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## Sullins D-SUB


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# D-Sub Solder Type - 100 SERIES



## SPECIFICATIONS

### Material

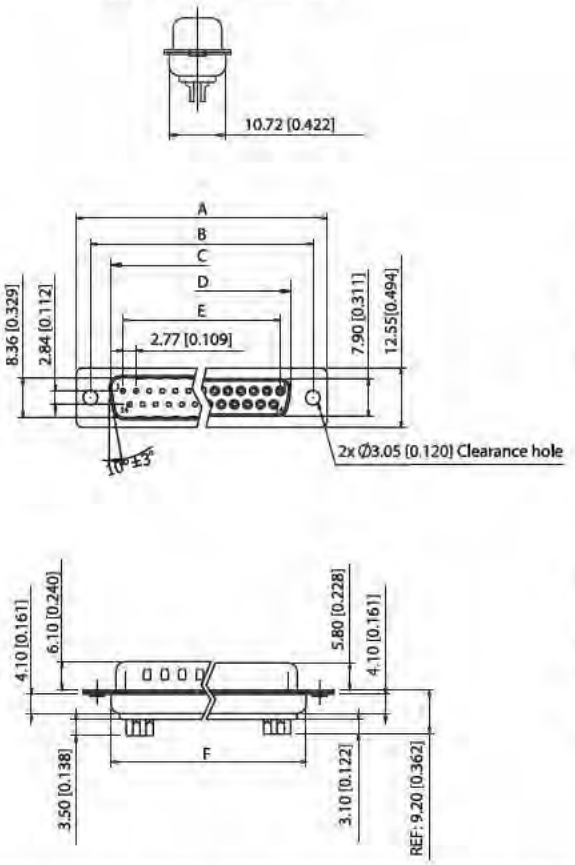
- Insulator: Glass-Filled Thermoplastic PBT, UL 94V-0
- Contact: Brass
- Clinch Nut: Brass, Nickel Plated
- Boardlock: Brass, Tin Plated
- Screwlock: Steel, Nickel Plated

### Electrical

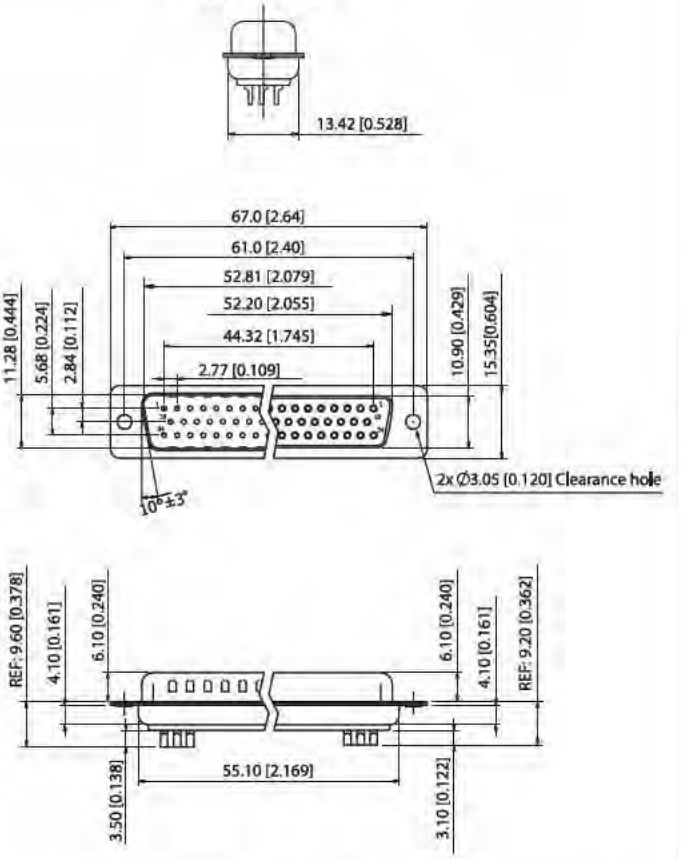
- Contact Resistance: 20m OHMs Max at 1 Amp DC.
- Insulation Resistance: 1000 MagOHMs at 500 VDC.
- Dielectric withstanding Voltage: 1000 Vac/Rms 60Hz for 1 Minute
- Current Rating: 3 Amps
- Voltage Rating: 250 Vac/Rms 60Hz

## DIMENSIONS

### 9,15,25,37 Positions




### 50 Positions




| Positions | A | | B | | C | | D | | E | | F | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch |
| 9 | 30.81 | 1.213 | 24.99 | 0.984 | 16.92 | 0.666 | 16.33 | 0.643 | 11.08 | 0.436 | 19.20 | 0.756 |
| 15 | 39.20 | 1.543 | 33.30 | 1.311 | 25.25 | 0.994 | 24.70 | 0.972 | 19.39 | 0.763 | 27.70 | 1.091 |
| 25 | 53.05 | 2.088 | 47.04 | 1.852 | 38.96 | 1.534 | 38.40 | 1.512 | 33.24 | 1.309 | 41.10 | 1.618 |
| 37 | 69.40 | 2.732 | 63.50 | 2.500 | 55.42 | 2.182 | 54.80 | 2.158 | 49.86 | 1.963 | 57.30 | 2.256 |

# D-Sub Solder Type - SDS100 SERIES

## PART NUMBER OPTIONS

**SDS100-PR - - - -**

**CONTACT PLATING**
(All Platings Have .000050" Nickel Underplate)
W = Gold Flash On Contact Surface, .000100"Pure Tin On Termination.
B = .000010" Gold On Contact Surface, .000100"Pure Tin On Termination.
U = .000015" Gold On Contact Surface, .000100"Pure Tin On Termination.
C = .000030" Gold On Contact Surface, .000100"Pure Tin On Termination.

**SHELL PLATING**
0. $Cr^{+}3$ Yellow Chrome
1. Nickel
2. Tin (Standard)
3. $Cr^{+}6$ Yellow Chrome
4. Gold Flash
5. Tin without Dimple
6. $Cr^{+}6$ Yellow Chrome, With Dimple

**CONTACT TYPE**
M : MALE
F : FEMALE

**NO. OF PINS**
09 : 09 POSITIONS
15 : 15 POSITIONS
25 : 25 POSITIONS
37 : 37 POSITIONS
50 : 50 POSITIONS

**INSULATOR COLOR**
1.Black (Standard) 2.Blue
3.Green 6.White

**POSITION OF CLINCH NUT (REFER TO BELOW FIGURE FOR DETAIL)**
0. 3.05mm [ .120] Clearance Hole
1. Front Rivet, 5.9mm[0.23]
2. Rear Rivet, 5.9mm[0.23]
3. Rivet+2 Prong Boardlock ∅3.2 x 6.0 L [0.13 x 0.24]

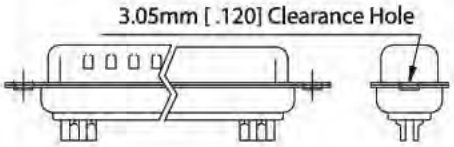
**FLANGE MOUNTING OPTION**
0. ∅3.05mm [∅.120] Clearance Hole
1. #4-40 Female Thread
8. #4-40 UNC (5.0 X 10.mm [0.20 X 0.39]) Female Screwlock Installed
9. #4-40 UNC (5.0 X 10.mm [0.20 X 0.39]) Female Screwlock Bulk-Packed
4. M3 Female Thread
5. M3 (5.0 X 10.0mm [0.20 X 0.39]) Female Screwlock Installed

**FERRITE**
N : Without Ferrite

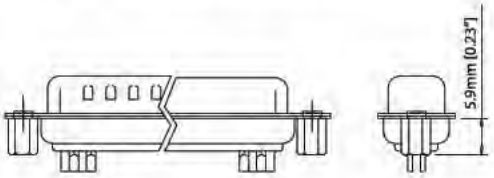
**PIN TYPE**
S : STAMPED PIN
M : MACHINED PIN

## POSITION OF CLINCH NUT Consult sales or factory for other mounting style options

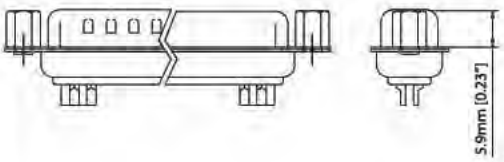
### 0. 3.05mm [ .120] Clearance Hole



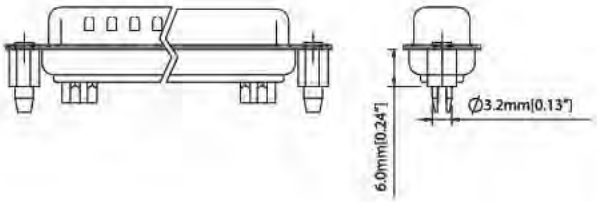

### 2. Rear Rivet, 5.9mm[0.23]




### 1. Front Rivet, 5.9mm[0.23]




### 3. Rivet+2 Prong Boardlock ∅3.2 x 6.0 L [0.13 x 0.24]



# D-Sub Dip Straight Type - 101 SERIES



## SPECIFICATIONS

### Material

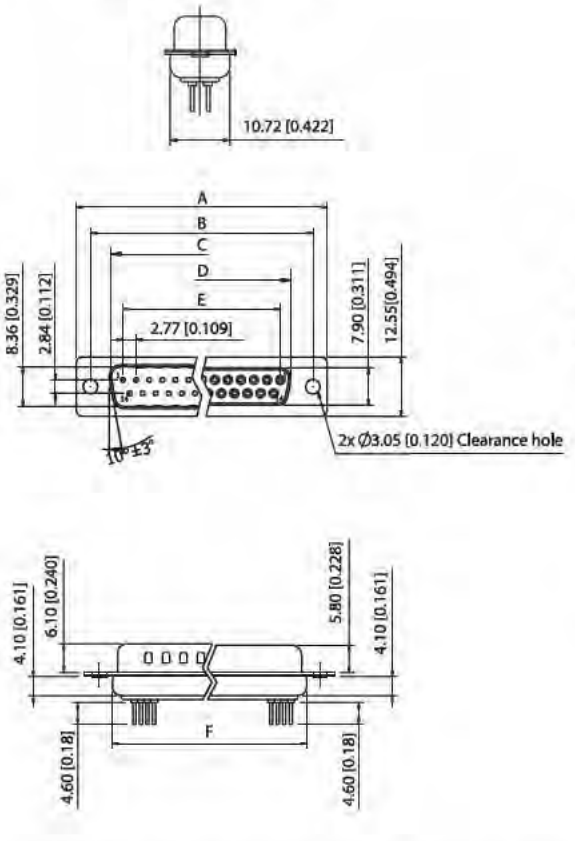
- Insulator: Glass-Filled Thermoplastic PBT, UL 94V-0
- Contact: Brass
- Clinch Nut: Brass, Nickel Plated
- Boardlock: Brass, Tin Plated
- Screwlock: Steel, Nickel Plated

