	.308	.218	.420	.250	.130	.083
25	1.185	.965	.308	.218	.420	.250	.130	.083
31	1.335	1.115	.308	.218	.520	.250	.130	.158
37	1.485	1.265	.308	.218	.520	.250	.130	.183
51-3	1.435	1.215	.351	.260	.650	.300	.150	.108
100	2.165	1.800	.394	---	1.000	.400	.200	.275

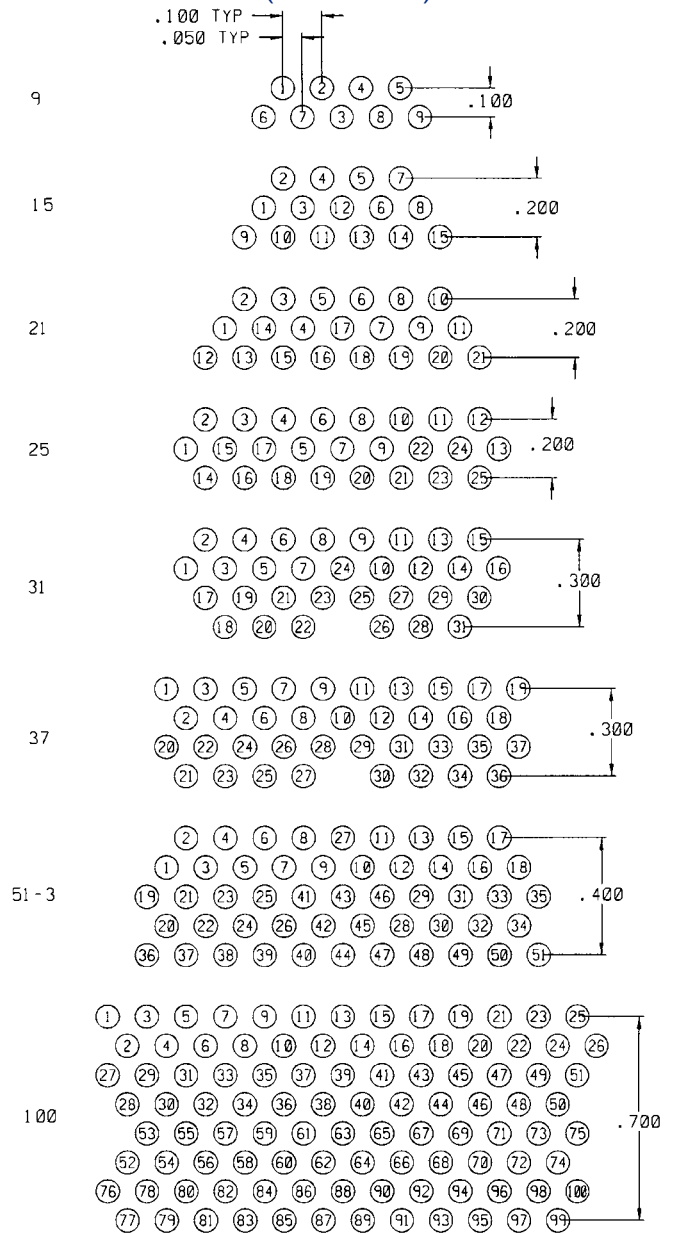
# Style I

## View A Termination footprints viewing connector, not circuit board

### Plug Layouts (Pin side)



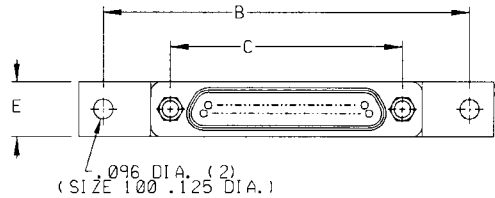
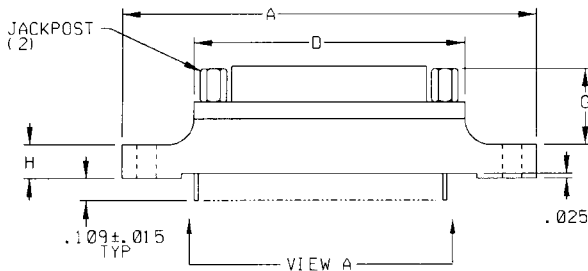
### Receptacle Layouts (Socket side)



