

# **D-SUBMINIATURE**

RIGHT ANGLE .318" [8.08] MOUNT DPL & DSL SERIES

#### INTRODUCTION:

Adam Tech Right Angle PCB mount .318" footprint D-Sub connectors are a popular interface for many I/O applications. Offered in 9, 15, 25 and 37 positions they are a good choice for a low cost industry standard connection. These connectors are manufactured with precision stamped contacts offering a choice of contact plating and a wide selection of mating and mounting options.

#### **FEATURES:**

Industry standard compatibility
Durable metal shell design
Precision formed contacts
Variety of Mating and mounting options

#### **MATING CONNECTORS:**

Adam Tech D-Subminiatures and all industry standard D-Subminiature connectors.

#### **SPECIFICATIONS:**

#### Material:

Standard insulator: PBT, 30% glass reinforced, rated UL94V-0

Optional Hi-Temp insulator: Nylon 6T

Insulator color: Black Contacts: Phosphor Bronze Shell: Steel, Tin or Zinc plated Hardware: Brass, Nickel plated

#### **Contact Plating:**

Gold flash (15 and 30  $\mu$ in optional) over Nickel underplate on mating area. Tin over copper underplate on PCB tails.

#### Electrical:

Operating voltage: 250V AC / DC max.

Current rating: 5 Amps max.

Contact resistance: 20 m $\Omega$  max. initial Insulation resistance: 5000 M $\Omega$  min.

Dielectric withstanding voltage: 1000V AC for 1 minute

#### Mechanical:

Insertion force: 0.75 lbs max Extraction force: 0.44 lbs min

#### **Temperature Rating:**

Operating temperature: -55°C to +105°C

Soldering process temperature: Standard insulator: 235°C Hi-Temp insulator: 260°C

#### **PACKAGING:**

Anti-ESD plastic trays

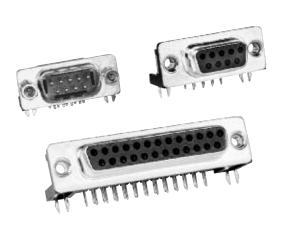
#### **APPROVALS AND CERTIFICATIONS:**

UL Recognized & CSA Certified, File no. E224053

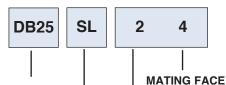








#### ORDERING INFORMATION



#### SHELL SIZE/ POSITIONS

**DE09** = 9 Position **DA15** = 15 Position **DB25** = 25 Position

**DC37** = 37 Position

#### CONTACT TYPE

**PL** = Plug, .318" Footprint **SL** = Socket, .318" Footprint

# MATING FACE MOUNTING OPTIONS

- 3 = #4-40 fixed jackscrews
- 4 = #4-40 flush threaded inserts
- **5** = #4-40 flush threaded inserts with removable jackscrews installed
- **6** = .120" non-threaded mounting holes
- \* See Mounting Option diagrams pg. 77

#### **PCB MOUNTING OPTIONS**

- 1 = Wrap around ground straps with thru holes
- 2 = Forked board locks
- **3** = Top side only ground straps with thru holes
- 4 = Top side only ground straps with #4-40 threaded screw holes
- \* See Mounting Option diagrams pg. 77

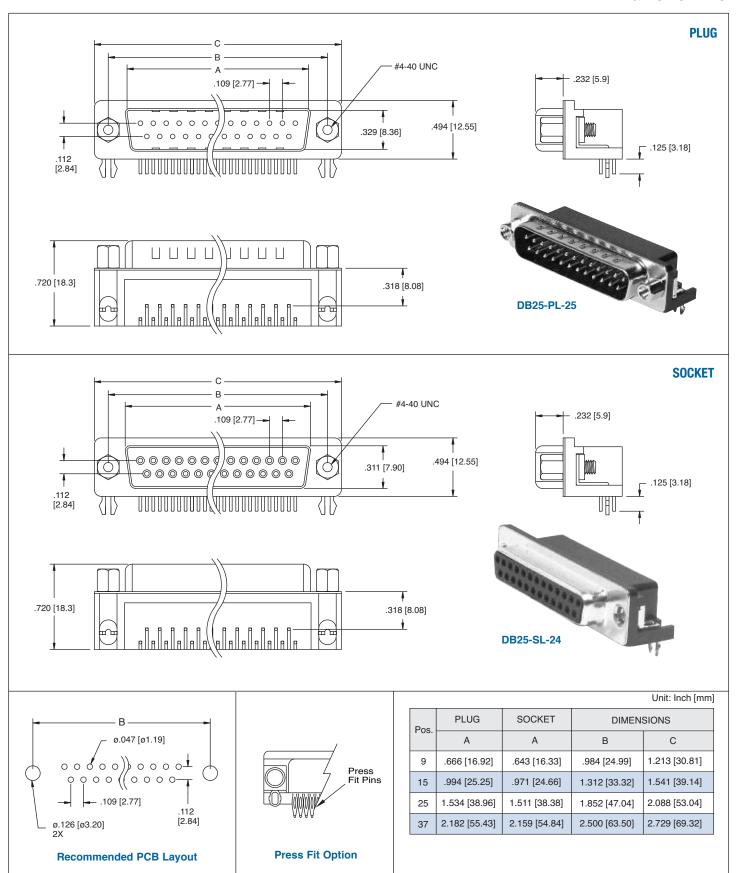
#### **OPTIONS:**

Add designator(s) to end of part number

- **15** = 15  $\mu$ in gold plating in contact area
- **30** = 30  $\mu$ in gold plating in contact area
- **EMI** = Ferrite filtered version for EMI/RFI suppression
- **LPJ** = Loose packed jackscrews
  - **F** = Superior retention 4 prong boardlocks
- HT = Hi-Temp insulator for Hi-Temp soldering processes up to 260°C
- **R** = Round jackscrews
- **PF** = Press fit pins



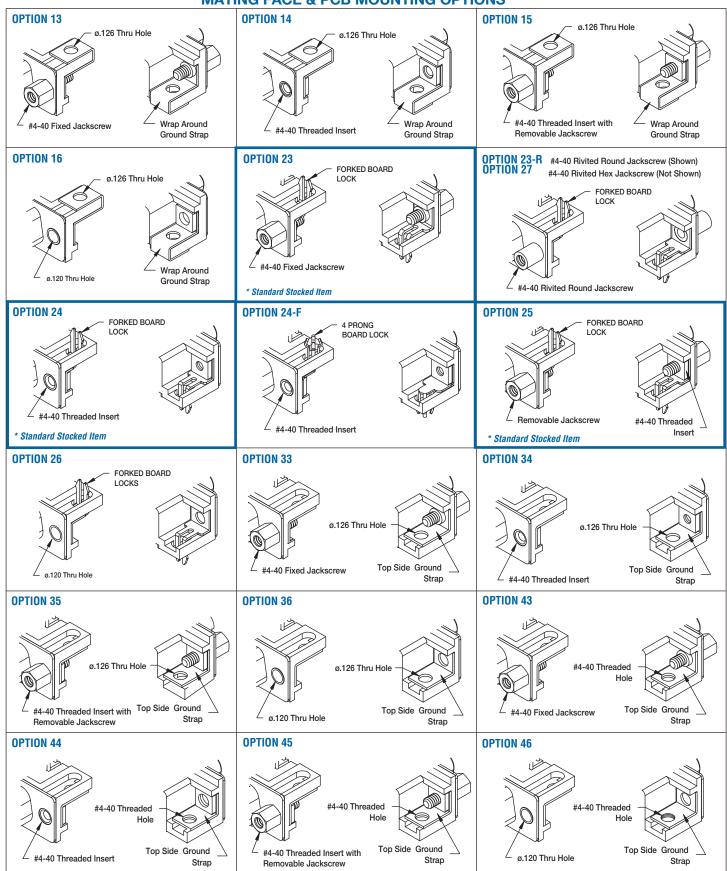
RIGHT ANGLE .318" [8.08] MOUNT DPL & DSL SERIES





RIGHT ANGLE .318" [8.08] MOUNTING OPTIONS

#### **MATING FACE & PCB MOUNTING OPTIONS**





# **D-SUBMINIATURE**

RIGHT ANGLE .590" [15.00] MOUNT DPQ & DSQ SERIES

#### INTRODUCTION:

Adam Tech Right Angle PCB mount .590" footprint D-Sub connectors are a popular interface for many I/O applications. Offered in 9, 15, 25 and 37 positions they are an excellent choice for a low cost industry standard connection. They are available with full or half size PCB side mounting flanges. Adam Tech connectors are manufactured with precision stamped contacts offering a choice of contact plating and a wide selection of mating and mounting options.

#### **FEATURES:**

Half or Full flange options Industry standard compatibility Durable metal shell design Precision formed contacts Variety of Mating and mounting options

#### **MATING CONNECTORS:**

Adam Tech D-Subminiatures and all industry standard D-Subminiature connectors.

#### SPECIFICATIONS:

#### Material:

Standard insulator: PBT, 30% glass reinforced, rated UL94V-0

Optional Hi-Temp insulator: Nylon 6T

Insulator Color: Black Contacts: Phosphor Bronze Shell: Steel, Tin or Zinc plated Hardware: Brass, Nickel plated

#### **Contact Plating:**

Gold flash (15 and 30  $\mu$ in optional) over Nickel underplate.

#### **Electrical:**

Operating voltage: 250V AC / DC max.

Current rating: 5 Amps max.

Contact resistance: 20 m $\Omega$  max. Initial Insulation resistance: 5000 M $\Omega$  min.

Dielectric withstanding voltage: 1000V AC for 1 minute

#### Mechanical:

Insertion force: 0.75 lbs max Extraction force: 0.44 lbs min

#### **Temperature Rating:**

Operating temperature: -55°C to +105°C

Soldering process temperature: Standard insulator: 235°C Hi-Temp insulator: 260°C

#### **PACKAGING:**

Anti-ESD plastic trays

#### APPROVALS AND CERTIFICATIONS:

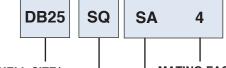
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#### ORDERING INFORMATION



#### SHELL SIZE/ POSITIONS

**DE09** = 9 Position **DA15** = 15 Position **DB25** = 25 Position **DC37** = 37 Position

#### **CONTACT TYPE** -

**PQ**= Plug,

**OPTIONS:** 

.590" Footprint

**SQ**= Socket, .590" Footprint

Add designator(s) to end of part number

for EMI/RFI suppression

**15** = 15  $\mu$ in gold plating in

**30** = 30  $\mu$ in gold plating in

**EMI** = Ferrite filtered version

**HT** = Hi-Temp insulator for

**R** = Round jackscrews

Hi-Temp soldering

**LPJ** = Loose packed jackscrews

F = Superior retention 4 prong

processes up to 260°C

contact area

contact area

boardlocks

# MATING FACE MOUNTING OPTIONS

3 = #4-40 fixed jack screws

**4** = #4-40 flush threaded inserts

5 = #4-40 flush threaded inserts with removable jack screws installed

**6** = .120" non-threaded mounting holes

\* See Mounting Option diagrams page 80

# PCB MOUNTING OPTIONS

SA = Wrap around ground straps with thru holes on half flange

SB = Wrap around ground straps with thru holes on full flange

SC = Top side only ground straps with thru holes on half flange

SD = Top side only ground straps with thru holes on full flange

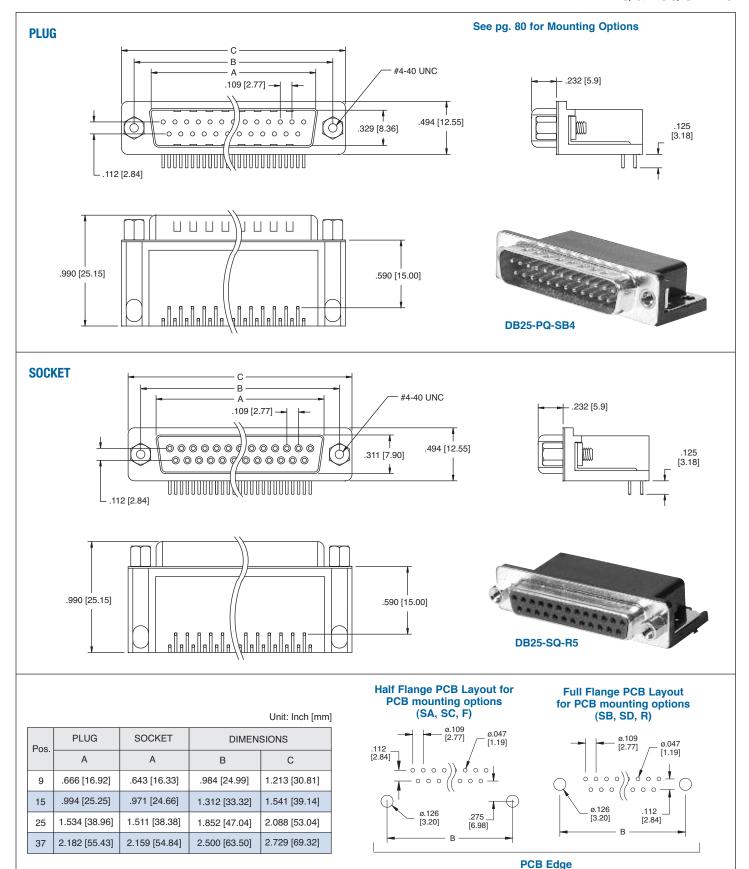
**F** = Forked boardlocks on half flange