### Electrical

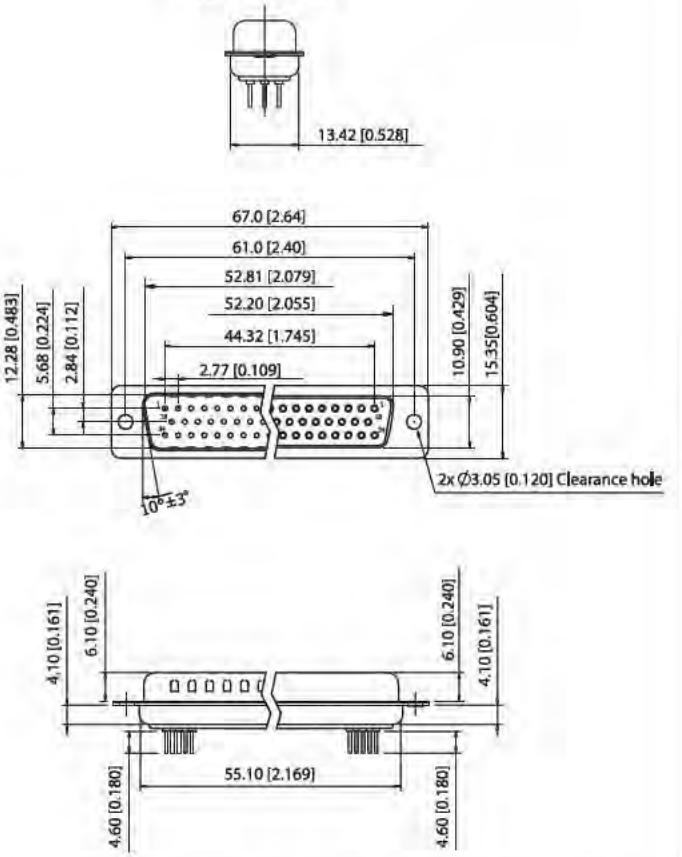
- Contact Resistance: 20m OHMs Max at 1 Amp DC.
- Insulation Resistance: 1000 MagOHMs at 500 VDC.
- Dielectric withstanding Voltage: 1000 Vac/Rms 60Hz for 1 Minute
- Current Rating: 3 Amps
- Voltage Rating: 250 Vac/Rms 60Hz

## DIMENSIONS

**9,15,25,37 Positions**




**50 Positions**




| Positions | A | | B | | C | | D | | E | | F | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch |
| 9 | 30.81 | 1.213 | 24.99 | 0.984 | 16.92 | 0.666 | 16.33 | 0.643 | 11.08 | 0.436 | 19.20 | 0.756 |
| 15 | 39.20 | 1.543 | 33.30 | 1.311 | 25.25 | 0.994 | 24.70 | 0.972 | 19.39 | 0.763 | 27.70 | 1.091 |
| 25 | 53.05 | 2.088 | 47.04 | 1.852 | 38.96 | 1.534 | 38.40 | 1.512 | 33.24 | 1.309 | 41.10 | 1.618 |
| 37 | 69.40 | 2.732 | 63.50 | 2.500 | 55.42 | 2.182 | 54.80 | 2.158 | 49.86 | 1.963 | 57.30 | 2.256 |

# D-Sub Dip Straight Type - 101 SERIES

## PART NUMBER OPTIONS

**SDS101-PR - - -**

**CONTACT PLATING**
(All Platings Have .000050" Nickel Underplate)
W = Gold Flash On Contact Surface, .000100"Pure Tin On Termination.
B = .000010" Gold On Contact Surface, .000100"Pure Tin On Termination.
U = .000015" Gold On Contact Surface, .000100"Pure Tin On Termination.
C = .000030" Gold On Contact Surface, .000100"Pure Tin On Termination.

**SHELL PLATING**
0. $Cr^{+}3$ Yellow Chrome
1. Nickel
2. Tin (Standard)
3. $Cr^{+}6$ Yellow Chrome
4. Gold Flash

**CONTACT TYPE**
M : MALE
F : FEMALE

**NO. OF PINS**
09 : 09 POSITIONS
15 : 15 POSITIONS
25 : 25 POSITIONS
37 : 37 POSITIONS
50 : 50 POSITIONS

**INSULATOR COLOR**
1.Black (Standard) 2.Blue
6.White

**POSITION OF CLINCH NUT (REFER TO BELOW FIGURE FOR DETAIL)**
0. Ø3.05mm [ .120] Clearance Hole
1. Front Rivet, 5.9mm[0.23]
2. Rear Rivet, 5.9mm[0.23]
3. Rivet+2 Prong Boardlock Ø3.2 x 6.0 L [0.13 x 0.24]

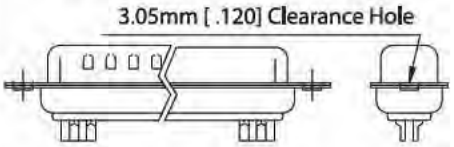
**FLANGE MOUNTING OPTION**
0. Ø3.05mm [Ø0.120] Clearance Hole
1. #4-40 Female Thread
8. #4-40 UNC (5.0 X 10.mm [0.20 X 0.39]) Female Screwlock Installed
9. #4-40 UNC (5.0 X 10.mm [0.20 X 0.39]) Female Screwlock Bulk-Packed
4. M3 Female Thread
5. M3 (5.0 X 10.0mm [0.20 X 0.39]) Female Screwlock Installed

**FERRITE**
N : Without Ferrite

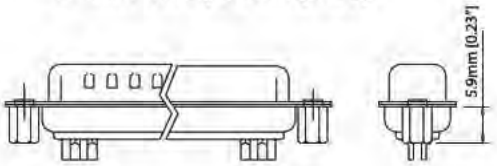
**PIN TYPE**
S : STAMPED PIN
M : MACHINED PIN

## POSITION OF CLINCH NUT Consult sales or factory for other mounting style options

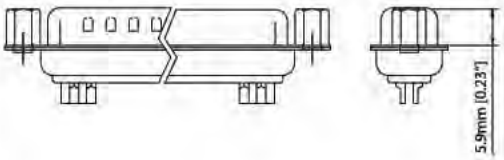
### 0. 3.05mm [ .120] Clearance Hole



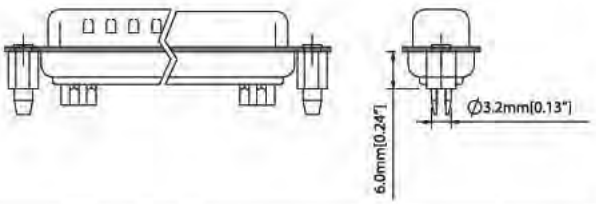

### 2. Rear Rivet, 5.9mm[0.23]




### 1. Front Rivet, 5.9mm[0.23]

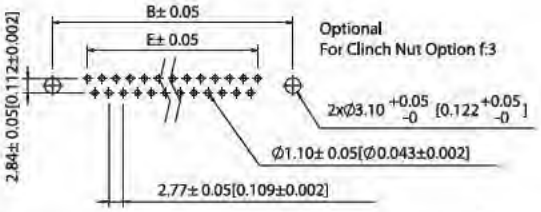



### 3. Rivet+2 Prong Boardlock Ø3.2 x 6.0 L [0.13 x 0.24]

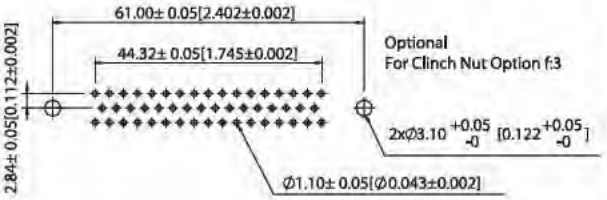



## RECOMMENDED PCB LAYOUT

### 9,15,25,37 Positions




### 50 Positions



# D-Sub IDC Type - 103 SERIES



## SPECIFICATIONS

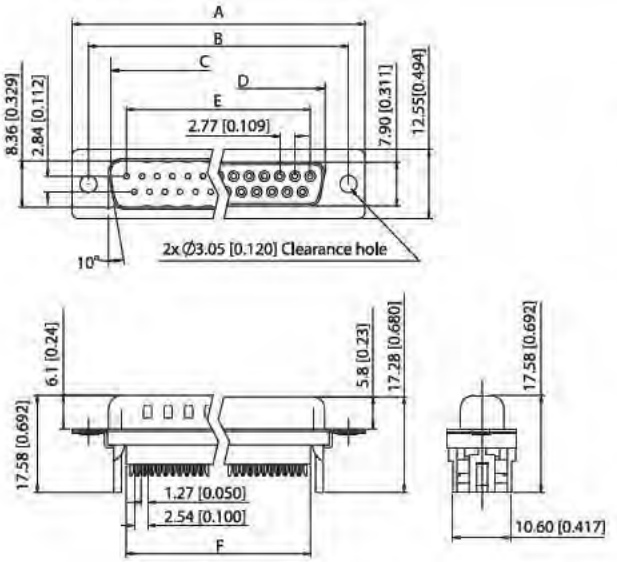
### Material

- Insulator: Glass-Filled Thermoplastic PBT, UL 94V-0
- Contact: Brass
- Clinch Nut: Brass, Nickel Plated
- Screwlock: Steel, Nickel Plated

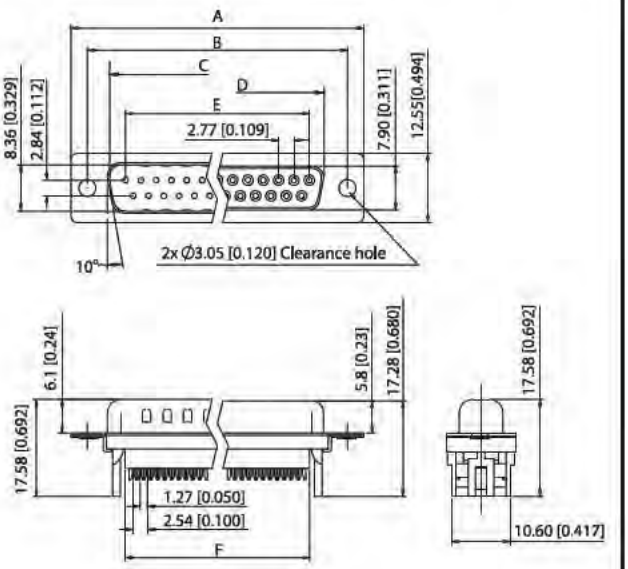
### Electrical

- Contact Resistance: 20m OHMs Max at 1 Amp DC.
- Insulation Resistance: 1000 MagOHMs at 500 VDC.
- Dielectric withstanding Voltage: 1000 Vac/Rms 60Hz for 1 Minute
- Current Rating: 3 Amps
- Voltage Rating: 250 Vac/Rms 60Hz