## Style 4

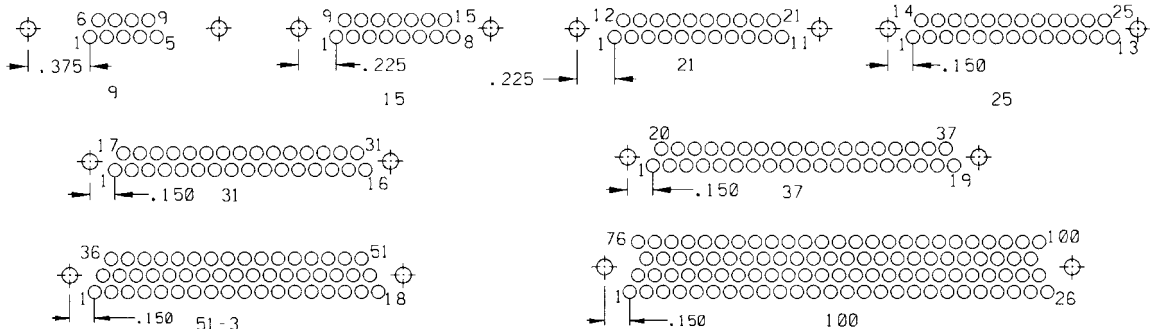
Style 4 (BS) is a vertical mount p/c board connector with exit leads on a .100 x .100 grid. It has the same number of rows as the mating face ie; 9 thru 37 has 2 rows, the 51 has 3 rows and the 100 has 4 rows.

Jackposts for coupling are optional. For new applications, we suggest you consider Style 6 which has a denser footprint of .075. Style 4 configuration is in accordance with slash sheets 22 thru 27 of MIL-DTL-83513. ("M" series only)



Size	A Max.	B +/- .007	C +/- .005	D Ref.	E Max. M & B	E Max. A & P	G Max.	H Max.
9	1.390	1.150	.565	.785	.308	.218	.555	.165
15	1.390	1.150	.715	.935	.308	.218	.555	.165
21	1.690	1.450	.865	1.085	.308	.218	.555	.165
25	1.740	1.500	.965	1.185	.308	.218	.555	.165
31	2.040	1.800	1.115	1.335	.308	.218	.555	.165
37	2.340	2.100	1.265	1.485	.308	.218	.555	.165
51-3	2.270	2.000	1.215	1.435	.351	.260	.555	.165
100	3.070	2.800	1.800	2.175	.394	---	.750	.303

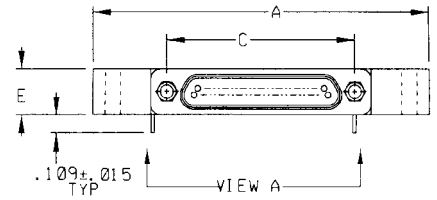
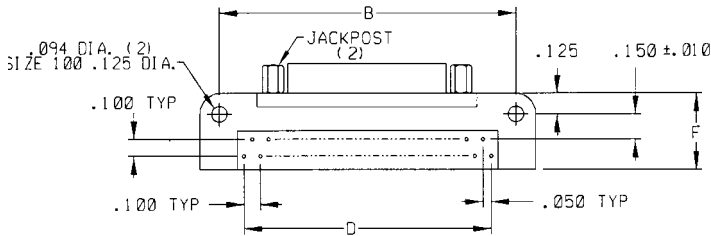
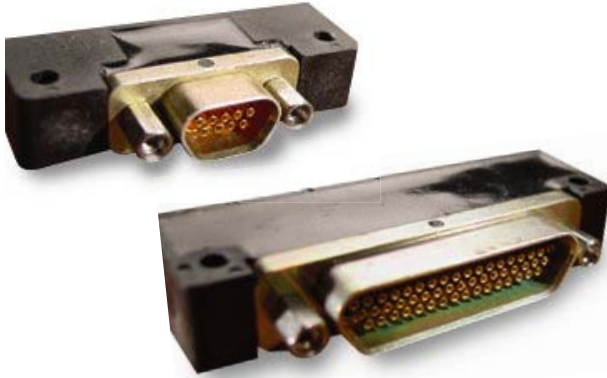
Pin side termination footprints viewing connector not circuit board. (View A)\*