**R** = Forked boardlocks on full flange

\* See Mounting Option diagrams page 80



RIGHT ANGLE .590" [15.00] MOUNT DPQ & DSQ SERIES

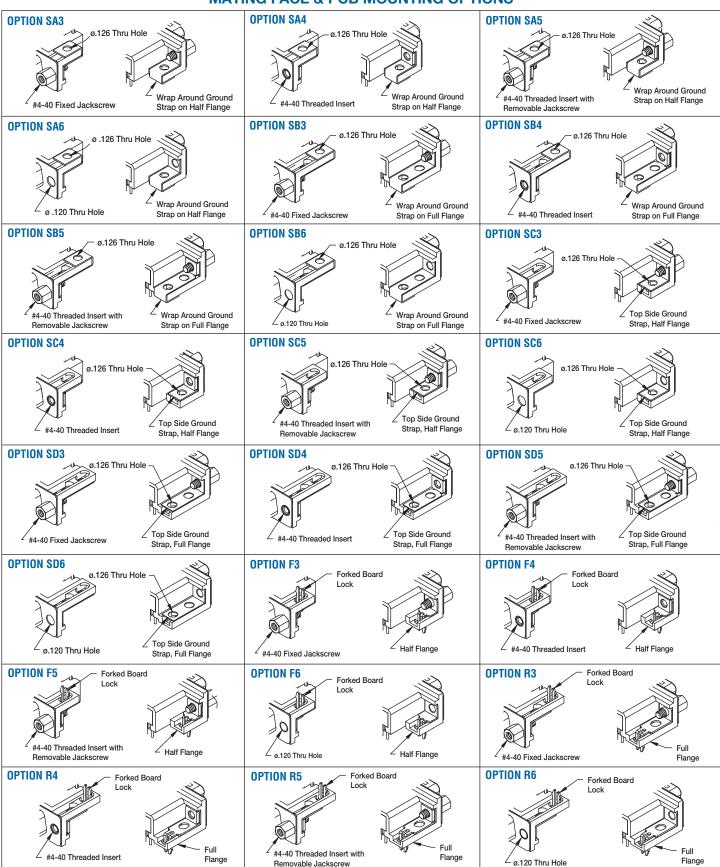




Adam Technologies, Inc.

RIGHT ANGLE .590" [15.00] MOUNTING OPTIONS

#### **MATING FACE & PCB MOUNTING OPTIONS**





#### COMBINATION SIGNAL WITH COAX OR POWER

DSC SERIES

#### INTRODUCTION:

Adam Tech Combination Signal/Coax D-Sub connectors are a popular interface for many mixed signal I/O applications. Offered in five shell sizes they are a good choice for a low cost industry standard connection that requires utilization of standard signal and high performance, low impedance signals either in signal-coax or signal power choices. Adam Tech connectors are manufactured with precision stamped standard signal contacts and precision turned coax contacts. These connectors are manufactured with precision stamped contacts offering a choice of contact plating and a wide selection of mating and mounting options.

#### **Electrical:**

Operating voltage: 250V AC / DC max. Signal Current rating: 5 Amps max.

High Power contact current rating: 20 or 40 Amps.

Coaxial Impedance:  $50\Omega$  (75 $\Omega$  optional) Contact resistance: 20 mΩ max. initial Insulation resistance: 5000 M $\Omega$  min.

Dielectric withstanding voltage: 1000V AC for 1 minute

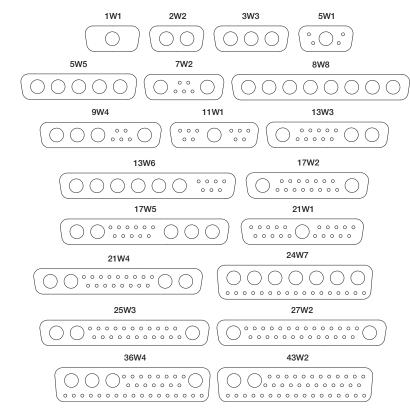


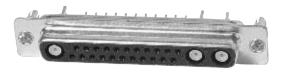


#### APPROVALS AND CERTIFICATIONS:

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#### SHELL CONFIGURATIONS







#### ORDERING INFORMATION

**D13W3** 



2

#### **SHELL CONFIGURATIONS**

D1W1, D2W2, D3W3, D5W1, D5W5, D7W2, D8W8, D9W4N, D11W1, D13W3, D13W6, D17W2, D17W5, D21W1, D21W4, D24W7, D25W3, D27W2, D36W4, D43W2

#### **CURRENT RATING**

SIGNAL-COAX

1 = 50 Ohm

2 = 75 Ohm

SIGNAL-POWER

3 = 10 Amps

4 = 20 Amps

5 = 30 Amps

6 = 40 Amps

7 = 50 Amps

#### TYPE '

#### SIGNAL-COAX

PT = Plug, Straight PCB

ST = Socket, Straight PCB

PL= Plug, Right Angle PCB

**SL**= Socket, Right Angle PCB

PD = Plug, Solder Cup

SD = Socket, Solder Cup

SIGNAL-POWER

PTP= Plug, Straight PCB,

**Power Contacts** STP= Socket, Straight PCB,

**Power Contacts** PLP= Plug, Right Angle PCB,

**Power Contacts** 

SLP= Socket, Right Angle PCB, Power Contacts

PDP= Plug, Solder Cup **Power Contacts** 

SDP = Socket, Solder Cup **Power Contacts** 

#### MOUNTING RIGHT ANGLE

- 1 = 120" non-threaded mounting holes. no bracket
- 2 = Short Bracket with #4-40 flush threaded inserts in mounting holes
- 2A = Short Bracket with #4-40 flush threaded inserts in mounting holes Jack Screws installed
  - 3= Long Bracket with #4-40 flush threaded inserts in mounting holes
- 3A = Long Bracket with #4-40 flush threaded inserts in mounting holes Jack Screws installed

#### MOUNTING STRAIGHT

JS= Riveted #4-40 Jack Screws on top of flange

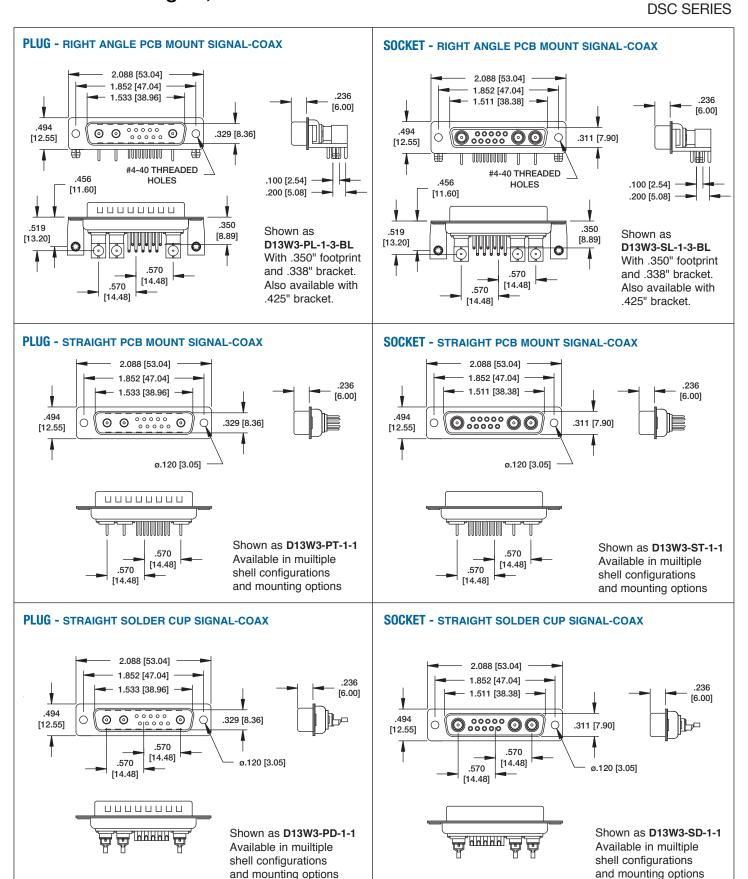
SL= Riveted #4-40 clinch nuts on bottom of flange

**BL** = Riveted Board Locks



# **D-SUBMINIATURE**

COMBINATION SIGNAL & COAX

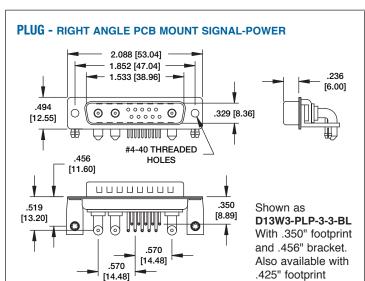




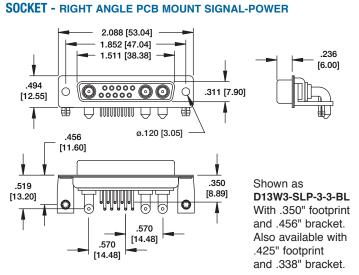
# **D-SUBMINIATURE**

**COMBINATION SIGNAL & POWER** 

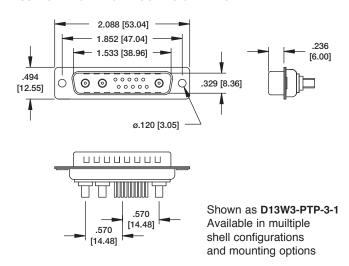
**DSC SERIES** 



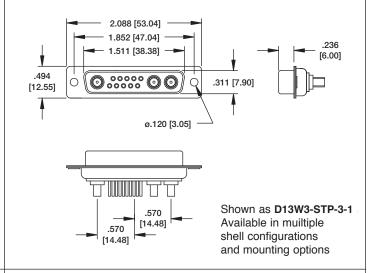
and .338" bracket.



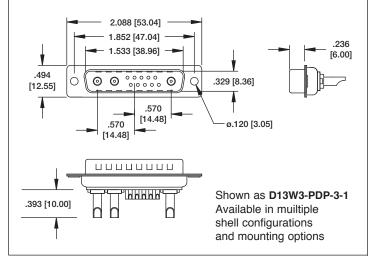




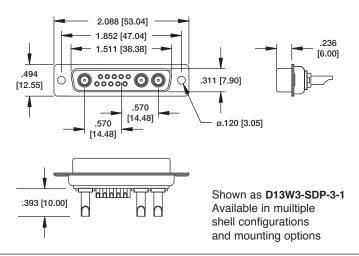




#### **PLUG - STRAIGHT SOLDER CUP SIGNAL-POWER**



#### **SOCKET - STRAIGHT SOLDER CUP SIGNAL-POWER**





## **D-SUBMINIATURE**

RIGHT ANGLE .197" [5.00] SLIMLINE

#### **INTRODUCTION:**

Adam Tech Right Angle Slimline PCB tail D-Sub connectors are a popular interface for many I/O applications. Offered in 9, 15 and 25 positions they are an excellent choice for a low cost industry standard connection and are ideal for low profile design requirements. Adam Tech connectors are manufactured with precision stamped contacts offering a choice of contact plating and a wide selection of mating and mounting options.

#### **FEATURES:**

Short profile space saving design Industry standard compatibility Durable metal shell design Precision formed contacts Variety of Mating and mounting options

#### **MATING CONNECTORS:**

Adam Tech D-Subminiatures and all industry standard D-Subminiature connectors.

#### **SPECIFICATIONS:**

#### Material:

Standard insulator: PBT, 30% glass reinforced, rated UL94V-0

Optional Hi-Temp insulator: Nylon 6T

Insulator Color: Black Contacts: Phosphor Bronze Shell: Steel, Tin or Zinc plated Hardware: Brass, Nickel plated

#### **Contact Plating:**

Gold flash (15 and 30  $\mu$ in optional) over Nickel underplate overall.

#### **Electrical:**

Operating voltage: 250V AC / DC max.

Current rating: 5 Amps max.

Contact resistance: 20 m $\Omega$  max. initial Insulation resistance: 5000 M $\Omega$  min.