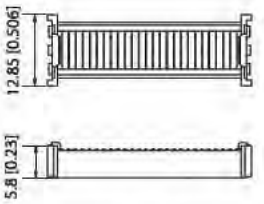
## DIMENSIONS



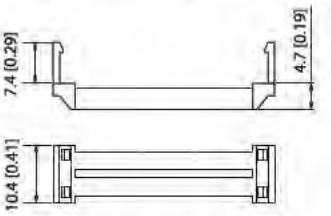

**Without Insulator Support**




**With Insulator Support**




**COVER**




**Strain Relief**
**Optional See P/N Coding**

| Positions | A | | B | | C | | D | | E | | F | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch |
| 9 | 30.81 | 1.213 | 24.99 | 0.984 | 16.92 | 0.666 | 16.33 | 0.643 | 11.08 | 0.436 | 19.20 | 0.756 |
| 15 | 39.20 | 1.543 | 33.30 | 1.311 | 25.25 | 0.994 | 24.70 | 0.972 | 19.39 | 0.763 | 27.70 | 1.091 |
| 25 | 53.05 | 2.088 | 47.04 | 1.852 | 38.96 | 1.534 | 38.40 | 1.512 | 33.24 | 1.309 | 41.10 | 1.618 |
| 37 | 69.40 | 2.732 | 63.50 | 2.500 | 55.42 | 2.182 | 54.80 | 2.158 | 49.86 | 1.963 | 57.30 | 2.256 |

## PART NUMBER OPTIONS

**SDS103-PR - - -**

**CONTACT PLATING**
(All Platings Have .000050" Nickel Underplate)
W = Gold Flash On Contact Surface, .000100"Pure Tin On Termination.
B = .000010" Gold On Contact Surface, .000100"Pure Tin On Termination.
U = .000015" Gold On Contact Surface, .000100"Pure Tin On Termination.
C = .000030" Gold On Contact Surface, .000100"Pure Tin On Termination.

**SHELL PLATING**
1. Nickel
2. Tin (Standard)

**CONTACT TYPE**
M : MALE
F : FEMALE

**NO. OF PINS**
09 : 09 POSITIONS
15 : 15 POSITIONS
25 : 25 POSITIONS
37 : 37 POSITIONS

**INSULATOR COLOR**
1.With Insulator Support 2.W/O Insulator Support

**SR TYPE**
1: Plastic Strain Relief
2: Metal Shell Strain Relief
3: Without Strain Relief

**INSULATOR COLOR**
1: Black (Standard) 2: Blue

**POSITION OF CLINCH NUT**
0. Ø3.05mm [ .120] Clearance Hole
5. Rear Rivet, 4.0mm[0.16]

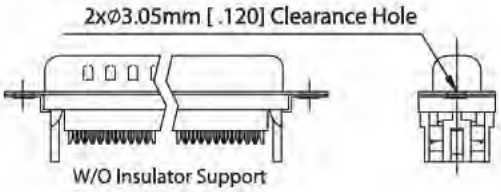
**FLANGE MOUNTING OPTION**
**(REFER TO BELOW FIGURE FOR DETAIL)**
0. Ø3.05mm [Ø0.120] Clearance Hole
1. #4-40 Female Thread
4. M3 Female Thread
7. M2.6 Female Thread
A. #4-40 Female Thread: 4.0mm[0.16]

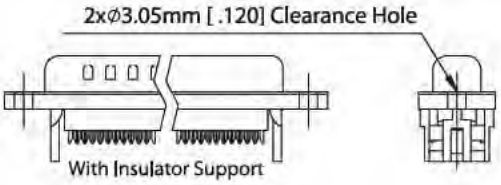
**FERRITE**
N : Without Ferrite

**PIN TYPE**
S : STAMPED PIN

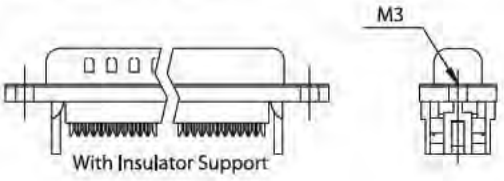
## FLANGE MOUNTING OPTION Consult sales or factory for other mounting style options

### 0. 3.05mm [ .120] Clearance Hole

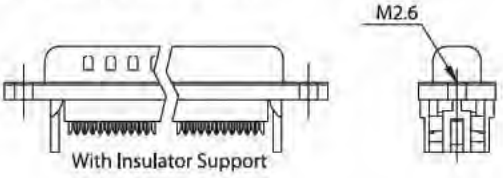


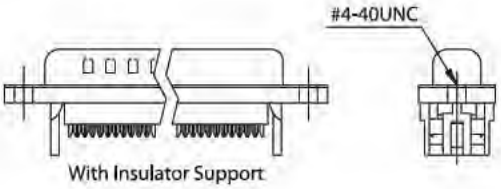

### 4. M3 Female Thread



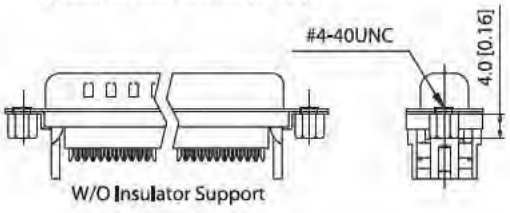

### 7. M2.6 Female Thread




### 1. #4-40 Female Thread




### A. #4-40 Female Thread: 4.0mm[0.16] (Rear Rivet, 4.0mm[0.16])



# D-Sub HD Solder Type - 104 SERIES



## SPECIFICATIONS

### Material

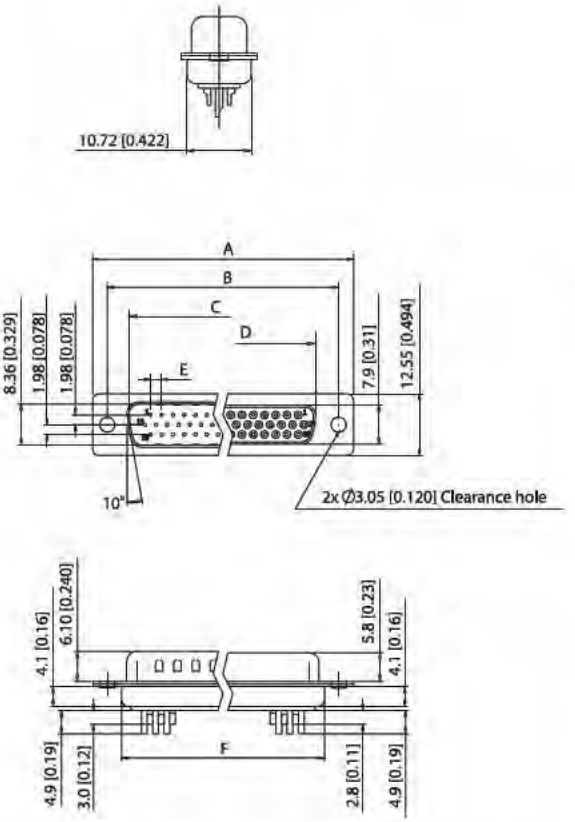
- Insulator: Glass-Filled Thermoplastic PBT, UL 94V-0
- Contact: Brass
- Clinch Nut: Brass, Nickel Plated
- Screwlock: Steel, Nickel Plated

### Electrical

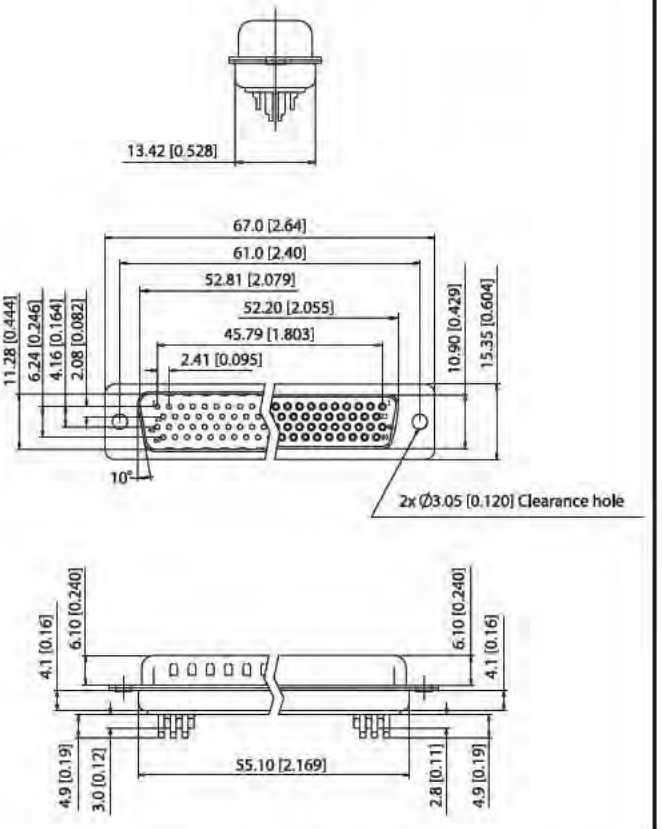
- Contact Resistance: 20m OHMs Max at 1 Amp DC.
- Insulation Resistance: 1000 MagOHMs at 500 VDC.
- Dielectric withstanding Voltage: 1000 Vac/Rms 60Hz for 1 Minute
- Current Rating: 3 Amps
- Voltage Rating: 250 Vac/Rms 60Hz

## DIMENSIONS

### 15, 26, 44, 62 Positions




### 78 Positions




| Positions | A | | B | | C | | D | | E | | F | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch |
| 15 | 30.81 | 1.213 | 24.99 | 0.984 | 16.92 | 0.666 | 16.33 | 0.643 | 11.08 | 0.436 | 19.20 | 0.756 |
| 26 | 39.20 | 1.543 | 33.30 | 1.311 | 25.25 | 0.994 | 24.70 | 0.972 | 19.39 | 0.763 | 27.70 | 1.091 |
| 44 | 53.05 | 2.088 | 47.04 | 1.852 | 38.96 | 1.534 | 38.40 | 1.512 | 33.24 | 1.309 | 41.10 | 1.618 |
| 62 | 69.40 | 2.732 | 63.50 | 2.500 | 55.42 | 2.182 | 54.80 | 2.158 | 49.86 | 1.963 | 57.30 | 2.256 |

## D-Sub HD Solder Type - 104 SERIES



### PART NUMBER OPTIONS

**SDS104-PR - - - -**

**CONTACT PLATING**
(All Platings Have .000050" Nickel Underplate)
W = Gold Flash On Contact Surface, .000100"Pure Tin On Termination.
B = .000010" Gold On Contact Surface, .000100"Pure Tin On Termination.
U = .000015" Gold On Contact Surface, .000100"Pure Tin On Termination.
C = .000030" Gold On Contact Surface, .000100"Pure Tin On Termination.