\* Socket sides are mirror image

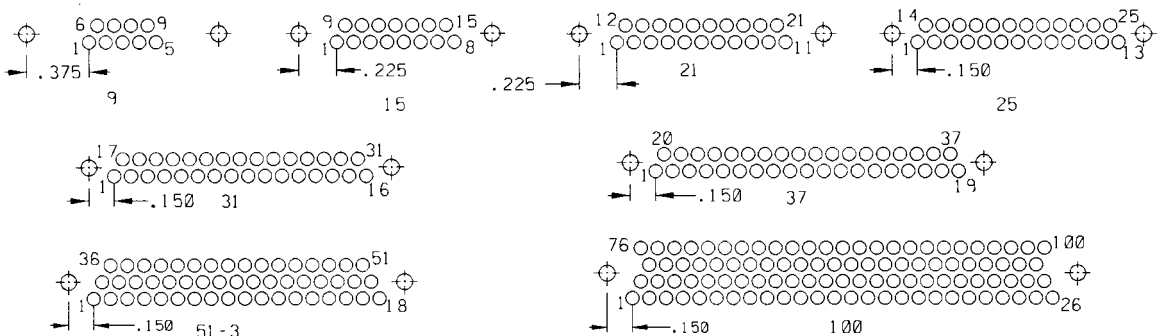
## Style 5

Style 5 (BR) is a right angle mount connector. Exit leads are on a .100 x .100 grid with the same footprint as Style 4. Mounting thru-holes and Jackposts for coupling are provided. For new applications consider Style 8 which has a denser footprint of .075. Style 5 is in accordance with slash sheets 16 thru 21 of MIL-DTL-83513. ("M" series only)



Size	A Max.	B +/- .007	C +/- .005	D Ref.	E Max. M & B	E Max. A & P	F Max.
9	1.390	1.150	.565	.400	.308	.218	.455
15	1.540	1.300	.715	.700	.308	.218	.455
21	1.690	1.450	.865	1.000	.308	.218	.455
25	1.790	1.550	.965	1.200	.308	.218	.455
31	2.040	1.800	1.115	1.500	.308	.218	.455
37	2.340	2.100	1.265	1.800	.308	.218	.455
51-3	1.875	1.600	1.215	1.700	.351	.260	.565
100	2.780	2.500	1.800	2.500	.394	---	.665

Termination footprints viewing connector not circuit board. (View A)\*



\*Socket connectors are mirror image

## 50mil Strip Series

The plastic molded body of the 50 mil Strip is made to accommodate up to 43 micro contacts, however, you may select the number of contacts you need from 1 to 43. There are many options to choose from: guide pins, jackscrews, securing latch, mounting holes and six circuit termination styles.



### Basic Strip Dimensional Formula

A= (No. of positions -1) x.050 1st to last contacts.

B= A + .075 - overall with out ears.

C= A + .200 - center to center of mounting holes.