Dielectric withstanding voltage: 1000V AC for 1 minute

#### Mechanical:

Insertion force: 0.75 lbs max Extraction force: 0.44 lbs min

#### **Temperature Rating:**

Operating temperature: -55°C to +105°C

Soldering process temperature: Standard insulator: 235°C Hi-Temp insulator: 260°C

#### **PACKAGING:**

Anti-ESD plastic trays

#### APPROVALS AND CERTIFICATIONS:

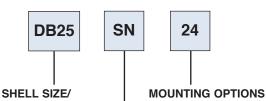
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#### ORDERING INFORMATION



POSITIONS
DE09 = 9 Positions
DB25 = 25 Positions
HD15 = High Density

HD15 = High Density
15 Positions

24 = Forked Boardlocks for PCB Retention and #4-40 threaded inserts in mounting holes

25 = Forked Boardlocks for PCB retention and #4-40 threaded inserts in mounting holes with installed jackscrews

#### CONTACT / TYPE

**PN** = Plug, .197" Slimline **SN** = Socket, .197" Slimline

#### **OPTIONS:**

Add designator(s) to end of part number

**15** = 15  $\mu$ in gold plating in contact area

**30** = 30  $\mu$ in gold plating in contact area

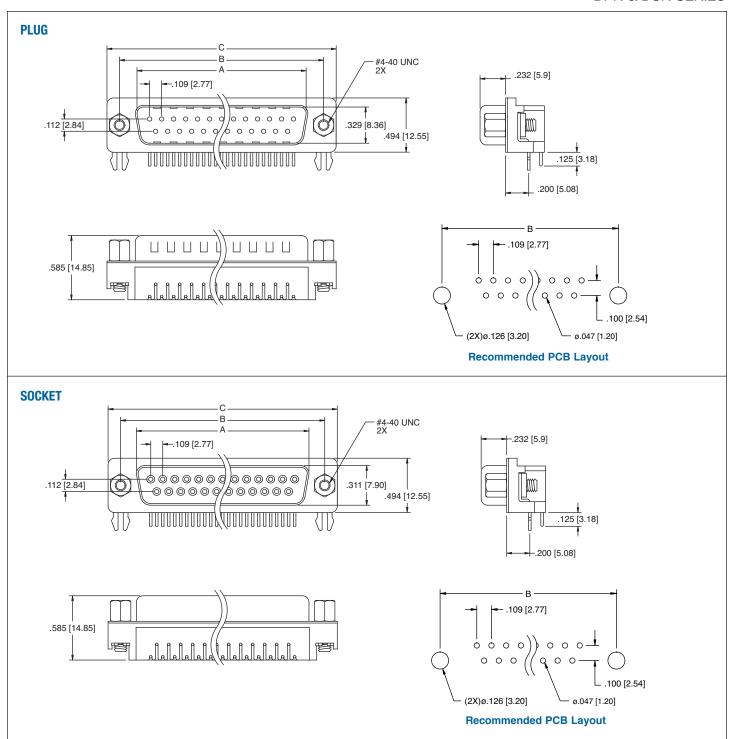
**LPJ** = Loose packed jackscrews

**HT** = Hi-Temp insulator for Hi-Temp soldering processes up to 260°C

R = Round jackscrews installed



RIGHT ANGLE .197" [5.00] SLIMLINE DPN & DSN SERIES



Unit: Inch [mm]

Positions	PLUG	SOCKET	DIMEN	ISIONS
FOSITIONS	А	A	В	С
9	.666 [16.92]	.643 [16.33]	.984 [24.99]	1.213 [30.81]
15	.994 [25.25]	.971 [24.66]	1.312 [33.32]	1.541 [39.14]
25	1.534 [38.96]	1.511 [38.38]	1.852 [47.04]	2.088 [53.04]



RIGHT ANGLE SMT .118" [3.00] SLIMLINE SMT SERIES

#### INTRODUCTION:

Adam Tech Right Angle SMT Slimline D-Sub connectors are a popular interface for many I/O applications. Offered in 9, 15 and 25 positions they are an excellent choice for a low cost industry standard connection and are ideal for low profile design requirements. Adam Tech connectors are manufactured with precision stamped contacts offering a choice of contact plating and a wide selection of mating and mounting options.

#### **FEATURES:**

Short profile space saving design Industry standard compatibility Durable metal shell design Precision formed contacts Variety of Mating and mounting options

#### **MATING CONNECTORS:**

Adam Tech D-Subminiatures and all industry standard D-Subminiature connectors.

#### **SPECIFICATIONS:**

#### Material:

Insulator: Hi-Temperature thermoplastic, rated UL94V-0

Insulator Color: Black

Contacts: Phosphor Bronze or Brass Shell: Steel, Tin or Zinc plated Hardware: Brass, Nickel plated

#### **Contact Plating:**

Gold flash (15 and 30  $\mu$ in optional) over Nickel underplate on mating area, Tin over Copper underplate on SMT tails.

#### **Electrical:**

Operating voltage: 250V AC / DC max.

Current rating: 1 Amp max.

Contact resistance: 20 m $\Omega$  max. initial Insulation resistance: 5000 M $\Omega$  min.

Dielectric withstanding voltage: 1000V AC for 1 minute

#### Mechanical:

Insertion force: 0.75 lbs max Extraction force: 0.44 lbs min

#### **Temperature Rating:**

Operating temperature: -55°C to +105°C Soldering process temperature: 260°C

#### **PACKAGING:**

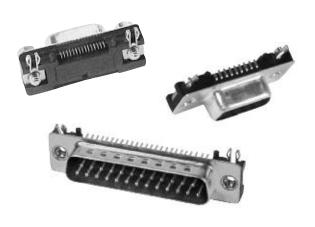
Anti-ESD plastic trays

#### **APPROVALS AND CERTIFICATIONS:**

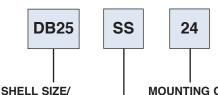
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#### ORDERING INFORMATION



## POSITIONS

DE09 = 9 Positions DB25 = 25 Positions HDL15 = High Density 15P

#### **MOUNTING OPTIONS**

24 = Forked Boardlocks for PCB Retention and #4-40 threaded inserts in mounting holes

25 = Forked Boardlocks for PCB retention and #4-40 threaded inserts in mounting holes with installed jackscrews

#### **CONTACT / TYPE**

PS = Plug Surface Mount SS = Socket Surface Mount

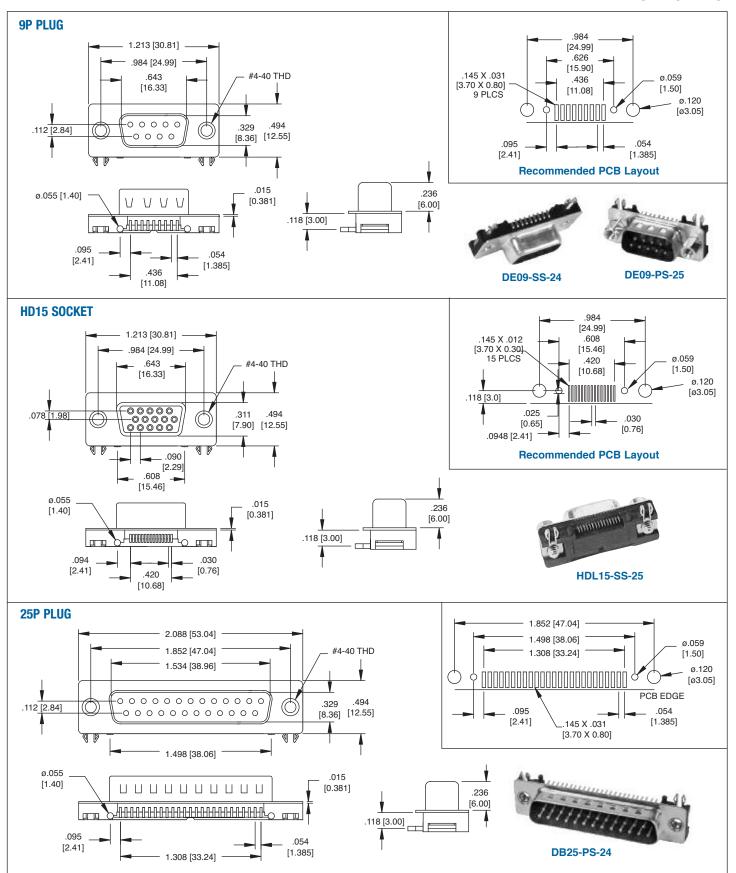
#### OPTIONS:

Add designator(s) to end of part number  $15 = 15 \mu$ in gold plating in contact area  $30 = 30 \mu$ in gold plating in contact area R = R



# **D-SUBMINIATURE**

RIGHT ANGLE SMT .118" [3.00] SLIMLINE SMT SERIES





## **D-SUBMINIATURE**

# RIGHT ANGLE WITH MACHINED CONTACTS

**DPH & DSH SERIES** 

#### INTRODUCTION

Adam Tech Right Angle .283" footprint D-Sub connectors with Screw Machine Contacts are a popular interface for many I/O applications. Offered in 9, 15, 25 and 37 positions they are a good choice for a high reliability industry standard connection. These connectors are manufactured with precision machine turned contacts and offer an exceptional high reliability connection. They are available in a choice of contact plating and a wide selection of mating and mounting options.

#### **FEATURES:**

**Exceptional Machine Contact connection** Industry standard compatibility Durable metal shell design Precision turned screw machined contacts Variety of Mating and mounting options

#### MATING CONNECTORS:

Adam Tech D-Subminiatures and all industry standard D-Subminiature connectors.

#### SPECIFICATIONS:

#### Material:

Standard insulator: PBT, 30% glass reinforced, rated UL94V-0 Optional Hi-Temp insulator: Nylon 6T rated UL94V-0

Insulator Colors: White (Black optional)

Contacts: Phosphor Bronze Shell: Steel, Tin plated Hardware: Brass, Nickel plated

#### **Contact Plating:**

Gold flash (15 and 30  $\mu$ in optional) over Nickel underplate.

#### **Electrical:**

Operating voltage: 250V AC / DC max.

Current rating: 5 Amps max.

Contact resistance: 20 m $\Omega$  max. initial Insulation resistance: 5000 M $\Omega$  min.

Dielectric withstanding voltage: 1000V AC for 1 minute

#### Mechanical:

Insertion force: 0.75 lbs max Extraction force: 0.44 lbs min

#### **Temperature Rating:**

Operating temperature: -55°C to +105°C

Soldering process temperature: Standard insulator: 235°C Hi-Temp insulator: 260°C

#### **PACKAGING:**

Anti-ESD plastic trays

#### **APPROVALS AND CERTIFICATIONS:**

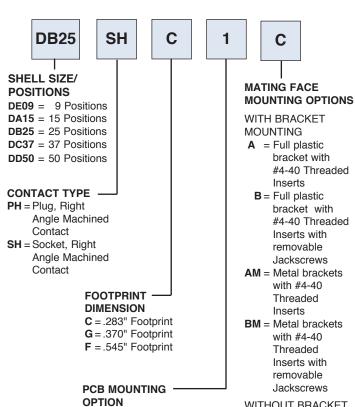
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#### ORDERING INFORMATION



#### WITH BRACKET MOUNTING

C

A = Full plastic bracket with #4-40 Threaded Inserts

B = Full plastic bracket with #4-40 Threaded Inserts with removable Jackscrews

AM = Metal brackets with #4-40 Threaded Inserts

**BM** = Metal brackets with #4-40 Threaded Inserts with removable Jackscrews

#### WITHOUT BRACKET **MOUNTING**

C = .120"

Non-Threaded holes

D = #4-40Rear Clinch Nut

**E** = #4-40 Clinch Nut with removable Jackscrews

#### **OPTIONS:**

Add designator(s) to end of part number **15** = 15  $\mu$ in gold plating in contact area

1 = Without Bracket

boardlock

2 = Bracket with forked

3 = Bracket with .120"

PCB mounting hole

**30** = 30  $\mu$ in gold plating in contact area

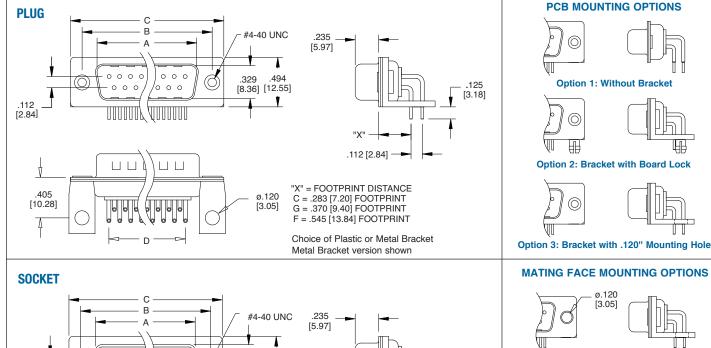
**BK** = Black insulator

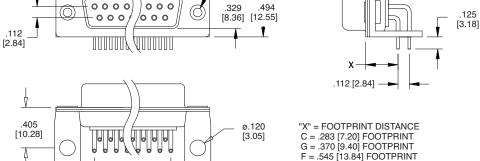
**HT** = Hi-Temp insulator for Hi-Temp soldering processes up to 260°C



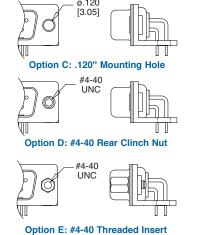
# RIGHT ANGLE WITH MACHINED CONTACTS

**DPH & DSH SERIES** 

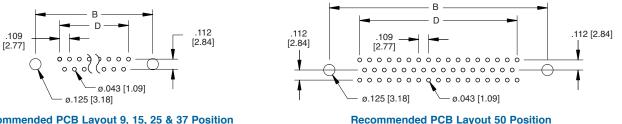




Choice of Plastic or Metal Bracket Metal Bracket version shown



with removable Jack Screws



Recommended PCB Layout 9, 15, 25 & 37 Position

Unit: Inch / mm

Positions	PLUG	SOCKET	DIMENSIONS		
1 031110113	A	А	В	С	D
9	.666 [16.92]	.643 [16.33]	.984 [24.99]	1.213 [30.81]	.436 [11.08]
15	.994 [25.25]	.971 [24.66]	1.312 [33.32]	1.541 [39.14]	.763 [19.39]
25	1.534 [38.96]	1.511 [38.38]	1.852 [47.04]	2.088 [53.04]	1.310 [33.24]
37	2.182 [55.43]	2.159 [54.84]	2.500 [63.50]	2.729 [69.32]	1.963 [49.86]
50	2.790 [52.80]	2.016 [52.34]	2.402 [61.00]	2.646 [67.20]	1.744 [44.32]

# ADAM TECH

# Adam Technologies, Inc.

# **D-SUBMINIATURE**

IDC FLAT CABLE TERMINATION

DPF & DSF SERIES

#### INTRODUCTION:

Adam Tech Flat Cable IDC D-Sub connectors are a popular interface for many I/O and cable assembly applications. Offered in 9, 15, 25, 37 and 50 positions they are an excellent choice for a low cost industry standard connection that terminates .050" flat cable quickly, easily and compactly. These connectors are manufactured with precision stamped contacts offering a choice of contact plating and a wide selection of mating and mounting options.