**SHELL PLATING**
1. Nickel
2. Tin (Standard)

**CONTACT TYPE**
M : MALE
F : FEMALE

**NO. OF PINS**
15 : 15 POSITIONS
26 : 26 POSITIONS
44 : 44 POSITIONS
62 : 62POSITIONS
78 : 78 POSITIONS

**INSULATOR COLOR**
1.Black (Standard) 2.Blue
6.White

**POSITION OF CLINCH NUT (REFER TO BELOW FIGURE FOR DETAIL)**
0. Ø3.05mm [.120] Clearance Hole
1. Front Rivet, 5.9mm[0.23]
2. Rear Rivet, 5.9mm[0.23]
3. Rivet+2 Prong Boardlock Ø3.2 x 6.0 L [0.13 x 0.24]

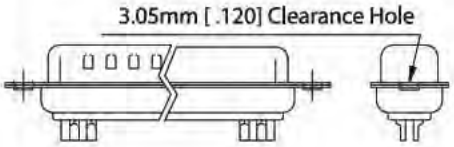
**FLANGE MOUNTING OPTION**
0. Ø3.05mm [Ø.120] Clearance Hole
1. #4-40 Female Thread
2. #4-40 UNC (5.0 X 10.mm [0.20 X 0.39]) Female Screwlock Installed
3. #4-40 UNC (5.0 X 10.mm [0.20 X 0.39]) Female Screwlock Bulk-Packed
4. M3 Female Thread

**FERRITE**
N : Without Ferrite

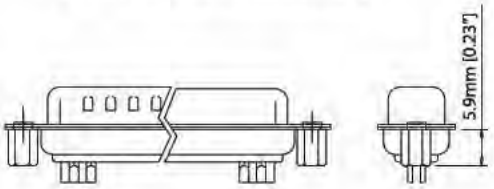
**PIN TYPE**
S : STAMPED PIN
M : MACHINED PIN

### POSITION OF CLINCH NUT Consult sales or factory for other mounting style options

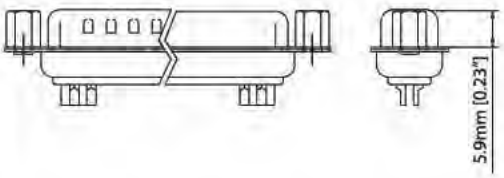
**0. 3.05mm [.120] Clearance Hole**



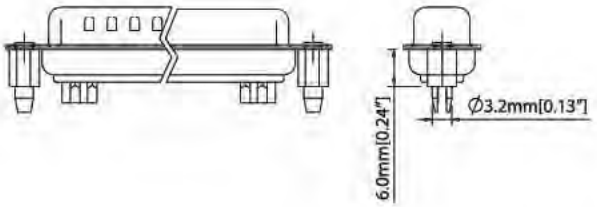

**2. Rear Rivet, 5.9mm[0.23]**




**1. Front Rivet, 5.9mm[0.23]**




**3. Rivet+2 Prong Boardlock Ø3.2 x 6.0 L [0.13 x 0.24]**



# D-Sub Right Angle Type - 107 SERIES

## SPECIFICATIONS

### Material

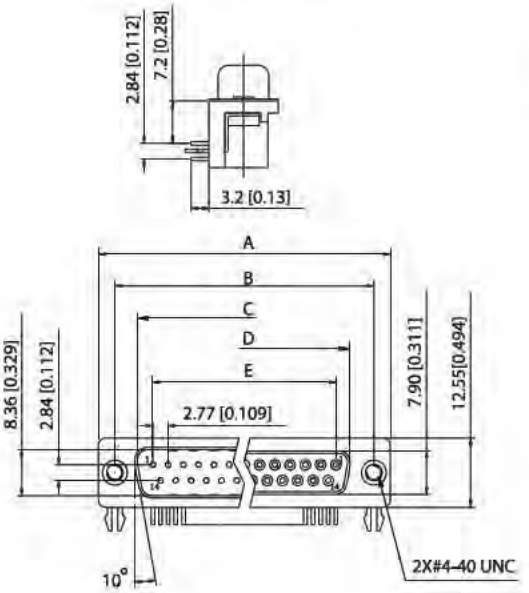
- Insulator: Glass-Filled Thermoplastic PBT, UL 94V-0
- Contact: Brass
- Clinch Nut: Brass, Nickel Plated
- Boardlock: Brass, Tin Plated
- Screwlock: Steel, Nickel Plated

### Electrical

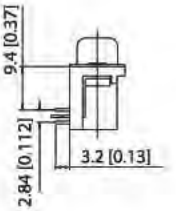
- Contact Resistance: 20m OHMs Max at 1 Amp DC.
- Insulation Resistance: 1000 MagOHMs at 500 VDC.
- Dielectric withstanding Voltage: 1000 Vac/Rms 60Hz for 1 Minute
- Current Rating: 3 Amps
- Voltage Rating: 250 Vac/Rms 60Hz

## DIMENSIONS With 7.2mm[0.28"] , 9.4mm[0.37"] , 13.84mm[0.545"] Footprint

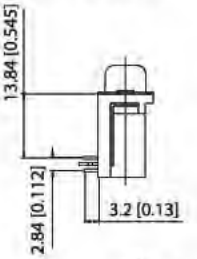
**7.2mm[0.28"] Footprint**

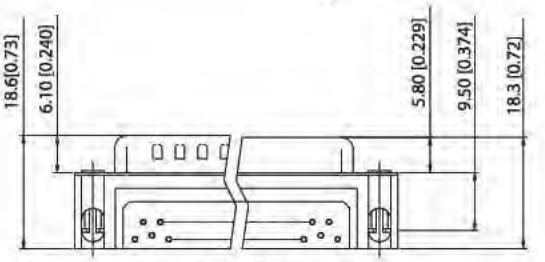



**9.4mm[0.37"] Footprint**

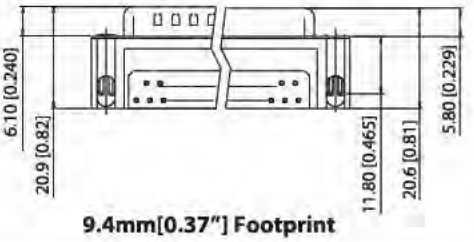



**13.84mm[0.545"] Footprint**

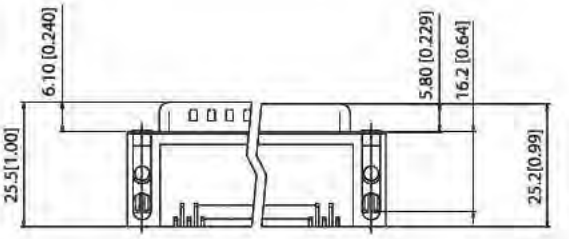



**7.2mm[0.28"] Footprint**




**9.4mm[0.37"] Footprint**




**13.84mm[0.545"] Footprint**

| Positions | A | | B | | C | | D | | E | | F | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch |
| 9 | 30.81 | 1.213 | 24.99 | 0.984 | 16.92 | 0.666 | 16.33 | 0.643 | 11.08 | 0.436 | 11.08 | 0.436 |
| 15 | 39.20 | 1.543 | 33.30 | 1.311 | 25.25 | 0.994 | 24.70 | 0.972 | 19.39 | 0.763 | 19.39 | 0.763 |
| 25 | 53.05 | 2.088 | 47.04 | 1.852 | 38.96 | 1.534 | 38.40 | 1.512 | 33.24 | 1.309 | 33.24 | 1.309 |
| 37 | 69.40 | 2.732 | 63.50 | 2.500 | 55.42 | 2.182 | 54.80 | 2.158 | 49.86 | 1.963 | 49.86 | 1.963 |

## D-Sub Right Angle Type - 107 SERIES



## SPECIFICATIONS

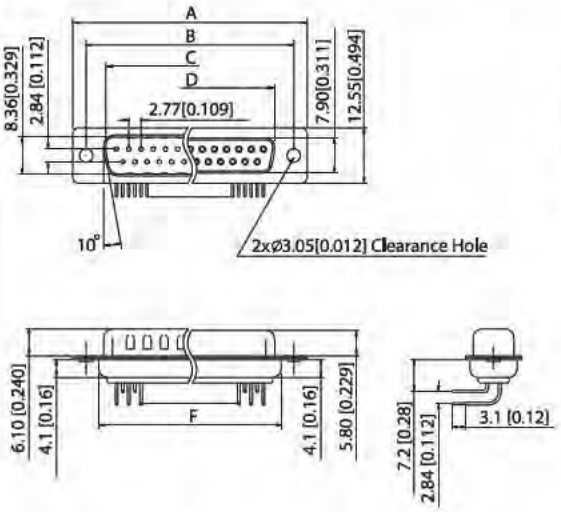
### Material

- Insulator: Glass-Filled Thermoplastic PBT, UL 94V-0
- Contact: Brass
- Clinch Nut: Brass, Nickel Plated
- Boardlock: Brass, Tin Plated
- Screwlock: Steel, Nickel Plated

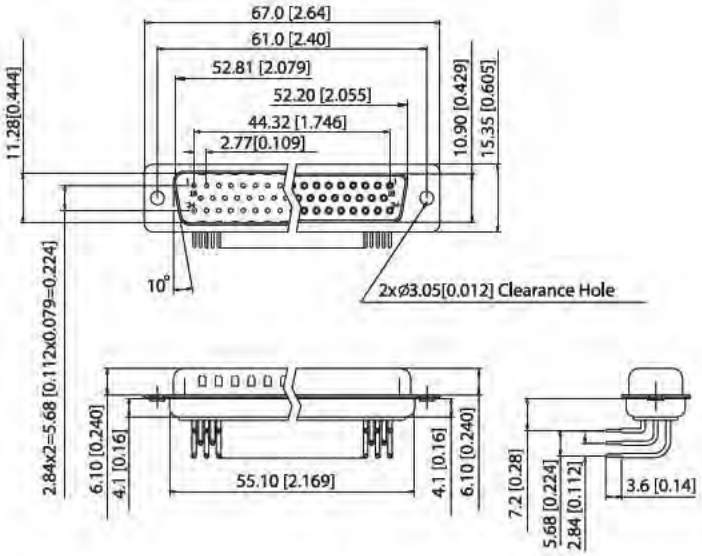
### Electrical

- Contact Resistance: 20m OHMs Max at 1 Amp DC.
- Insulation Resistance: 1000 MagOHMs at 500 VDC.
- Dielectric withstanding Voltage: 1000 Vac/Rms 60Hz for 1 Minute
- Current Rating: 3 Amps
- Voltage Rating: 250 Vac/Rms 60Hz