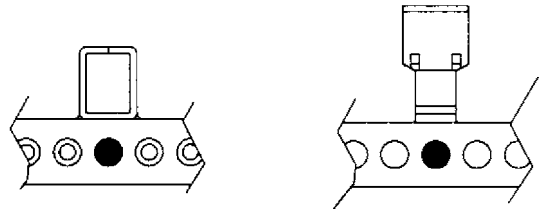
D= A + .375 - overall with ears.

### Ordering Notes

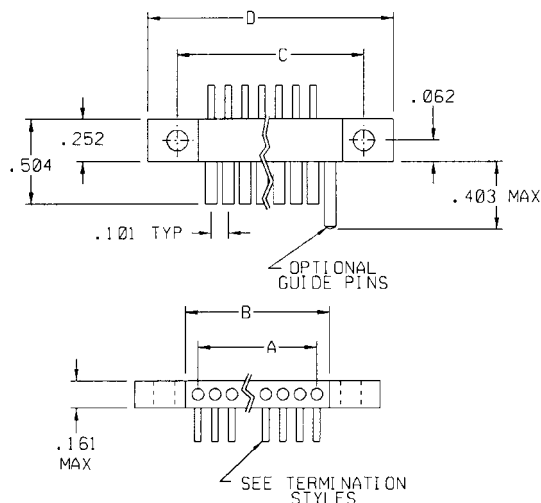
Each guide pin will replace a contact cavity thereby increasing the overall length. The overall length will also increase for one or two cross mounting holes or for jackscrews. Use 3 positions for each cross mounting hole or jackscrew.

### Securing Latch Feature

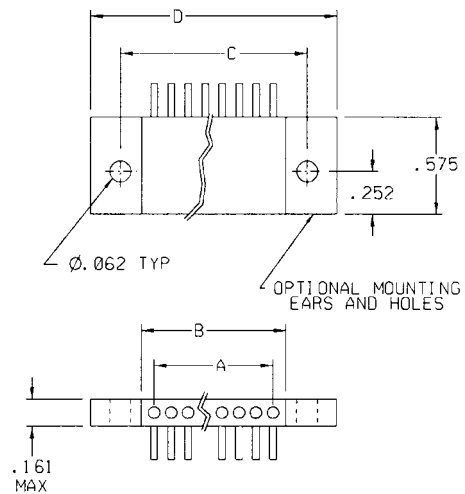
\*Consult factory for part numbers for Strip Series connectors with Securing Latch.