#### **FEATURES:**

Quickly terminates to flat cable Industry standard compatibility Durable metal shell design Integral strain relief available Precision formed contacts Variety of Mating and mounting options

#### **MATING CONNECTORS:**

Adam Tech D-Subminiatures and all industry standard D-Subminiature connectors.

#### SPECIFICATIONS:

#### Material:

Insulator: PBT, 30% glass reinforced, rated UL94V-0

Insulator Colors: Black (Blue optional)

Contacts: Phosphor Bronze Shell: Steel, Tin or Zinc plated Hardware: Brass, Nickel plated

#### **Contact Plating:**

Gold flash (15 and 30  $\mu$ in optional) over Nickel underplate, Nickel over copper underplate on IDC area

#### Electrical:

Operating voltage: 250V AC / DC max.

Current rating: 5 Amps max.

Contact resistance: 20 m $\Omega$  max. initial Insulation resistance: 5000 M $\Omega$  min.

Dielectric withstanding voltage: 1000V AC for 1 minute

#### Mechanical:

Insertion force: 0.75 lbs max Extraction force: 0.44 lbs min

Recommended cable size: 28 to 30 Awg.

**Temperature Rating:** 

Operating temperature: -55°C to +105°C

#### **PACKAGING:**

Anti-ESD plastic trays

#### **APPROVALS AND CERTIFICATIONS:**

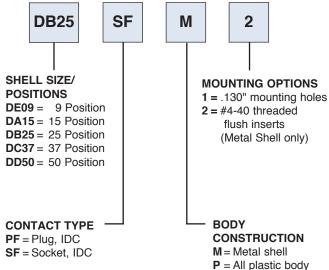
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#### **ORDERING INFORMATION**



## Strain Relief

#### Part No.:

DSR-09 = 9 Position DSR-15 = 15 Position DSR-25 = 25 Position DSR-37 = 37 Position DSR-50 = 50 Position

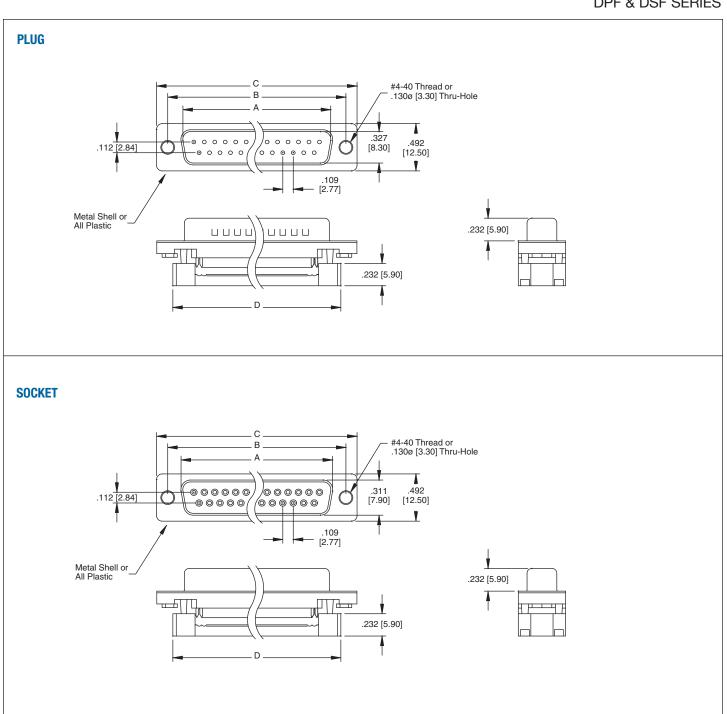
#### **OPTIONS:**

Add designator(s) to end of part number 15 = 15 µin. gold in contact area 30 = 30 µin. gold in contact area BU = Blue color insulator



IDC FLAT CABLE TERMINATION

DPF & DSF SERIES



Unit: Inch [mm]

Positions PLUG A		SOCKET	DIMENSIONS		
		A	В	С	D
9	.666 [16.92]	.643 [16.33]	.984 [24.99]	1.213 [30.81]	.883 [22.44]
15	.994 [25.25]	.971 [24.66]	1.312 [33.32]	1.541 [39.14]	1.213 [30.81]
25	1.534 [38.96]	1.511 [38.38]	1.852 [47.04]	2.088 [53.04]	1.755 [44.57]
37	2.182 [55.43]	2.159 [54.84]	2.500 [63.50]	2.729 [69.32]	2.414 [61.32]

# ADAM TECH

# Adam Technologies, Inc.

#### INTRODUCTION:

Adam Tech Solder Cup D-Sub connectors are a popular interface for many I/O applications. Offered in 9, 15, 25, 37 and 50 positions, they are an excellent choice for a low cost industry standard connection. These connectors are manufactured with precision stamped contacts, and offer a wide selection of mating and mounting options. Adam Tech Solder Cup connectors can be soldered to cable ends or mounted directly to a PCB card edge.

#### **FEATURES:**

Cable or edge card mounting Industry standard compatibility Durable metal shell design Precision formed contacts Mating and mounting options

#### **MATING CONNECTORS:**

Adam Tech D-Subminiatures and all industry standard D-Subminiature connectors.

#### **SPECIFICATIONS:**

#### Material:

Insulator: PBT, 30% glass reinforced, rated UL94V-0

Insulator Colors: Black (White optional)

Contacts: Phosphor Bronze Shell: Steel, Tin or Zinc plated Hardware: Brass, Nickel plated

#### **Contact Plating:**

Gold flash (15 and 30  $\mu$ in optional) over Nickel underplate underall.

#### **Electrical:**

Operating voltage: 250V AC / DC max.

Current rating: 5 Amps max.

Contact resistance:  $20~\text{m}\Omega$  max. initial Insulation resistance:  $5000~\text{M}\Omega$  min.

Dielectric withstanding voltage: 1000V AC for 1 minute

#### Mechanical:

Insertion force: 0.75 lbs max Extraction force: 0.44 lbs min

#### **Temperature Rating:**

Operating temperature: -55°C to +105°C

#### PACKAGING:

Anti-ESD plastic trays

#### **APPROVALS AND CERTIFICATIONS:**

UL Recognized & CSA Certified, File no. E224053



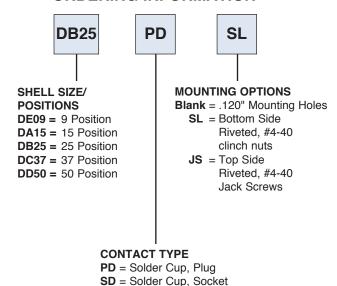


# **D-SUBMINIATURE**

SOLDER CUP TERMINATION
DPD & DSD SERIES



#### ORDERING INFORMATION



Add designator(s) to end of part number

15 = 15  $\mu$ in gold plating in contact area

 $30 = 30 \mu \text{in gold plating in contact area}$ 

**EMI** = Ferrite filtered version for EMI / RFI suppression (Page 114)

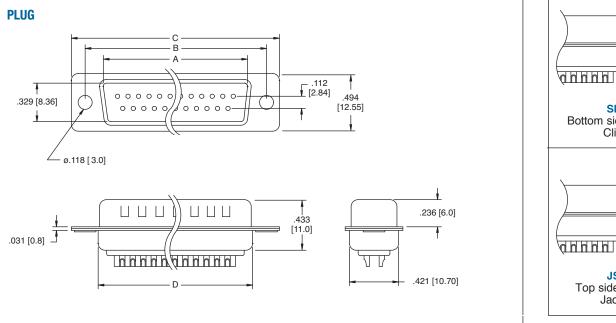
WT = White Color Insulator

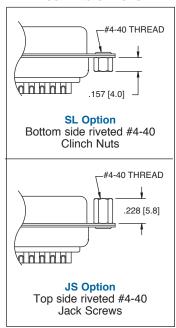
**OPTIONS:** 

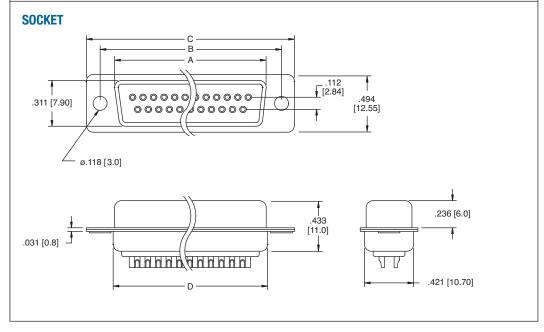


# SOLDER CUP TERMINATION DPD & DSD SERIES

#### **MOUNTING OPTIONS**







Unit: Inch [mm]

Positions	PLUG		SOCKET DIMENSIONS		
FUSITIONS	А	А	В	С	D
9	.666 [16.92]	.643 [16.33]	.984 [24.99]	1.213 [30.81]	.756 [19.20]
15	.994 [25.25]	.971 [24.66]	1.312 [33.32]	1.541 [39.14]	1.091 [27.70]
25	1.534 [38.96]	1.511 [38.38]	1.852 [47.04]	2.088 [53.04]	1.618 [41.10]
37	2.182 [55.43]	2.159 [54.84]	2.500 [63.50]	2.729 [69.32]	2.256 [57.30]
50	2.079 [52.81]	2.064 [52.43]	2.406 [61.11]	2.637 [67.00]	2.169 [55.10]

# ADAM TECH

# Adam Technologies, Inc.

#### INTRODUCTION:

Adam Tech Crimp and Poke D-Sub connectors are a popular interface for many I/O applications. Offered in 9, 15, 25, 37 and 50 positions they are a low cost alternative to soldering a connector to cable. Contacts are crimped onto discrete wires and pushed into the connector body. The connector is comprised of a metal shell and plastic insulator and is available with a variety of mating options. The contacts are precision stamped and are available in a variety of platings.

#### **FEATURES:**

Low cost no solder alternative Industry standard compatibility Durable metal shell design Precision formed contacts Variety of Mating and mounting options

#### **MATING CONNECTORS:**

Adam Tech D-Subminiatures and all industry standard D-Subminiature connectors.

#### SPECIFICATIONS:

#### Material:

Insulator: PBT, 30% glass reinforced, rated UL94V-0

Insulator Color: Black Contacts: Phosphor Bronze Shell: Steel, Tin or Zinc plated Hardware: Brass, Nickel plated

#### **Contact Plating:**

Gold flash (15 and 30  $\mu$ in optional) over Nickel underplate.

#### **Electrical:**

Operating voltage: 250V AC / DC max.

Current rating: 5 Amps max.

Contact resistance: 20 m $\Omega$  max. initial Insulation resistance: 5000 M $\Omega$  min.