## DIMENSIONS With 7.2mm[0.28"] Footprint Machined Pin (W/O Rear Cover) & 50 Positions Machined Pin (W/O Rear Cover)



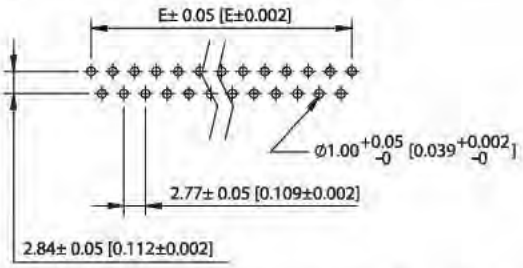

**7.2mm[0.28"] Footprint Machined Pin (W/O Rear Cover)**



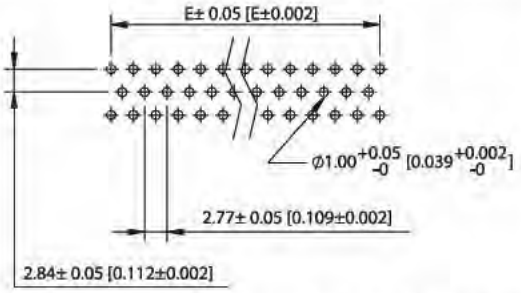

**50 Positions Machined Pin (W/O Rear Cover)**

| Positions | A | | B | | C | | D | | E | | F | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch |
| 9 | 30.81 | 1.213 | 24.99 | 0.984 | 16.92 | 0.666 | 16.33 | 0.643 | 11.08 | 0.436 | 19.20 | 0.756 |
| 15 | 39.20 | 1.543 | 33.30 | 1.311 | 25.25 | 0.994 | 24.70 | 0.972 | 19.39 | 0.763 | 27.70 | 1.091 |
| 25 | 53.05 | 2.088 | 47.04 | 1.852 | 38.96 | 1.534 | 38.40 | 1.512 | 33.24 | 1.309 | 41.10 | 1.618 |
| 37 | 69.40 | 2.732 | 63.50 | 2.500 | 55.42 | 2.182 | 54.80 | 2.158 | 49.86 | 1.963 | 57.30 | 2.256 |

## RECOMMENDED PCB LAYOUT




**7.2mm[0.28"] Footprint Machined Pin (W/O Rear Cover)**




**50 Positions Machined Pin (W/O Rear Cover)**

# D-Sub Right Angle Type - 107 SERIES



## SPECIFICATIONS

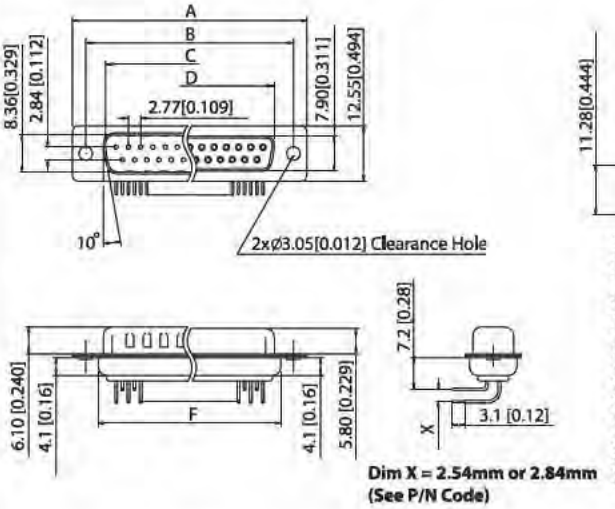
### Material

- Insulator: Glass-Filled Thermoplastic PBT, UL 94V-0
- Contact: Brass
- Clinch Nut: Brass, Nickel Plated
- Boardlock: Brass, Tin Plated
- Screwlock: Steel, Nickel Plated

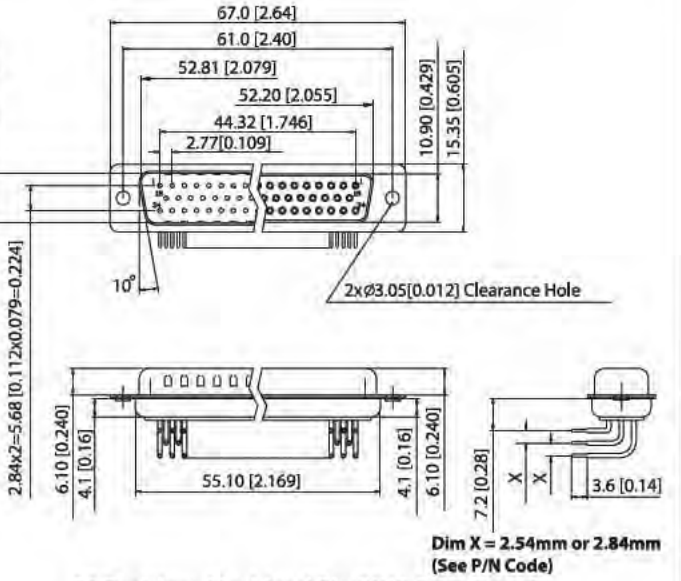
### Electrical

- Contact Resistance: 20m OHMs Max at 1 Amp DC.
- Insulation Resistance: 1000 MagOHMs at 500 VDC.
- Dielectric withstanding Voltage: 1000 Vac/Rms 60Hz for 1 Minute
- Current Rating: 3 Amps
- Voltage Rating: 250 Vac/Rms 60Hz

## DIMENSIONS With 9.4mm[0.37"] Footprint Machined Pin (W/O Rear Cover) & 50 Positions Machined Pin (W/O Rear Cover)



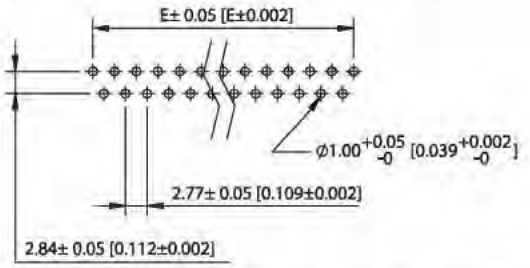

**9.4mm[0.37"] Footprint Machined Pin (W/O Rear Cover)**



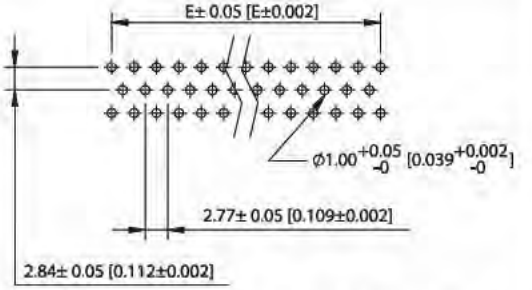

**50 Positions Machined Pin (W/O Rear Cover)**

| Positions | A | | B | | C | | D | | E | | F | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch |
| 9 | 30.81 | 1.213 | 24.99 | 0.984 | 16.92 | 0.666 | 16.33 | 0.643 | 11.08 | 0.436 | 19.20 | 0.756 |
| 15 | 39.20 | 1.543 | 33.30 | 1.311 | 25.25 | 0.994 | 24.70 | 0.972 | 19.39 | 0.763 | 27.70 | 1.091 |
| 25 | 53.05 | 2.088 | 47.04 | 1.852 | 38.96 | 1.534 | 38.40 | 1.512 | 33.24 | 1.309 | 41.10 | 1.618 |
| 37 | 69.40 | 2.732 | 63.50 | 2.500 | 55.42 | 2.182 | 54.80 | 2.158 | 49.86 | 1.963 | 57.30 | 2.256 |

## RECOMMENDED PCB LAYOUT




**7.2mm[0.28"] Footprint Machined Pin (W/O Rear Cover)**




**50 Positions Machined Pin (W/O Rear Cover)**

# D-Sub Right Angle Type - 107 SERIES

## PART NUMBER OPTIONS

**SDS107-PR - - - -**

**CONTACT PLATING**
(All Platings Have .000050" Nickel Underplate)
W = Gold Flash On Contact Surface, .000100"Pure Tin On Termination.
B = .000010" Gold On Contact Surface, .000100"Pure Tin On Termination.
U = .000015" Gold On Contact Surface, .000100"Pure Tin On Termination.
C = .000030" Gold On Contact Surface, .000100"Pure Tin On Termination.
N = .000050" Gold On Contact Surface, .000100"Pure Tin On Termination.
P = Gold Flash Overall

**SHELL PLATING**
1. Nickel
2. Tin (Standard)
3. $Cr^{+}6$ Yellow Chrome
4. Gold Flash

**CONTACT TYPE**
M : MALE
F : FEMALE

**NO. OF PINS**
09 : 09 POSITIONS
15 : 15 POSITIONS
25 : 25 POSITIONS
37 : 37 POSITIONS
50 : 50 POSITIONS

**FOOTPRINT**
1: 7.2mm [0.28"] Footprint
2: 9.4mm [0.37"] Footprint
3: 13.84mm [0.545"] Footprint

**INSULATOR COLOR**
1: Black (Standard) 2: Blue

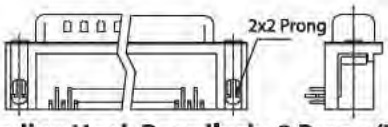
**RIVET OPTIONS (REFER TO BELOW FIGURE FOR DETAIL)**
0. None 1. Grounding Strap #4-40 Threaded on PANEL
2. Grounding Strap #4-40 Threaded on PCB & PANEL
3. Grounding Hook Boardlock+2 Prong (Tin)

**FLANGE MOUNTING OPTION (REFER TO BELOW FIGURE FOR DETAIL)**
1. #4-40 Female Thread
2. #4-40 UNC (4.8 X 11.8mm [0.19 X 0.46]) Female Screwlock Installed
3. #4-40 UNC (4.8 X 11.8mm [0.19 X 0.46]) Female Screwlock Bulk-Packed
**6. #4-40 UNC (4.8 X 11.8mm [0.19 X 0.46]) Female Screwlock Installed
** Remove Screwlock to Disassemble Boardlock Bracket

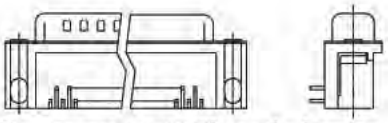
**FERRITE**
N : Without Ferrite

**PIN TYPE**
S : STAMPED PIN
M : MACHINED PIN

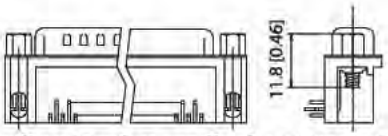
## RIVET OPTIONS & FLANGE MOUNTING OPTION



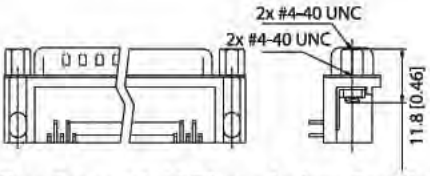

**Grounding Hook Boardlock+2 Prong (Tin)**
(#4-40 Female Thread)



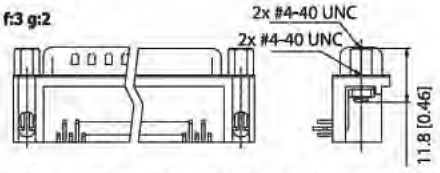
**Grounding Strap #4-40 Threaded on Spelling**
(#4-40 Female Thread)