### Socket



### Pin

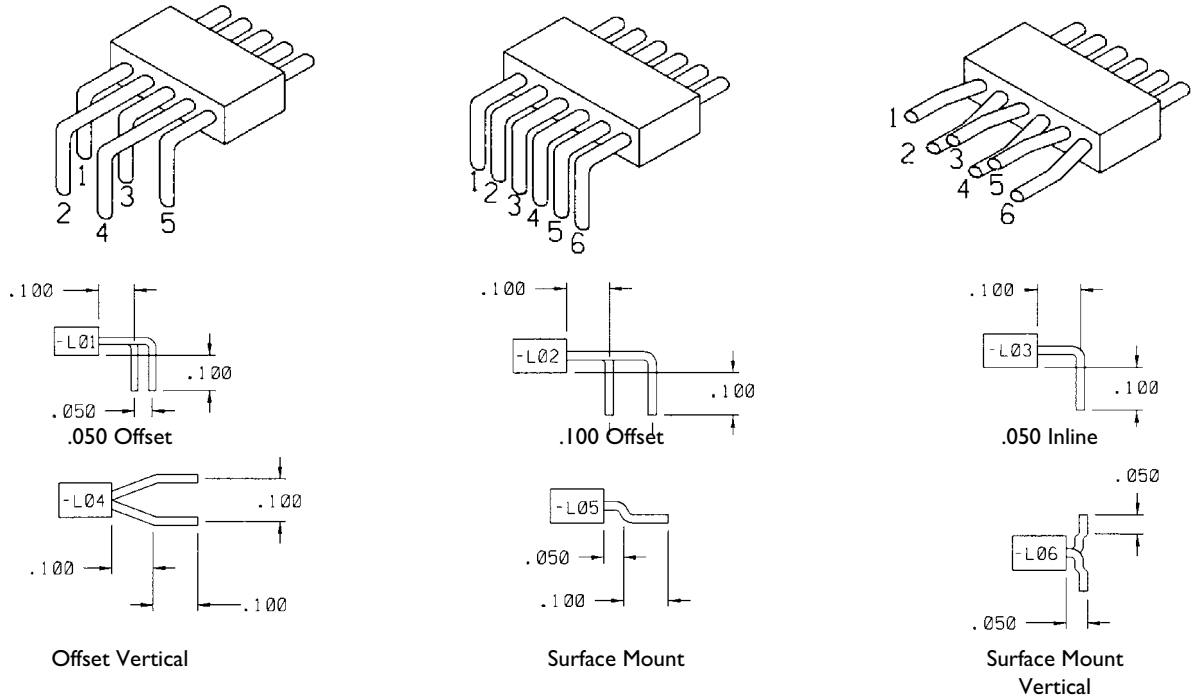


# Strip Series

## 50 mil Center Line Spacing



### Optional Circuit Terminations (Terminations Are Solid 24 AWG Wire)



### How To Order

**S R 15 P 2 - 26 E 5 - 18.0**

**or L01**

**Series "S"**

**Insulator Material**

R= PPS per MIL-M-24519 GST-40F \*

**Size**

Number of contacts up to 43

**Contact Type**

P= Pin, Crimp    N= Pin, Solder Cup  
S= Socket, Crimp    T= Socket, Solder Cup

**Hardware**

(Combine as required)

0= None

- 1= One guide pin (socket side), One hole (pin side)
- 2= Two guide pins (socket side), Two holes (pin side)
- 3= One center jackscrew (socket side),  
One threaded hole (pin side)
- 4= Mounting hole at each end
- 5= Jackscrews hole at each end (socket side)  
Threaded holes each end (pin side)

\* = Indicates preferred standard

**Wire Length**

3 Digits (ie. 18.0") or M46 (cm)

**Wire Color/Finish**

- 1= All white
- 2= All yellow
- 3= Tin plated-solid
- 4= Gold plated-solid
- 5= Color coded per MIL-STD-681C

**Wire Type**

- C= Solid copper per QQ-W-343
- E= Type "E" Teflon per MIL-W-16878/4
- F= Type "ET" Teflon per MIL-W-16878/6
- M= Teflon per MIL-W-22759/11
- Y= Tefzel per MIL-W-22759/33

**Wire Size**

24,25,26\*,30 AWG

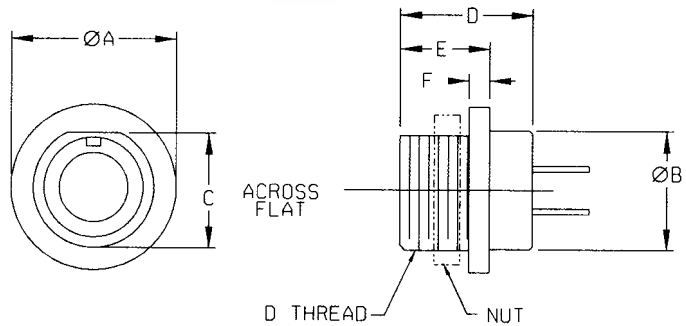
**Circuit Termination**

(Ends part#)

-L01, -L02, -L03, -L04, -L05, -L06 **19**

## RQ Receptacle

The Ulti-Mate "RQ" Series was originally designed for a quick disconnect connector for a small missile with a lanyard release. It has since grown into a family of a simple push-pull hand disconnect. All have precision machined metal shells and are available in the sizes 1, 2 and 3 layouts. Environmental sealing is optional.