Dielectric withstanding voltage: 1000V AC for 1 minute

#### Mechanical:

Insertion force: 0.75 lbs max Extraction force: 0.44 lbs min

#### **Temperature Rating:**

Operating temperature: -55°C to +105°C

#### **PACKAGING:**

Anti-ESD plastic trays

#### **APPROVALS AND CERTIFICATIONS:**

UL Recognized & CSA Certified, File no. E224053



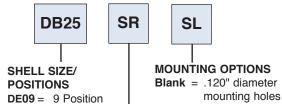


# **D-SUBMINIATURE**

CRIMP AND POKE SYSTEM



# ORDERING INFORMATION HOUSING



DA15 = 15 Position
DB25 = 25 Position
DC37 = 37 Position
DC37 = 37 Position

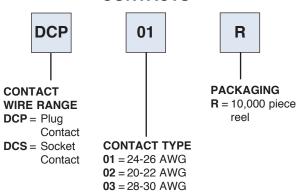
SL = Riveted #4-40 clinch nuts
JS = Riveted #4-40

DD50 = 50 Position jackscrews

#### CONTACT TYPE

**PR** = Plug, Crimp and Poke **SR** = Socket, Crimp and Poke

#### **CONTACTS**



#### **OPTIONS:**

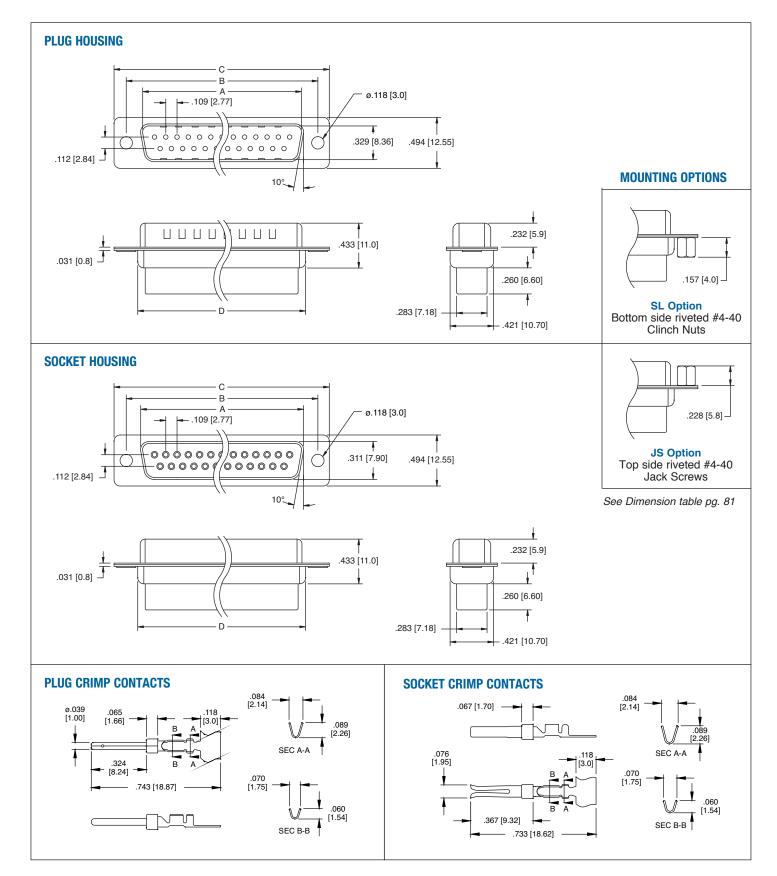
Add designator(s) to end of part number

15 = 15 µin gold plating in contact area on crimp contacts
 30 µin gold plating in contact area on crimp contacts



CRIMP AND POKE HOUSINGS & CONTACTS

DPR / DSR SERIES





## **D-SUBMINIATURE**

## FLUSH MOUNT STRAIGHT PCB TAIL

**DPA & DSA SERIES** 

#### INTRODUCTION:

Adam Tech Flush Mount Straight PCB tail D-Sub connectors are a popular interface for many limited space I/O applications. Offered in 9, 15 and 25 positions they are an excellent choice for a low cost industry standard connection and are ideal for low profile design requirements. Adam Tech connectors are manufactured with precision stamped contacts offering a choice of contact plating and a wide selection of mating and mounting options.

#### **FEATURES:**

Low profile space saving design Industry standard compatibility Durable metal shell design Precision formed contacts Variety of Mating and mounting options

#### **MATING CONNECTORS:**

Adam Tech D-Subminiatures and all industry standard D-Subminiature connectors.

#### **SPECIFICATIONS:**

#### Material:

Standard insulator: PBT, 30% glass reinforced, rated UL94V-0

Optional Hi-Temp insulator: Nylon 6T

Insulator Color: Black Contacts: Phosphor Bronze Shell: Steel, Tin or Zinc plated Hardware: Brass, Nickel plated

#### **Contact Plating:**

Gold flash (15 and 30  $\mu$ in optional) over Nickel underplate overall.

#### **Electrical:**

Operating voltage: 250V AC / DC max.

Current rating: 5 Amps max.

Contact resistance: 20 m $\Omega$  max. Initial Insulation resistance: 5000 M $\Omega$  min.

Dielectric withstanding voltage: 1000V AC for 1 minute

#### Mechanical:

Insertion force: 0.75 lbs max Extraction force: 0.44 lbs min

#### **Temperature Rating:**

Operating temperature: -55°C to +105°C Soldering process temperature:

Standard insulator: 235°C Hi-Temp insulator: 260°C

#### **PACKAGING:**

Anti-ESD plastic trays

#### **APPROVALS AND CERTIFICATIONS:**

UL Recognized & CSA Certified, File no. E224053











#### ORDERING INFORMATION







#### SHELL SIZE/ POSITIONS

**DE09** = 9 Position **DA15** = 15 Position **DB25** = 25 Position

DC37 = 37 Position

#### **CONTACT TYPE**

PA = Plug, Flush mount, Straight PCB Tail

**SA** = Socket, Flush Mount, Straight PCB Tail

#### **MOUNTING OPTIONS**

M1 = Thru Hole Mounting

**M2** = #4-40 Threaded mounting holes

M1-R3 = Riveted Round
Jackscrews on top

M2-R-BL = Riveted Round
Jackscrews on top
side with Boardlocks
underneath

M2-JS = #4-40 Threaded Holes with removable Jackscrews

M2-BL = Riveted #4-40 Internal Threaded Standoffs with Boardlocks

**M2-BL-JS** = Removable Jackscrews with Boardlocks

#### **OPTIONS:**

Add designator[s] to end of part number

15 = 15  $\mu$ in gold plating in contact area

 $30 = 30 \mu in gold plating in contact area$ 

**PF** = Press Fit Pins

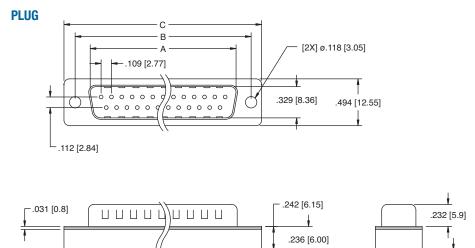
**HT** = Hi-Temp insulator for hi-temp soldering processes up to 260°C

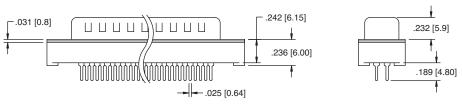


## FLUSH MOUNT STRAIGHT PCB TAIL

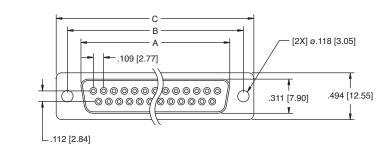
**DPA & DSA SERIES** 

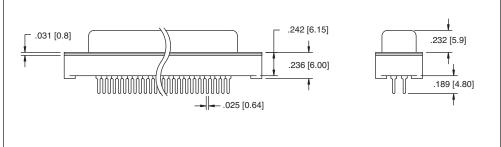
#### **MOUNTING OPTIONS**





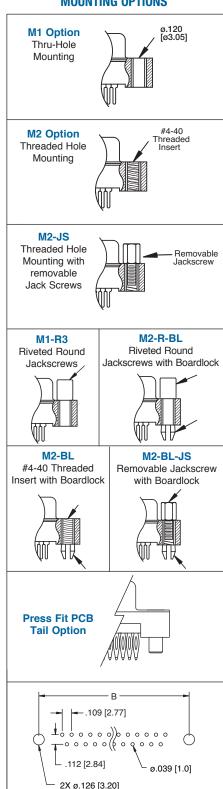
#### **SOCKET**





Unit: Inch [mm]

Positions	PLUG	SOCKET	DIMEN	SIONS
FOSITIONS	A A	A	В	С
9	.666 [16.92]	.643 [16.33]	.984 [24.99]	1.213 [30.81]
15	.994 [25.25]	.971 [24.66]	1.312 [33.32]	1.541 [39.14]
25	1.534 [38.96]	1.511 [38.38]	1.852 [47.04]	2.088 [53.04]



**Recommended PCB Layout** 



## **D-SUBMINIATURE**

STRAIGHT & WIRE WRAP PCB TAIL

DPT, DST, DPE & DSE SERIES

#### INTRODUCTION:

Adam Tech Straight PCB tail D-Sub connectors are a popular interface for many I/O applications. Offered in 9, 15, 25, 37 and 50 positions they are an excellent choice for a low cost, sturdy, full metal body industry standard connection. These connectors are manufactured with precision stamped or machined turned contacts offering a choice of contact plating and a wide selection of mating and mounting options.

#### **FEATURES:**

Industry standard compatibility
Durable metal shell design
Precision formed contacts
Variety of Mating and mounting options

#### MATING CONNECTORS:

Adam Tech D-Subminiatures and all industry standard D-Subminiature connectors.

#### **SPECIFICATIONS:**

#### Material:

Standard insulator: PBT, 30% glass reinforced, rated UL94V-0

Optional Hi-Temp insulator: Nylon 6T Insulator Colors: Black (White optional)

Contacts: Phosphor Bronze Shell: Steel, Tin or Zinc plated Hardware: Brass, Nickel plated

#### **Contact Plating:**

Gold flash (15 and 30  $\mu$ in optional) over Nickel underplate overall

#### **Electrical:**

Operating voltage: 250V AC / DC max.

Current rating: 5 Amps max.

Contact resistance:  $20 \text{ m}\Omega$  max. initial Insulation resistance:  $5000 \text{ M}\Omega$  min.

Dielectric withstanding voltage: 1000V AC for 1 minute

#### Mechanical:

Insertion force: 0.75 lbs max Extraction force: 0.44 lbs min

#### **Temperature Rating:**

Operating temperature: -55°C to +105°C

Soldering process temperature:
Standard insulator: 235°C
Hi-Temp insulator: 260°C

#### **PACKAGING:**

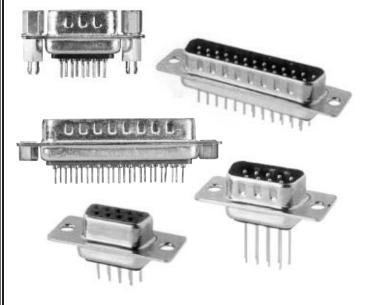
Anti-ESD plastic trays

#### **APPROVALS AND CERTIFICATIONS:**

UL Recognized & CSA Certified, File no. E224053







#### ORDERING INFORMATION



# SHELL SIZE/POSITIONS

**DE09** = 9 Position **DA15** = 15 Position **DB25** = 25 Position **DC37** = 37 Position **DD50** = 50 Position

#### **CONTACT TYPE**

PT = Plug, Straight PCB
Tail, Standard Profile
ST = Seeket Straight

ST = Socket, Straight PCB Tail, Standard Profile

**PE**= Plug, Straight PCB Tail, High Profile

SE= Socket, Straight PCB Tail, High Profile

# MOUNTING OPTIONS Blank = .120"Mounting

Holes
SL = Bottom side
riveted #4-40
Clinch Nuts

JS = Top side riveted #4-40 Jackscrews

BL = Riveted #4-40 Internal Threaded Standoffs with Boardlocks

R = Riveted Round Jack Screws

JSL = Bottom side riveted #4-40 Clinch Nuts with Jack Screws installed

#### TAIL LENGTH

1 = Standard tail length for .062"-.125" PCB's (E = .189")
2 = Wire wrap tail

(E = .512")

#### **OPTIONS:**

Add designator(s) to end of part number

**15** = 15  $\mu$ in gold plating in contact area

**30** = 30  $\mu$ in gold plating in contact area

**EMI** = Ferrite filtered version for EMI / RFI suppression (Page 114)

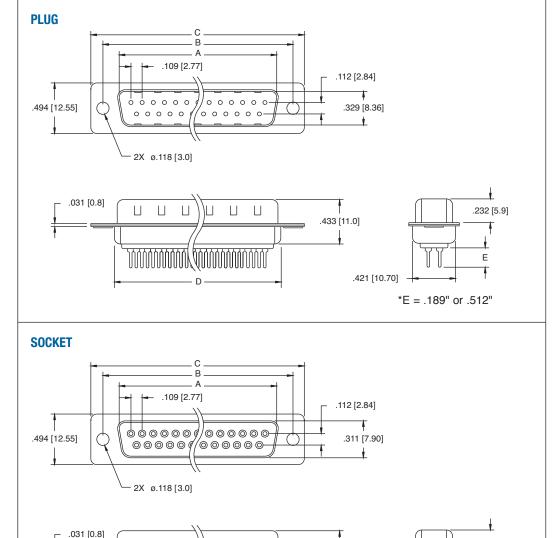
**HT** = Hi-Temp insulator for hi-temp soldering processes up to 260°C