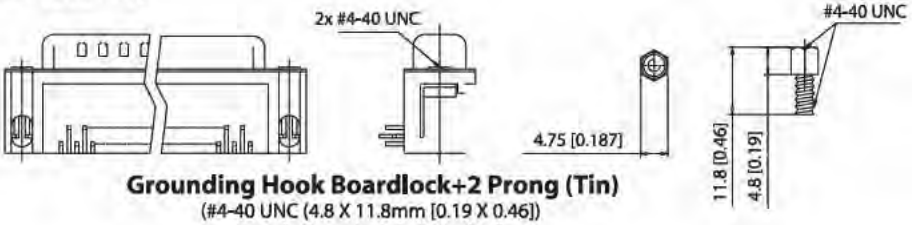

**Grounding Hook Boardlock+2 Prong (Tin)**
(#4-40 UNC (4.8 X 11.8mm [0.19 X 0.46])
Female Screwlock Installed)




**Grounding Strap #4-40 Threaded on Spelling**
(#4-40 UNC (4.8 X 11.8mm [0.19 X 0.46])
Female Screwlock Installed)




**Grounding Hook Boardlock+2 Prong (Tin)**
(#4-40 UNC (4.8 X 11.8mm [0.19 X 0.46])
Female Screwlock Installed)




**Grounding Hook Boardlock+2 Prong (Tin)**
(#4-40 UNC (4.8 X 11.8mm [0.19 X 0.46])
Female Screwlock Bulk-Packed)

MICROPLASTICS SULLINS

# D-Sub H.D. Right Angle Type - 108 SERIES



## SPECIFICATIONS

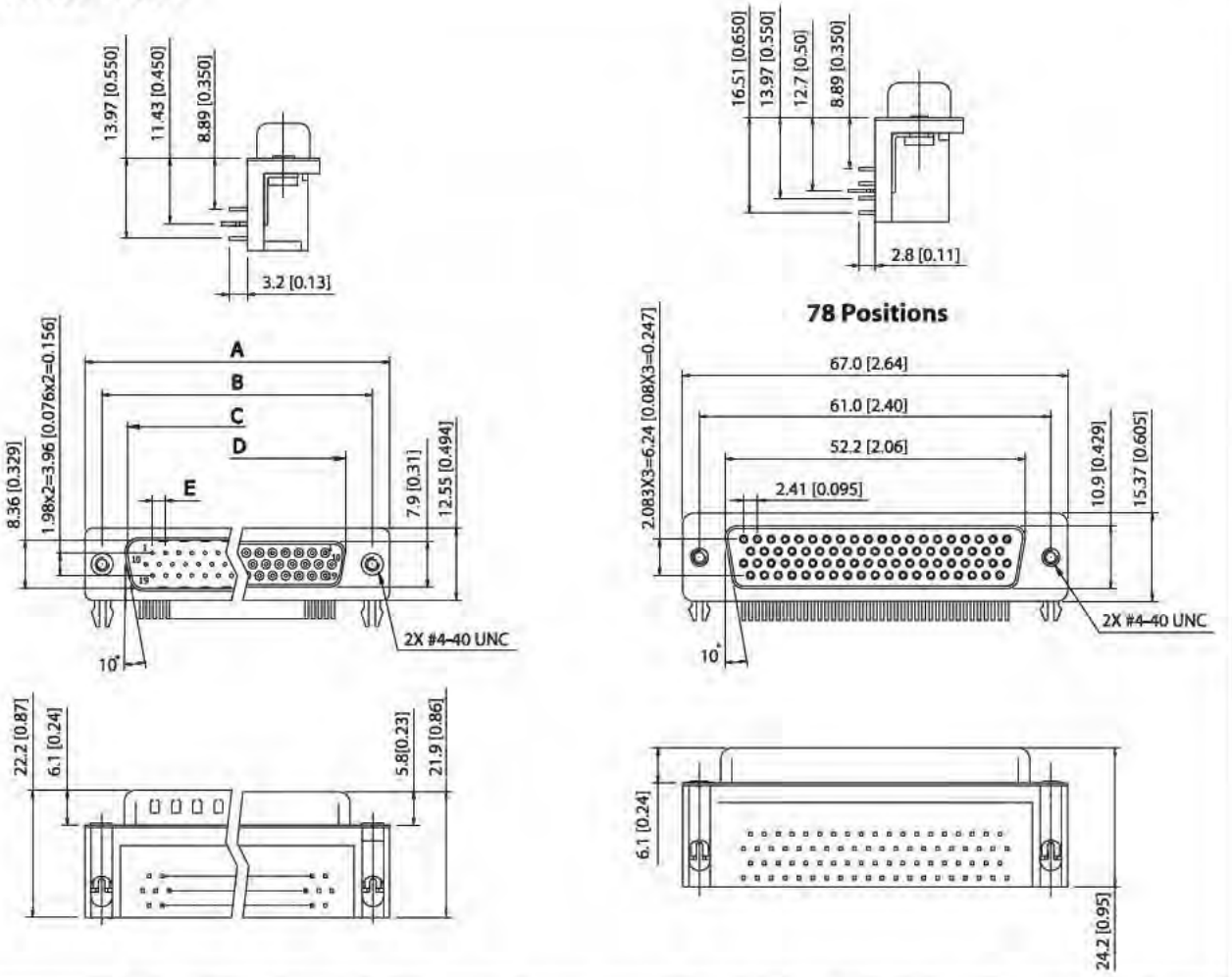
### Material

- Insulator: Glass-Filled Thermoplastic PBT, UL 94V-0
- Contact: Brass
- Clinch Nut: Brass, Nickel Plated
- Boardlock: Brass, Tin Plated
- Screwlock: Steel, Nickel Plated

### Electrical

- Contact Resistance: 20m OHMs Max at 1 Amp DC.
- Insulation Resistance: 1000 MagOHMs at 500 VDC.
- Dielectric withstanding Voltage: 1000 Vac/Rms 60Hz for 1 Minute
- Current Rating: 3 Amps
- Voltage Rating: 250 Vac/Rms 60Hz

## DIMENSIONS




| Positions | A | | B | | C | | D | | E | | F | | G | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch |
| 15 | 30.81 | 1.213 | 24.99 | 0.984 | 16.92 | 0.666 | 16.33 | 0.643 | 2.29 | 0.090 | 7.04 | 0.277 | 1.145 | 0.045 |
| 26 | 39.20 | 1.543 | 33.30 | 1.311 | 25.25 | 0.994 | 24.70 | 0.972 | 2.29 | 0.090 | 7.04 | 0.277 | 1.145 | 0.045 |
| 44 | 53.05 | 2.088 | 47.04 | 1.852 | 38.96 | 1.534 | 38.40 | 1.512 | 2.29 | 0.090 | 7.04 | 0.277 | 1.145 | 0.045 |
| 62 | 69.40 | 2.732 | 63.50 | 2.500 | 55.42 | 2.182 | 54.80 | 2.158 | 2.41 | 0.065 | 7.00 | 0.276 | 1.205 | 0.040 |

# D-Sub H.D. Right Angle Type - 108 SERIES

## PART NUMBER OPTIONS

**SDS108-PR - - -**

**CONTACT PLATING**
(All Platings Have .000050" Nickel Underplate)
W = Gold Flash On Contact Surface, .000100"Pure Tin On Termination.
B = .000010" Gold On Contact Surface, .000100"Pure Tin On Termination.
U = .000015" Gold On Contact Surface, .000100"Pure Tin On Termination.
C = .000030" Gold On Contact Surface, .000100"Pure Tin On Termination.
N = .000050" Gold On Contact Surface, .000100"Pure Tin On Termination.
P = Gold Flash Overall

**SHELL PLATING**
1. Nickel
2. Tin (Standard)

**CONTACT TYPE**
M : MALE F : FEMALE

**NO. OF PINS**
15 : 15 POSITIONS 26 : 26 POSITIONS
44 : 44 POSITIONS 62 : 62POSITIONS
78 : 78 POSITIONS

**INSULATOR COLOR**
1.Black (Standard) 2.Blue

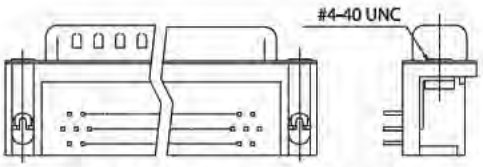
**RIVET OPTIONS (REFER TO BELOW FIGURE FOR DETAIL)**
0. None
1. Grounding Strap #4-40 Threaded On Panel
2. Grounding Strap #4-40 Threaded On PCB & Panel
3. Grounding Hook Boardlock+2 Prong

**FLANGE MOUNTING OPTION (REFER TO BELOW FIGURE FOR DETAIL)**
1. #4-40 Female Thread
2. #4-40 UNC (4.8 X 11.8mm [0.19 X 0.46]) Female Screwlock Installed
3. #4-40 UNC (4.8 X 11.8mm [0.19 X 0.46]) Female Screwlock Bulk-Packed
** 6. #4-40 UNC (4.8 X 11.8mm [0.19 X 0.46]) Female Screwlock Installed
** Remove Screwlock to Disassemble Boardlock Bracket

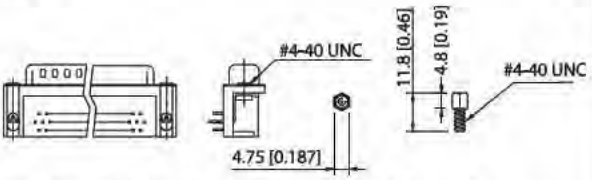
**FERRITE**
N : Without Ferrite

**PIN TYPE**
S : STAMPED PIN
M : MACHINED PIN

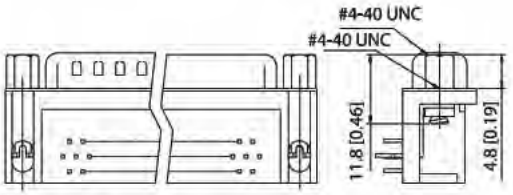
## RIVET OPTIONS & FLANGE MOUNTING OPTION