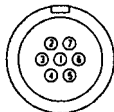


Rear Mount

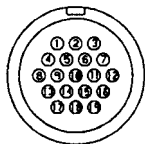
Shell Size	A Max.	B Max.	C Max.	D Max.	E Max.	F Max.
1	.605	.435	.418	.485	.330	.080
2	.655	.460	.480	.510	.345	.095
3	.885	.745	.725	.490	.300	.050

### Contact Arrangements

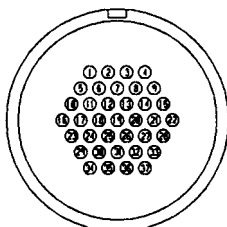
Face View / Pin Side  
Enlarged for Clarity



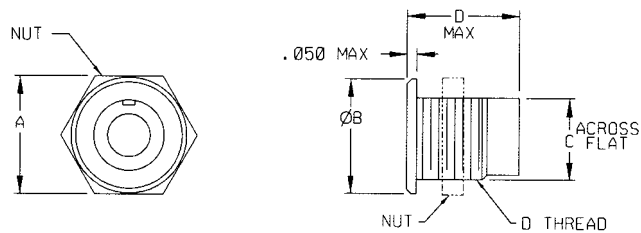
7 Contacts  
(Size 1)



19 Contacts  
(Size 1 or 2)



37 Contacts  
(Size 3)



Front Mount

Shell Size	A Max.	B Max.	C Max.	D Max.
1	.510	.510	.360	.495
2	.575	.565	.480	.510
3	.855	.850	.735	.495

### Front Panel Mount Cutouts

Shell Size	A +/- .005	B Dia.
1	.364	.390
2	.475	.515
3	.729	.755

### Rear Panel Mount Cutouts

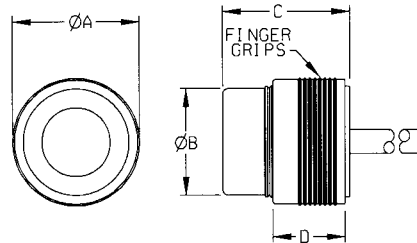
Shell Size	A +/- .005	B Dia.
1	.425	.440
2	.535	.564
3	.729	.755

# RQ Plug

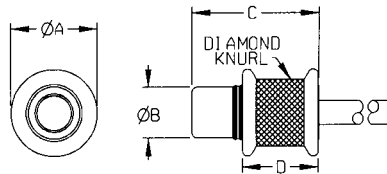
This family provides all the advantages of circular connectors: ease of coupling, round cable bundle form, ease of panel mounting and space efficiency.

Shell Size	A Max.	B Max.	C Ref.
1	.500	.300	.770
2	.610	.410	.755
3	.760	.635	.760