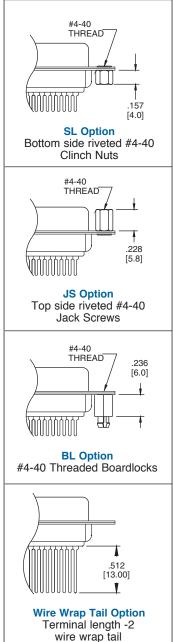


# STRAIGHT & WIRE WRAP PCB TAIL

**DPT & DST SERIES** 







Unit: Inch [mm]

.232 [5.9]

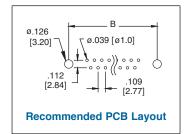
Е

\*E = .189" or .512"

Positions	PLUG	SOCKET	DIMENSIONS		
1 Ositions	A	А	В	С	D
9	.666 [16.92]	.643 [16.33]	.984 [24.99]	1.213 [30.81]	.756 [19.20]
15	.994 [25.25]	.971 [24.66]	1.312 [33.32]	1.541 [39.14]	1.091 [27.70]
25	1.534 [38.96]	1.511 [38.38]	1.852 [47.04]	2.088 [53.04]	1.618 [41.10]
37	2.182 [55.43]	2.159 [54.84]	2.500 [63.50]	2.729 [69.32]	2.256 [57.30]
50	2.079 [52.81]	2.064 [52.43]	2.406 [61.11]	2.637 [67.00]	2.169 [55.10]

.433 [11.0]

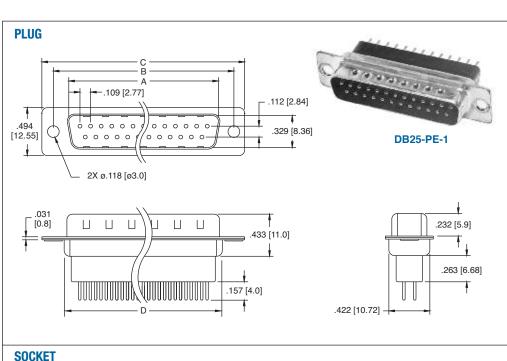
.421 [10.70]





# HIGH PROFILE STRAIGHT PCB TAIL

**DPE & DSE SERIES** 



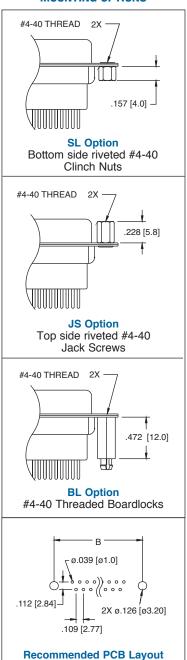
## **SOCKET** -.109 [2.77] .112 [2.84] 660000 000000 494 .311 [7.90] [12.55] **/**00000 000000 **DB25-SE-1** 2X ø.118 [ø3.0] .031 [0.8] .232 [5.9] .433 [11.0] **†** .263 [6.68]

.157 [4.0]

# Unit: Inch [mm]

PLUG Positions		SOCKET	SOCKET DIMENSIONS		
1 Ositions	A	A	В	С	D
9	.666 [16.92]	.643 [16.33]	.984 [24.99]	1.213 [30.81]	.756 [19.20]
15	.994 [25.25]	.971 [24.66]	1.312 [33.32]	1.541 [39.14]	1.091 [27.70]
25	1.534 [38.96]	1.511 [38.38]	1.852 [47.04]	2.088 [53.04]	1.618 [41.10]
37	2.182 [55.43]	2.159 [54.84]	2.500 [63.50]	2.729 [69.32]	2.256 [57.30]
50	2.079 [52.81]	2.064 [52.43]	2.406 [61.11]	2.637 [67.00]	2.169 [55.10]

#### **MOUNTING OPTIONS**



.422 [10.72]



# **D-SUBMINIATURE**

DUAL PORT, RIGHT ANGLE DPD SERIES

#### INTRODUCTION:

Adam Tech Dual Port D-Sub connectors are a popular space saving interface for many I/O applications. Offered in 9, 15, 25, 37 and 50 positions they are a good choice for a low cost industry standard connection and are ideal for PCB space saving applications. These connectors are manufactured with precision stamped contacts and are available in a number of connector combinations including same and mixed gender, mixed density and mixed interface. Options include a choice of contact plating and a variety of mating, mounting and grounding options.

#### **FEATURES:**

Stacked space saving design Industry standard compatibility Durable metal shell design Precision formed contacts Variety of Mating and mounting options

#### **MATING CONNECTORS:**

Adam Tech D-Subminiatures and all industry standard D-Subminiature connectors.

#### SPECIFICATIONS:

#### Material:

Insulator: PBT, 30% glass reinforced, rated UL94V-0

Insulator Color: Black Contacts: Phosphor Bronze Shell: Steel, Tin or Zinc plated Hardware: Brass, Nickel plated

#### **Contact Plating:**

Gold flash (15 and 30  $\mu$ in optional) over Nickel underplate overall.

#### **Electrical:**

Operating voltage: 250V AC / DC max.

Current rating: 5 Amps max.

Contact resistance: 20 m $\Omega$  max. initial Insulation resistance: 5000 M $\Omega$  min.

Dielectric withstanding voltage: 1000V AC for 1 minute

#### Mechanical:

Insertion force: 0.75 lbs max Extraction force: 0.44 lbs min

#### **Temperature Rating:**

Operating temperature: -55°C to +105°C

#### **PACKAGING:**

Anti-ESD plastic trays

#### **APPROVALS AND CERTIFICATIONS:**

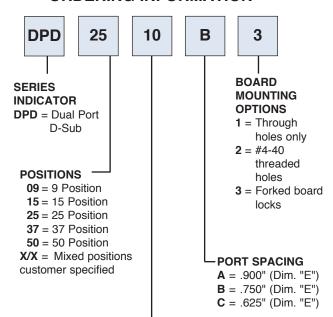
UL Recognized & CSA Certified, File no. E224053







#### ORDERING INFORMATION



#### TOP / BOTTOM GENDER

10 = Plug top, receptacle bottom11 = Plug top and bottom

01 = Receptacle top, plug bottom00 = Receptacle top and bottom

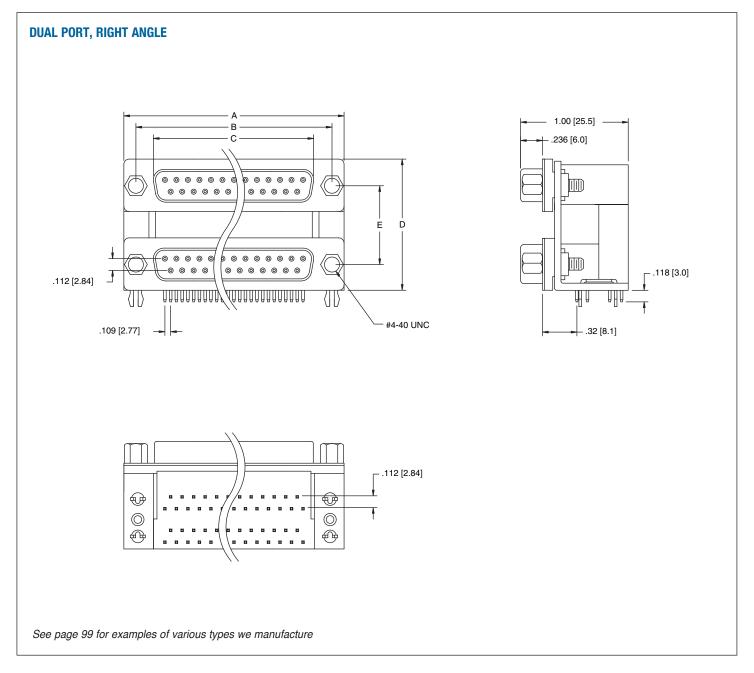
#### OPTIONS:

Add designator(s) to end of part number  $15 = 15 \mu$ in gold plating in contact area  $30 = 30 \mu$ in gold plating in contact area JS = #4-40 Jackscrews installed R = Rear boardlocks only

**F** = Four prong board lock



DUAL PORT, RIGHT ANGLE DPD SERIES



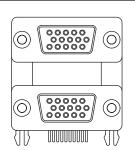
Unit: Inch [mm]

Positions	PLUG	SOCKET	DIMENSIONS					
1 ositions	А	Α	А В С		D	E		
9	.666 [16.92]	.643 [16.33]	.984 [24.99]	1.213 [30.81]	PORT HEIGHTS	PORT TO PORT		
15	.994 [25.25]	.971 [24.66]	1.312 [33.32]	1.541 [39.14]	4 440 500 403	CENTERLINE		
25	1.534 [38.96]	1.511 [38.38]	1.852 [47.04]	2.088 [53.04]	1.119 [28.42]	.900 [22.86]		
37	2.182 [55.43]	2.159 [54.84]	2.500 [63.50]	2.729 [69.32]	1.244 [31.60]	.750 [19.05]		
50	2.079 [52.81]	2.064 [52.43]	2.406 [61.11]	2.637 [67.00]	1.394 [35.41]	.625 [15.88]		

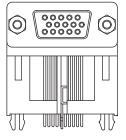


DUAL PORT VARIATIONS

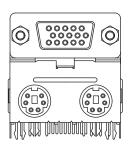
DPD SERIES



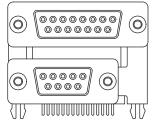
15P HD D-Sub over 15P HD D-Sub



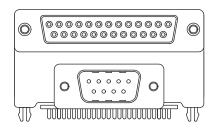
15P HD D-Sub Elevated



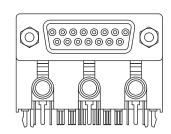
15P HD D-Sub over Dual Mini DINs



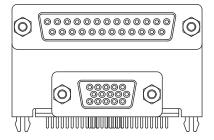
15P D-Sub over 9P D-Sub



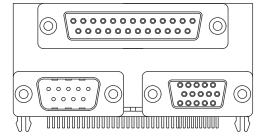
25P D-Sub over 9P D-Sub



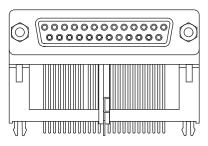
15P D-Sub over Ganged Stereo Jacks



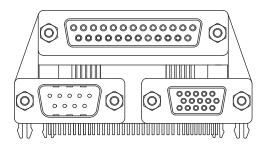
25P D-Sub over HD 15P D-Sub



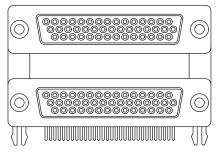
25P D-Sub over 9P D-Sub & HD 15P D-Sub



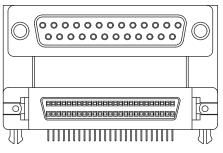
25P D-Sub Elevated



25P D-Sub over 9P D-Sub & HD 15P D-Sub



44P HD D-Sub over 44P HD D-Sub



25P D-Sub over 50P SCSI II



# **HIGH DENSITY D-SUB**

SOLDER CUP TERMINATION
HDT SERIES

#### INTRODUCTION:

Adam Tech Solder Cup High Density D-Sub connectors are a popular interface for many I/O applications. Offered in 15, 26, 44, 62 and 78 positions, they are a good choice for a low cost industry standard high density connection. Adam Tech connectors are manufactured with precision stamped contacts offering a choice of contact plating and a wide selection of mating and mounting options.

#### **FEATURES:**

High Density pin count in standard size shell Industry standard compatibility Durable metal shell design Precision formed contacts Mating and mounting options

#### **MATING CONNECTORS:**

Adam Tech high density D-Subminiatures and all industry standard high density D-Subminiature connectors.

#### **SPECIFICATIONS:**

#### Material:

Insulator: PBT, 30% glass reinforced, rated UL94V-0

Insulator Colors: Black (White optional)

Contacts: Phosphor Bronze Shell: Steel, Tin or Zinc plated Hardware: Brass, Nickel plated

#### **Contact Plating:**

Gold flash (15 and 30  $\mu$ in optional) over Nickel underplate overall.

#### **Electrical:**

Operating voltage: 250V AC / DC max.

Current rating: 5 Amps max.

Contact resistance: 20 m $\Omega$  max. initial Insulation resistance: 5000 M $\Omega$  min.