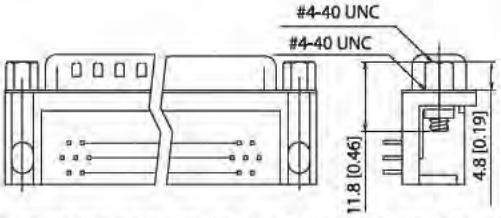

**Grounding Hook Boardlock+2 Prong**
(#4-40 Female Thread)



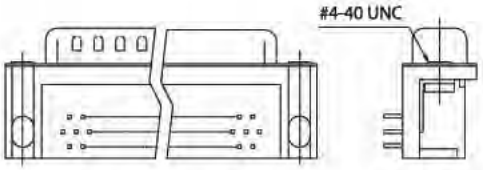

**Grounding Hook Boardlock+2 Prong**
(#4-40 UNC (4.8 X 11.8mm [0.19 X 0.46])
Female Screwlock Bulk-Packed)



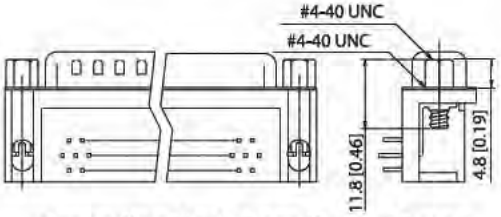

**Grounding Hook Boardlock+2 Prong**
(#4-40 UNC (4.8 X 11.8mm [0.19 X 0.46])
Female Screwlock Installed)




**Grounding Strap #4-40 Threaded on Panel**
(#4-40 UNC (4.8 X 11.8mm [0.19 X 0.46])
Female Screwlock Installed)




**Grounding Strap #4-40 Threaded on Panel**
(#4-40 Female Thread)




**Grounding Hook Boardlock+2 Prong**
(#4-40 UNC (4.8 X 11.8mm [0.19 X 0.46])
Female Screwlock Installed)

# D-Sub High Profile Straight Type - 155 SERIES



## SPECIFICATIONS

### Material

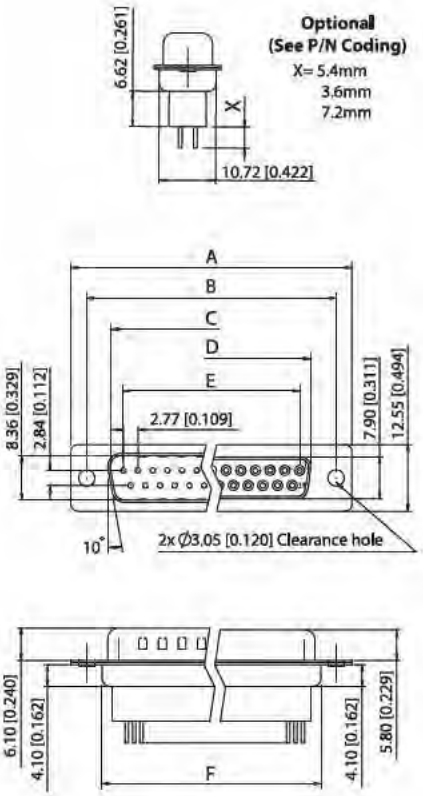
- Insulator: Glass-Filled Thermoplastic PBT, UL 94V-0
- Contact: Brass
- Clinch Nut: Brass, Nickel Plated
- Boardlock: Brass, Tin Plated
- Screwlock: Steel, Nickel Plated

### Electrical

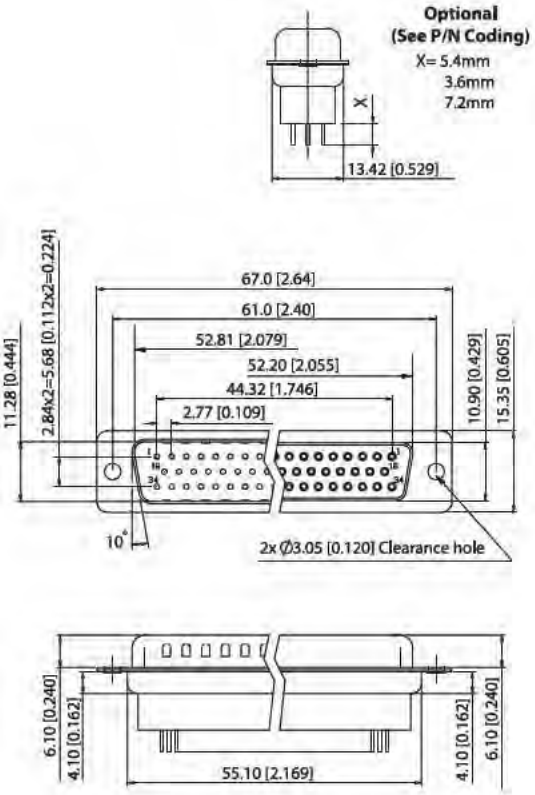
- Contact Resistance: 20m OHMs Max at 1 Amp DC.
- Insulation Resistance: 1000 MagOHMs at 500 VDC.
- Dielectric withstanding Voltage: 1000 Vac/Rms 60Hz for 1 Minute
- Current Rating: 3 Amps
- Voltage Rating: 250 Vac/Rms 60Hz

## DIMENSIONS

### 9,15,25,37 Positions




### 50 Positions




| Positions | A | | B | | C | | D | | E | | F | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch |
| 9 | 30.81 | 1.213 | 24.99 | 0.984 | 16.92 | 0.666 | 16.33 | 0.643 | 11.08 | 0.436 | 19.20 | 0.756 |
| 15 | 39.20 | 1.543 | 33.30 | 1.311 | 25.25 | 0.994 | 24.70 | 0.972 | 19.39 | 0.763 | 27.70 | 1.091 |
| 25 | 53.05 | 2.088 | 47.04 | 1.852 | 38.96 | 1.534 | 38.40 | 1.512 | 33.24 | 1.309 | 41.10 | 1.618 |
| 37 | 69.40 | 2.732 | 63.50 | 2.500 | 55.42 | 2.182 | 54.80 | 2.158 | 49.86 | 1.963 | 57.30 | 2.256 |

# D-Sub High Profile Straight Type - 155 SERIES

## PART NUMBER OPTIONS

**SDS155-PR - - -**

**CONTACT PLATING**
(All Platings Have .000050" Nickel Underplate)
W = Gold Flash On Contact Surface, .000100"Pure Tin On Termination.
B = .000010" Gold On Contact Surface, .000100"Pure Tin On Termination.
U = .000015" Gold On Contact Surface, .000100"Pure Tin On Termination.
C = .000030" Gold On Contact Surface, .000100"Pure Tin On Termination.

**SHELL PLATING**
0. $Cr^{+}3$ Yellow Chrome
1. Nickel
2. Tin (Standard)
3. $Cr^{+}6$ Yellow Chrome

**CONTACT TYPE**
M : MALE
F : FEMALE

**NO. OF PINS**
09 : 09 POSITIONS
15 : 15 POSITIONS
25 : 25 POSITIONS
37 : 37 POSITIONS
50 : 50 POSITIONS

**INSULATOR COLOR**
1.Black (Standard)

**RIVET OPTIONS**
**(REFER TO BELOW FIGURE FOR DETAIL)**
0. Ø3.05mm [.120] Clearance Hole
1. Front Rivet, 5.9mm[0.23]
2. Rear Rivet, 5.9mm[0.23]
4. Boardlock+2 Prong Ø3.0 x 11.0 L [0.12 x 0.43]
6. Boardlock+4 Prong Ø3.0 x 11.0 L [0.12 x 0.43]

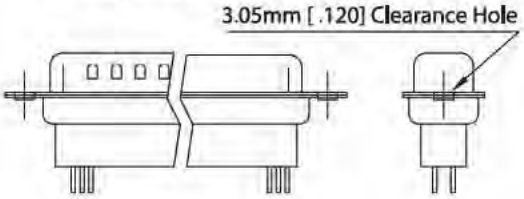
**FLANGE MOUNTING OPTION**
0. Ø3.05mm [Ø0.120] Clearance Hole
1. #4-40 Female Thread
8. #4-40 UNC (5.0 X 10.mm [0.20 X 0.39]) Female Screwlock Installed
9. #4-40 UNC (5.0 X 10.mm [0.20 X 0.39]) Female Screwlock Bulk-Packed

**FERRITE**
N : Without Ferrite

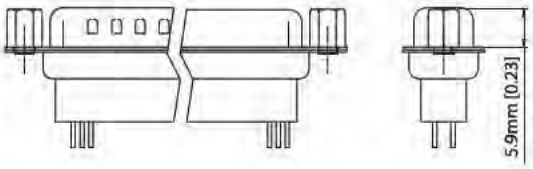
**PIN TYPE**
S : STAMPED PIN : 5.4mm [0.21]
M : MACHINED PIN : 5.4mm [0.21]
Q : STAMPED PIN : 3.6mm [0.14]
R : STAMPED PIN : 7.2mm [0.28]