Shell Size	D Max.	No. of Contacts
1	.770	7 or 9
2	.755	19
3	.760	37



Size 3



Size 1 & 2

## How To Order

**R Q P 0 B 1 - 7 S 26 E 5 - 18.0**

### Circular Series

### Connector Type

Q= Quick disconnect

### Shell Style

P= Plug  
R= Receptacle

### Mounting Style

0= Plug  
1= Front Mount Receptacle  
2= Rear Mount Receptacle

### Material

B= Brass, nickel plated

### Shell Size

1= 7 or 19 Position  
2= 19 Position  
3= 37 Position

### Wire Length

3 Digits (ie. 18.0") or M46 (cm)

### Wire Color

Reference page 3

### Wire Type

Reference page 3

### Wire Size

24,25,26\*,30 AWG

### Contact Type

P= Pin  
S= Socket

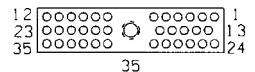
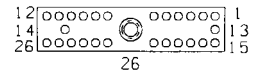
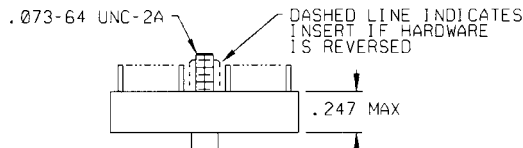
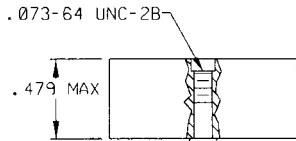
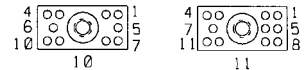
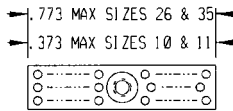
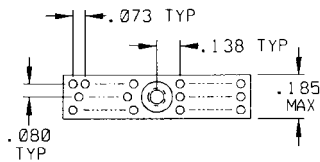
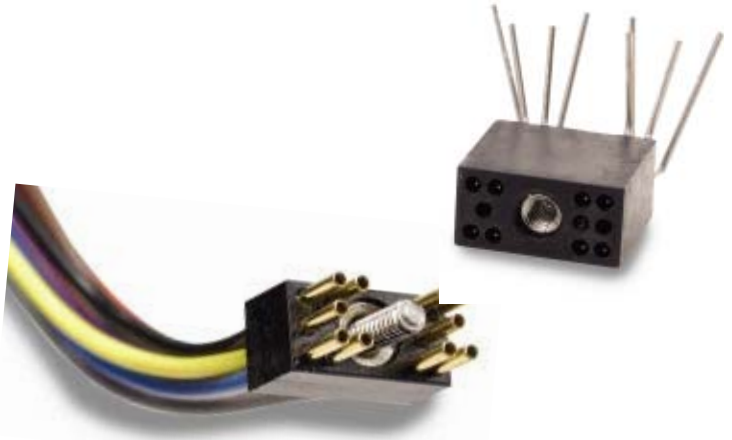
### Contact Layout

7, 19, 37

\* = Indicates preferred standard

## JSB Series

A family of microminiature center jack-screw connectors. The JSB Series, is available with layouts of 10, 11, 26 and 35 contacts. The JSB Series has a full range of terminations including cable to cable, board to cable, board to board and various other combinations.



MAY BE ORDERED WITH JACKSCREW AND JACKPOST REVERSED. (JACKSCREW SHOWN AT RIGHT IS STANDARD.)

.073-64 JACKSCREW (STANDARD INSTALLATION)

### How To Order

## **JSB R -26 P -26 E 5 -18.0 S**

**Series "JSB"**

**Insulator Material**

R= PPS Per Mil-M-24519 GST-40F

**Contact Arrangement**

10, 11, 26, 35

**Contact Type**

P= Pin Crimp  
S= Socket Crimp  
N= Pin Solder Cup  
T= Socket Solder Cup

**Coupling**

S= Standard  
R= Reversed

**Wire Length**

3 Digits (ie. 18.0") or M46 (cm)

**Wire Color**

Refer To Page 3

**Wire Type**

Refer To Page 3

**Wire Size**

24, 25, 26\*, 28, 30 AWG

\* = Indicates preferred standard

## Custom Connectors



*When your system requirements demand more than a standard Microminiature connector, Uliti-Mate is prepared to offer custom interconnect solutions to meet the most rigid performance requirements. Our development time from concept to production is unequalled. We are tooled on more Microminiature configurations than anyone else in the marketplace. When tooling is necessary we are equipped with the latest in design tools to speed your concept to reality. Let our experienced team design and build your next interconnect solution.*



*est in design tools to speed your concept to reality. Let our experienced team design and build your next interconnect solution.*



## **Custom Cable Assemblies**

*As a high end cable assembly supplier to the Military, Commercial airframe, Medical and Communications industries let us put our expertise to work for you. We design, manufacture and test custom pre-*



*cision interconnect turnkey solutions to meet your requirements. From over molded back-to-back cables to multiple connector “3D” system harness assemblies, the team at Uliti-Mate is ready*



*to make your concept a reality.*



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**Ulti-Mate**  
**Connector Inc.**