Dielectric withstanding voltage: 1000V AC for 1 minute

#### Mechanical:

Insertion force: 0.75 lbs max Extraction force: 0.44 lbs min

#### **Temperature Rating:**

Operating temperature: -55°C to +105°C

#### **PACKAGING:**

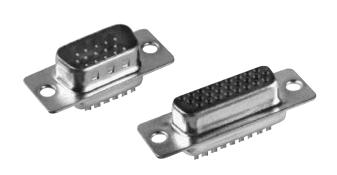
Anti-ESD plastic trays

#### **APPROVALS AND CERTIFICATIONS:**

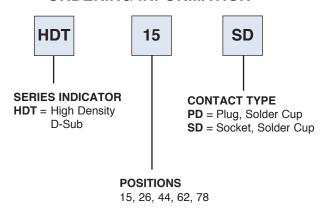
UL Recognized & CSA Certified, File no. E224053







#### ORDERING INFORMATION



#### **OPTIONS:**

Add designator(s) to end of part number

15 = 15  $\mu$ in gold plating in contact area

 $30 = 30 \mu \text{in gold plating in contact area}$ 

**WT** = White color insulator

SL = Bottom side Riveted #4-40 Clinch Nuts

JS = Top side riveted #4-40 Jack Screws

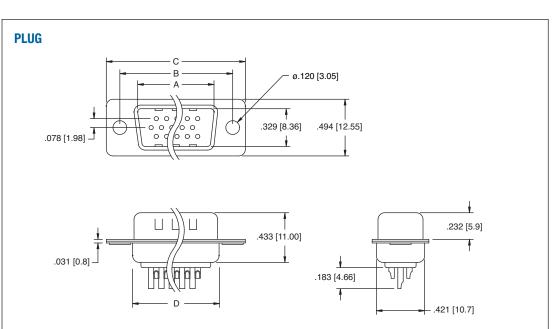
**EMI** = Ferrite filtered version for EMI / RFI suppression (Page 114)



# **HIGH DENSITY D-SUB**

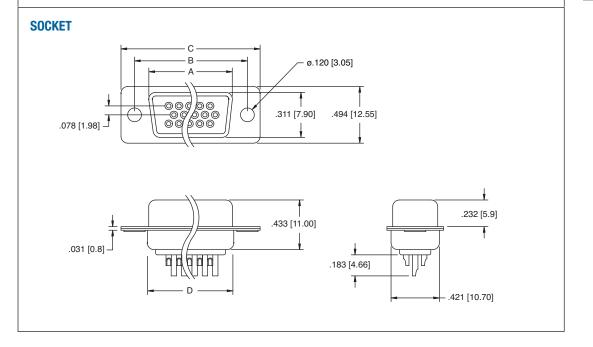
# SOLDER CUP TERMINATION

**HDT SERIES** 



# SL Option Bottom side riveted #4-40 Clinch Nuts JS Option Top side riveted #4-40 Jack Screws

**MOUNTING OPTIONS** 



Unit: Inch [mm]

PLUG Positions		SOCKET	DIMENSIONS		
1 031110113	A		В	С	D
15	.666 [16.92]	.643 [16.33]	.984 [24.99]	1.213 [30.81]	.759 [19.28]
26	.994 [25.25]	.971 [24.66]	1.312 [33.32]	1.541 [39.14]	1.083 [27.51]
44	1.534 [38.96]	1.511 [38.38]	1.852 [47.04]	2.088 [53.04]	1.626 [41.30]
62	2.182 [55.43]	2.159 [54.84]	2.500 [63.50]	2.729 [69.32]	2.271 [57.70]
78	2.079 [52.81]	2.064 [52.43]	2.406 [61.11]	2.635 [66.93]	2.099 [55.32]



## **HIGH DENSITY D-SUB**

STRAIGHT PCB TAIL

#### INTRODUCTION:

Adam Tech Straight PCB tail High Density D-Sub connectors are a popular interface for many I/O applications. Offered in 15, 26, 44, 62 and 78 positions they are a good choice for a low cost industry standard high density connection. Adam Tech connectors are manufactured with precision stamped contacts offering a choice of contact plating and a wide selection of mating and mounting options.

#### **FEATURES:**

High Density pin count in standard size shell Industry standard compatibility Durable metal shell design Precision formed contacts Variety of Mating and mounting options

#### MATING CONNECTORS:

Adam Tech high density D-Subminiatures and all industry standard high density D-Subminiature connectors.

#### SPECIFICATIONS:

#### Material:

Standard insulator: PBT, 30% glass reinforced, rated UL94V-0 Optional Hi-Temp insulator: Nylon 6T rated UL94V-0

Insulator Colors: Black (White optional)

Contacts: Phosphor Bronze Shell: Steel, Tin or Zinc plated Hardware: Brass, Nickel plated

#### **Contact Plating:**

Gold flash (15 and 30  $\mu$ in optional) over Nickel underplate overall.

#### **Electrical:**

Operating voltage: 250V AC / DC max.

Current rating: 5 Amps max.

Contact resistance: 20 m $\Omega$  max. initial Insulation resistance: 5000 M $\Omega$  min.

Dielectric withstanding voltage: 1000V AC for 1 minute

#### Mechanical:

Insertion force: 0.75 lbs max Extraction force: 0.44 lbs min

#### **Temperature Rating:**

Operating temperature: -55°C to +105°C

Soldering process temperature: Standard insulator: 235°C Hi-Temp insulator: 260°C

#### **PACKAGING:**

Anti-ESD plastic trays

#### **APPROVALS AND CERTIFICATIONS:**

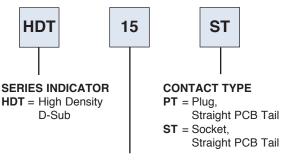
UL Recognized & CSA Certified, File no. E224053







#### ORDERING INFORMATION



#### POSITIONS

15, 26, 44, 62, 78

#### **OPTIONS:**

Add designator(s) to end of part number

**WT** = White color insulator

**HT** = Hi-Temp insulator for Hi-Temp soldering processes up to 260°C

SL = Riveted #4-40 Clinch Nuts

JS = Riveted #4-40 Jackscrews

**BL** = Riveted #4-40 Internal Threaded Standoffs with Boardlocks

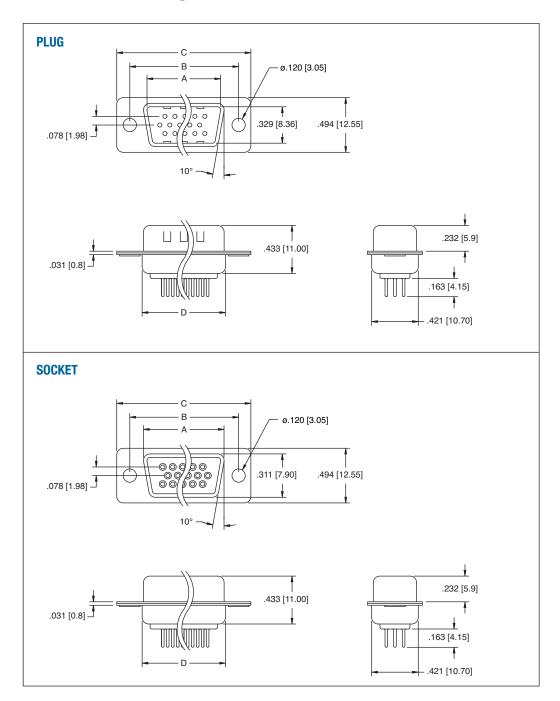
**EMI** = Ferrite filtered version for EMI / RFI suppression (Page 114)

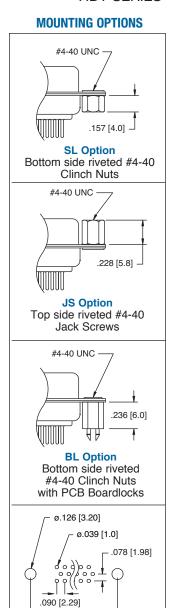


# **HIGH DENSITY D-SUB**

# STRAIGHT PCB TAIL







**Recommended PCB Layout** 

Unit: Inch [mm]

PLUG Positions		SOCKET	SOCKET DIMENSIONS		
1 031110113	A		В	С	D
15	.666 [16.92]	.643 [16.33]	.984 [24.99]	1.213 [30.81]	.759 [19.28]
26	.994 [25.25]	.971 [24.66]	1.312 [33.32]	1.541 [39.14]	1.083 [27.51]
44	1.534 [38.96]	1.511 [38.38]	1.852 [47.04]	2.088 [53.04]	1.626 [41.30]
62	2.182 [55.43]	2.159 [54.84]	2.500 [63.50]	2.729 [69.32]	2.271 [57.70]
78	2.079 [52.81]	2.064 [52.43]	2.406 [61.11]	2.635 [66.93]	2.099 [55.32]



# **HIGH DENSITY D-SUB**

RIGHT ANGLE PCB MOUNT

#### INTRODUCTION:

Adam Tech Right Angle PCB mount High Density D-Sub connectors are a popular interface for many I/O applications. Offered in 15, 26, 44, 62 and 78 positions they are a good choice for a low cost industry standard high density connection. Adam Tech connectors are manufactured with precision stamped contacts offering a choice of contact plating and a wide selection of mating and mounting options.

#### **FEATURES:**

High Density in standard size shell Industry standard compatibility Durable metal shell design Precision formed contacts Variety of Mating and mounting options

#### **MATING CONNECTORS:**

Adam Tech high density D-Subminiatures and all industry standard high density D-Subminiature connectors.

#### **SPECIFICATIONS:**

#### Material:

Standard insulator: PBT, 30% glass reinforced, rated UL94V-0  $\,$ 

Optional Hi-Temp insulator: Nylon 6T rated UL94V-0

Insulator Colors: HDL Series: Black HDVG Series: Blue

Contacts: Phosphor Bronze Shell: Steel, Tin or Zinc plated Hardware: Brass, Nickel plated

#### **Contact Plating:**

Gold flash (15 and 30  $\mu$ in optional) over Nickel underplate overall.

#### Electrical:

Operating voltage: 250V AC / DC max.

Current rating: 5 Amps max.

Contact resistance: 20 m $\Omega$  max initial Insulation resistance: 5000 M $\Omega$  min.

Dielectric withstanding voltage: 1000V AC for 1 minute

#### Mechanical:

Insertion force: 0.75 lbs max Extraction force: 0.44 lbs min

#### **Temperature Rating:**

Operating temperature: -55°C to +105°C

Soldering process temperature: Standard insulator: 235°C Hi-Temp insulator: 260°C

#### PACKAGING:

Anti-ESD plastic trays

#### APPROVALS AND CERTIFICATIONS:

UL Recognized & CSA Certified, File no. E224053









#### ORDERING INFORMATION

HDL 15 SL

#### SERIES INDICATOR

HDL = High Density D-Sub HDVG= High Density VESA connector

with recessed #9 pin and blue insulator

**POSITIONS** — 15, 26, 44, 62, 78

#### **MOUNT OPTIONS**

A = #4-40 Jackscrews and forked boardlocks

B

- **B** = #4-40 Flush threaded inserts and forked boardlocks
- C = #4-40 Flush threaded inserts with removable jackscrews and forked boardlocks
- **D**= Topside ground straps with screw holes

#### **CONTACT TYPE**

PL = Plug, Right Angle Mount SL = Socket, Right Angle Mount

#### **OPTIONS:**

Add designator(s) to end of part number

**15** = 15  $\mu$ in gold plating in contact area **30** = 30  $\mu$ in gold plating in contact area

**EMI** = Ferrite filtered version for EMI / RFI suppression (Page 114)

**F** = Retention 4 prong boardlocks

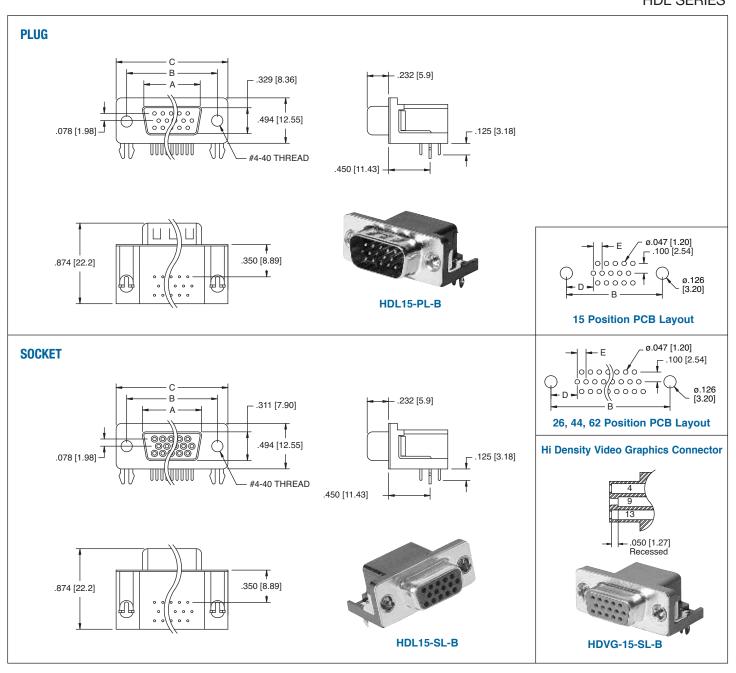
HT = Hi-Temp insulator for Hi-Temp soldering processes up to 260°C

R = Round Riveted Jackscrews



# **HIGH-DENSITY D-SUB**

RIGHT ANGLE PCB MOUNT HDL SERIES



Unit: Inch [mm]

Positions	PLUG	SOCKET	DIMENSIONS			
1 031110113	A		В С		D	E
15	.666 [16.92]	.643 [16.33]	.984 [24.99]	1.213 [30.81]	.277 [7.04]	.090 [2.29]
26	.994 [25.25]	.971 [24.66]	1.312 [33.32]	1.541 [39.14]	.277 [7.04]	.090 [2.29]
44	1.534 [38.96]	1.511 [38.38]	1.852 [47.04]	2.088 [53.04]	.277 [7.04]	.090 [2.29]
62	2.182 [55.43]	2.159 [54.84]	2.500 [63.50]	2.729 [69.32]	.276 [7.00]	.095 [2.41]
78	2.079 [52.81]	2.064 [52.43]	2.406 [61.11]	2.635 [66.93]	.300 [7.63]	.095 [2.41]

# <u>ADAM TECH</u>

# Adam Technologies, Inc.

# **HIGH DENSITY D-SUB**

CRIMP AND POKE SYSTEM HDT SERIES

#### INTRODUCTION:

Adam Tech Crimp and Poke High Density D-Sub connectors are a popular interface for many I/O applications. Offered in 15, 26, 44, 62 and 78 positions they are a low cost alternative to soldering a high density connector to cable. Contacts are crimped onto discrete wires and pushed into the connector body. The connector is comprised of a metal shell and plastic insulator and is available with a variety of mating options. The contacts are precision stamped and are available in a variety of platings.

#### **FEATURES:**

High Density in standard size shell Low cost no solder alternative Industry standard compatibility Durable metal shell design Precision formed contacts Variety of Mating and mounting options

#### **MATING CONNECTORS:**

Adam Tech high density D-Subminiatures and all industry standard high density D-Subminiature connectors.

#### **SPECIFICATIONS:**

#### Material:

Insulator: PBT, 30% glass reinforced, rated UL94V-0

Insulator Colors: Black (White optional)

Contacts: Phosphor Bronze Shell: Steel, Tin or Zinc plated Hardware: Brass, Nickel plated

#### **Contact Plating:**

Gold flash (15 and 30  $\mu$ in optional) over Nickel underplate overall.

#### **Electrical:**

Operating voltage: 250V AC / DC max.

Current rating: 5 Amps max.

Contact resistance: 20 m $\Omega$  max. initial Insulation resistance: 5000 M $\Omega$  min.

Dielectric withstanding voltage: 1000V AC for 1 minute

#### Mechanical:

Insertion force: 0.75 lbs max Extraction force: 0.44 lbs min

Recommended wire size: 22 to 28 Awg

#### **Temperature Rating:**

Operating temperature: -55°C to +105°C

#### **PACKAGING:**

Anti-ESD plastic trays

#### **APPROVALS AND CERTIFICATIONS:**

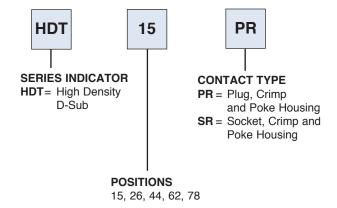
UL Recognized & CSA Certified, File no. E224053



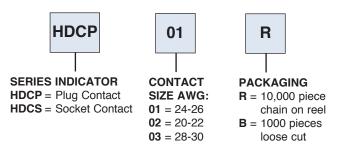




# ORDERING INFORMATION HOUSING



#### **CRIMP CONTACT**



#### **OPTIONS:**

Add designator(s) to end of part number  $15 = 15 \mu$ in gold plating in contact area

 $30 = 30 \mu \text{in gold plating in contact area}$ 

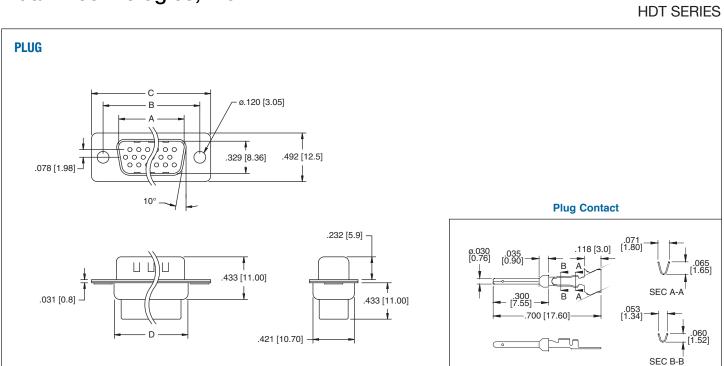
WT = White color insulator.
SL = Riveted #4-40 Clinch Nuts

JS = Riveted #4-40 Jackscrews

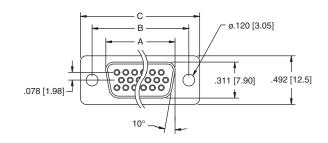


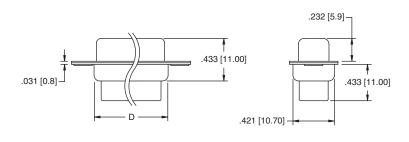
# **HIGH DENSITY D-SUB**

CRIMP AND POKE SYSTEM

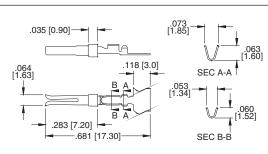


#### **SOCKET**





#### **Socket Contact**

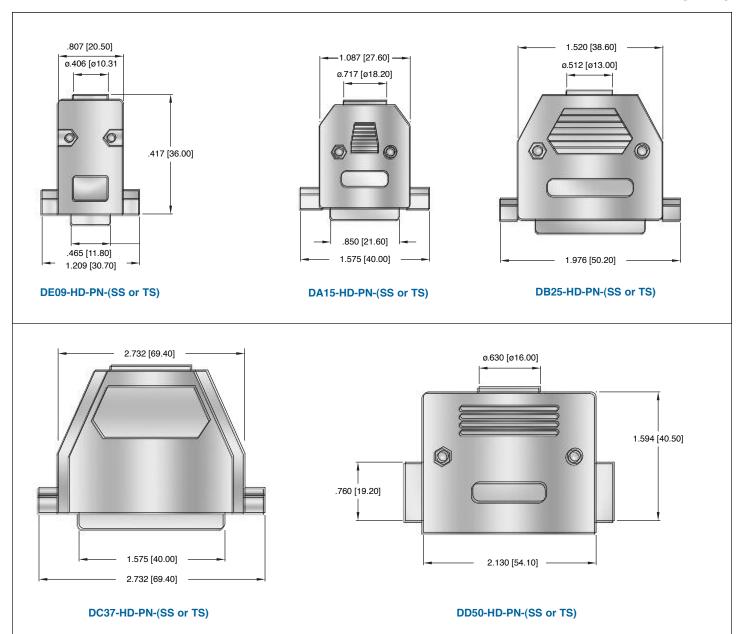


Unit: Inch [mm]

Positions	PLUG A		SOCKET DIMENSIONS		
POSITIONS			В	С	D
15	.666 [16.92]	.643 [16.33]	.984 [24.99]	1.213 [30.81]	.759 [19.28]
26	.994 [25.25]	.971 [24.66]	1.312 [33.32]	1.541 [39.14]	1.083 [27.51]
44	1.534 [38.96]	1.511 [38.38]	1.852 [47.04]	2.088 [53.04]	1.626 [41.30]
62	2.182 [55.43]	2.159 [54.84]	2.500 [63.50]	2.729 [69.32]	2.271 [57.70]
78	2.079 [52.81]	2.064 [52.43]	2.406 [61.11]	2.635 [66.93]	2.099 [55.32]



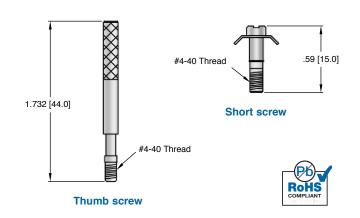
BACKSHELLS DHD SERIES



#### **ORDERING INFORMATION**

choose one from each category as shown in sample below

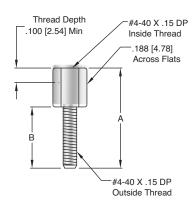
DE09-HD	PY	TS		
Hood Size	Hood Color	Hardware		
DE09-HD - 9P Hood	PY - Gray Plastic	SS - Short Screw		
DA15-HD - 15P Hood	PB - Black Plastic	TS - Thumb		
DB25-HD - 25P Hood	PN - Bright Chrome	Screw		
DC37-HD - 37P Hood	Plated Plastic			
DD50-HD - 50P Hood	AL - Aluminum Cast			





HARDWARE & ACCESSORIES
HDW SERIES

#### **Jackscrews**



JAC	KSCREW DIMENS	ONS		
PART NUMBER	Α	В		
JS-01	.416 [10.60]	.226 [5.70]		
JS-02	.467 [11.86]	.270 [6.86]		
JS-03	.500 [12.70]	.313 [7.95]		
JS-04	.465 [11.81]	.226 [5.70]		



#### HDW-031

Set includes 2 #4-40 female jackscrews

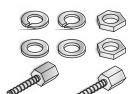






#### **HDW-024**

Set includes 2 #4-40 female jackscrews and 2 hex nuts



#### **HDW-023**

Set includes 2 #4-40 female jackscrews 2 flat washers, 2 split washers and 2 hex nuts

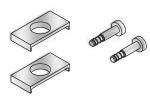








Screw retainer clip set includes 2 screw retainer clips and 2 retainer screws



#### HDW-029

Screw lock kit includes 2 screw locks and 2 retainer screws





#### **HDW-044**

Sliding lock posts Set of 2



#### **HDW-043A**

Slide lock post set includes 2 posts, 2 washers and 2 lock-washers



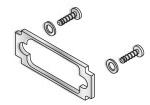








Slide lock post kit includes 2 posts, washers and hex nuts



#### HDW-043-XX

Slide lock assembly kit includes slide lock, screws and washers, Specify 9, 15, 25 or 37 position





#### HDW-041

Spring latch set includes
1 pair of spring latches
with holding hardware and
1 pair of notch clips with
holding hardware



**EMI FILTER OPTION** 

#### INTRODUCTION:

Adam Tech EMI filtered D-Sub option includes the addition of a high performance Ferrite Filter which surrounds each contact and provides a low cost EMI answer for high frequency interference. Our ferrite filtered D-Subs are direct drop-in replacements with our standard unfiltered D-Subs with the same footprint.

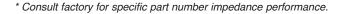
#### **FEATURES:**

Direct replacement for standard non-filtered parts Low cost alternative to passive component types Significant reduction of noise at high frequencies

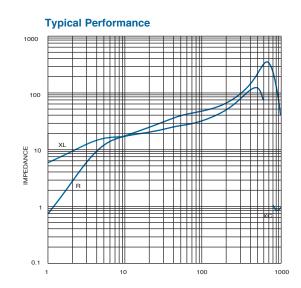
See pgs. 75, 78, 92, 98, 104, 106, 108 for ordering information

AdamTech offers a complete range of ferrite filtered D-Subs to satisfy EMI/RFI emissions in most applications. This series offers filtered connectors in a multitude of terminations, mating and mounting options.

- Drop in replacement for standard D-Subs
- Low applied cost
- Significant reduction of noise at high frequencies







FREQ (MHZ)											
	1	5	10	25	30	40	50	100	200		
XC-											
XL-	5.4	15	18	23	25	26	28	34	51		
R- C	0.656	11	18	29	32	37	40	50	64		

	300	400	500	600	700	800	900	1000
XC-					1.27	0.807	0.856	0.977
XL-	73	101	122	57				
R-	84	121	199	342	344	170	77	40

25	Position	

FREQ (	MHZ)
--------	------

	1	5	10	25	30	40	50	100	200
XC-									
XL-	4	14	18	22	24	26	27	35	55
R-	0.309	8.4	15	26	29	33	36	46	59
	300	400	500	600	700	800	900	1000	

		300	400	500	600	700	800	900	1000
	XC-					0.983	0.762	0.851	0.986
	XL-	81	115	147	65				
Į	R-	79	119	210	394	356	150	65	34

#### FREQ (MHZ)

	1	5	10	25	30	40	50	100	200
XC-									
XL-	3.6	15.9	19	24	25	27	28	36	54
R-	0.116	8.4	16	28	31	35	39	49	62

	300	400	500	600	700	800	900	1000
XC-					0.998	0.78	0.864	0.996
XL-	80	112	138	48				
R-	83	124	215	389	339	147	64	33

#### 37 Position

#### FREQ (MHZ)

		5	10	25	30	40	50	100	200
XC-									
XL-	4.9	16	20	25	27	28	30	36	53
R-	0.45	8.4	15	26	29	33	36	46	59

	300	400	500	600	700	800	900	1000
XC-					1.082	0.814	0.879	1
XL-	76	105	122	29				
R-	80	122	224	424	332	131	56	29