## RIVET OPTIONS

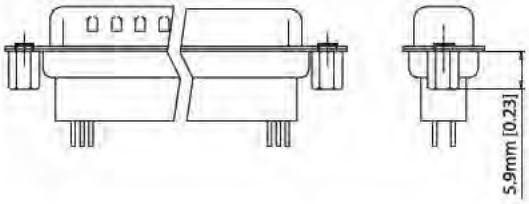
### 0. 3.05mm [.120] Clearance Hole



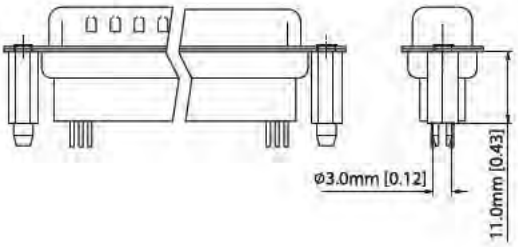

### 1. Front Rivet, 5.9mm[0.23]



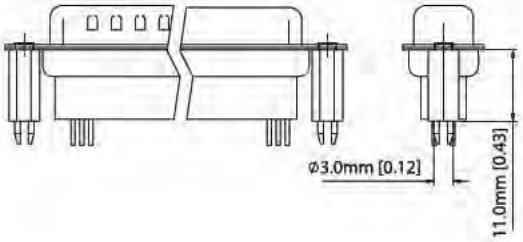

### 2. Rear Rivet, 5.9mm[0.23]




### 4. Boardlock+2 Prong Ø3.0 x 11.0 L [0.12 x 0.43]




### 6. Boardlock+4 Prong Ø3.0 x 11.0 L [0.12 x 0.43]



MICROPLASTICS SULLINS

# D-Sub H.D. High Profile PCB Type - 160 SERIES



## SPECIFICATIONS

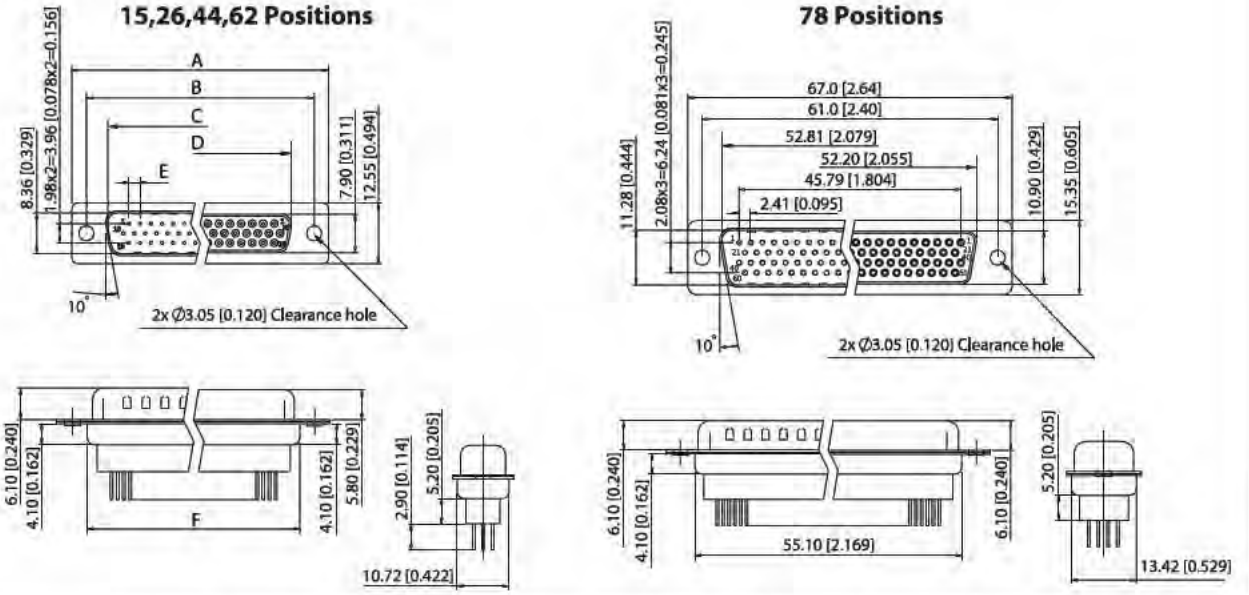
### Material

- Insulator: Glass-Filled Thermoplastic PBT, UL 94V-0
- Contact: Brass
- Clinch Nut: Brass, Nickel Plated
- Screwlock: Steel, Nickel Plated

### Electrical

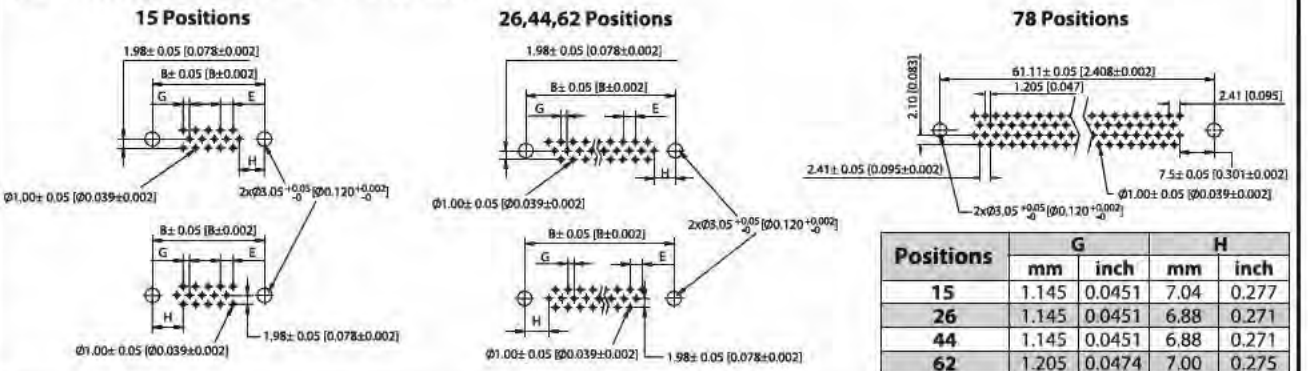
- Contact Resistance: 20m OHMs Max at 1 Amp DC.
- Insulation Resistance: 1000 MagOHMs at 500 VDC.
- Dielectric withstanding Voltage: 1000 Vac/Rms 60Hz for 1 Minute
- Current Rating: 3 Amps
- Voltage Rating: 250 Vac/Rms 60Hz

## DIMENSIONS




| Positions | A | | B | | C | | D | | E | | F | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch |
| 15 | 30.81 | 1.213 | 24.99 | 0.984 | 16.92 | 0.666 | 16.33 | 0.643 | 11.08 | 0.436 | 19.20 | 0.756 |
| 26 | 39.20 | 1.543 | 33.30 | 1.311 | 25.25 | 0.994 | 24.70 | 0.972 | 19.39 | 0.763 | 27.70 | 1.091 |
| 44 | 53.05 | 2.088 | 47.04 | 1.852 | 38.96 | 1.534 | 38.40 | 1.512 | 33.24 | 1.309 | 41.10 | 1.618 |
| 62 | 69.40 | 2.732 | 63.50 | 2.500 | 55.42 | 2.182 | 54.80 | 2.158 | 49.86 | 1.963 | 57.30 | 2.256 |

## RECOMMENDED PCB LAYOUT




| Positions | G | | H | |
|---|---|---|---|---|
| | mm | inch | mm | inch |
| 15 | 1.145 | 0.0451 | 7.04 | 0.277 |
| 26 | 1.145 | 0.0451 | 6.88 | 0.271 |
| 44 | 1.145 | 0.0451 | 6.88 | 0.271 |
| 62 | 1.205 | 0.0474 | 7.00 | 0.275 |

# D-Sub H.D. High Profile PCB Type - 160 SERIES

## PART NUMBER OPTIONS

**SDS160-PR - - -**

**CONTACT PLATING**
(All Platings Have .000050" Nickel Underplate)
W = Gold Flash On Contact Surface, .000100"Pure Tin On Termination.
B = .000010" Gold On Contact Surface, .000100"Pure Tin On Termination.
U = .000015" Gold On Contact Surface, .000100"Pure Tin On Termination.
C = .000030" Gold On Contact Surface, .000100"Pure Tin On Termination.

**SHELL PLATING**
0. $Cr^{+}3$ Yellow Chrome
1. Nickel
2. Tin (Standard)
3. $Cr^{+}6$ Yellow Chrome

**CONTACT TYPE**
M : MALE
F : FEMALE

**NO. OF PINS**
15 : 15 POSITIONS
26 : 26 POSITIONS
44 : 44 POSITIONS
62 : 62 POSITIONS
78 : 78 POSITIONS

**INSULATOR COLOR**
1.Black 2.Blue

**RIVET OPTIONS**
**(REFER TO BELOW FIGURE FOR DETAIL)**
0. Ø3.05mm [.120] Clearance Hole
1. Front Rivet, 5.9mm[0.23]
2. Rear Rivet, 5.9mm[0.23]
4. Boardlock+2 Prong Ø3.0 x 11.0 L [0.12 x 0.43]
6. Boardlock+4 Prong Ø3.0 x 11.0 L [0.12 x 0.43]

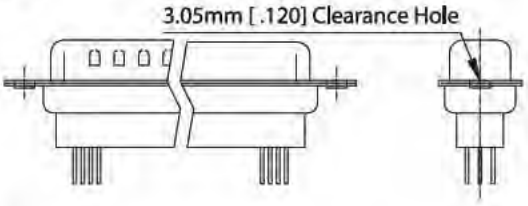
**FLANGE MOUNTING OPTION**
0. Ø3.05mm [Ø0.120] Clearance Hole
1. #4-40 Female Thread
B. #4-40 UNC (5.8 X 11.8mm [0.23 X 0.46]) Female Screwlock Installed
C. #4-40 UNC (5.8 X 11.8mm [0.23 X 0.46]) Female Screwlock Bulk-Packed

**FERRITE**
N : Without Ferrite

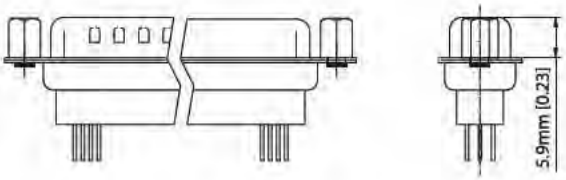
**PIN TYPE**
S : STAMPED PIN : 5.4mm [0.21]
M : MACHINED PIN : 5.4mm [0.21]
Q : STAMPED PIN : 3.6mm [0.14]
R : STAMPED PIN : 7.2mm [0.28]
T : MACHINED PIN : 7.5mm [0.30]

## RIVET OPTIONS

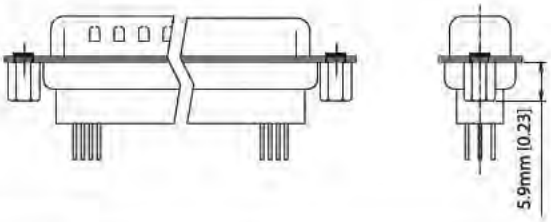
### 0. 3.05mm [.120] Clearance Hole



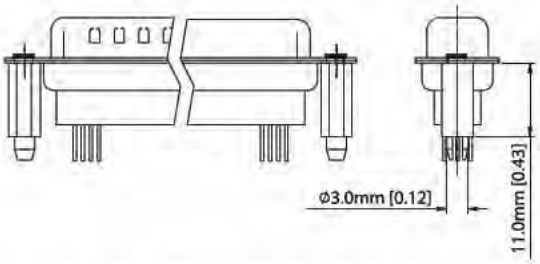

### 1. Front Rivet, 5.9mm[0.23]



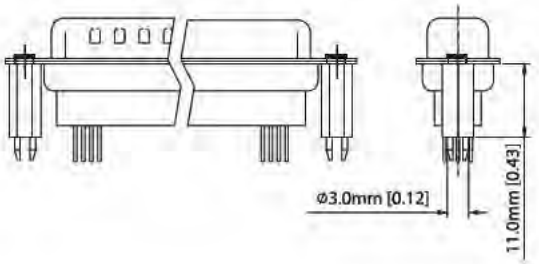

### 2. Rear Rivet, 5.9mm[0.23]




### 4. Boardlock+2 Prong Ø3.0 x 11.0 L [0.12 x 0.43]




### 6. Boardlock+4 Prong Ø3.0 x 11.0 L [0.12 x 0.43]



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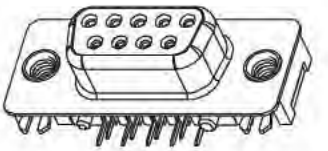
# D-Sub Right Angle Slim Type - 223 SERIES

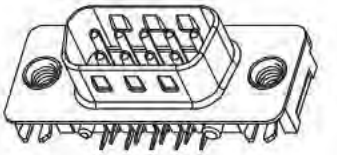


## SPECIFICATIONS

### Material

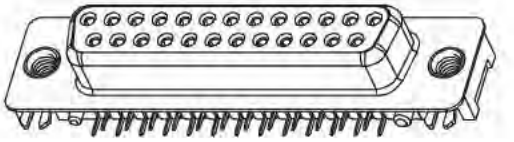
- Insulator: Glass-Filled Thermoplastic PBT, UL 94V-0
- Contact: Brass
- Clinch Nut: Brass, Nickel Plated
- Boardlock: Brass, Tin Plated
- Screwlock: Steel, Nickel Plated



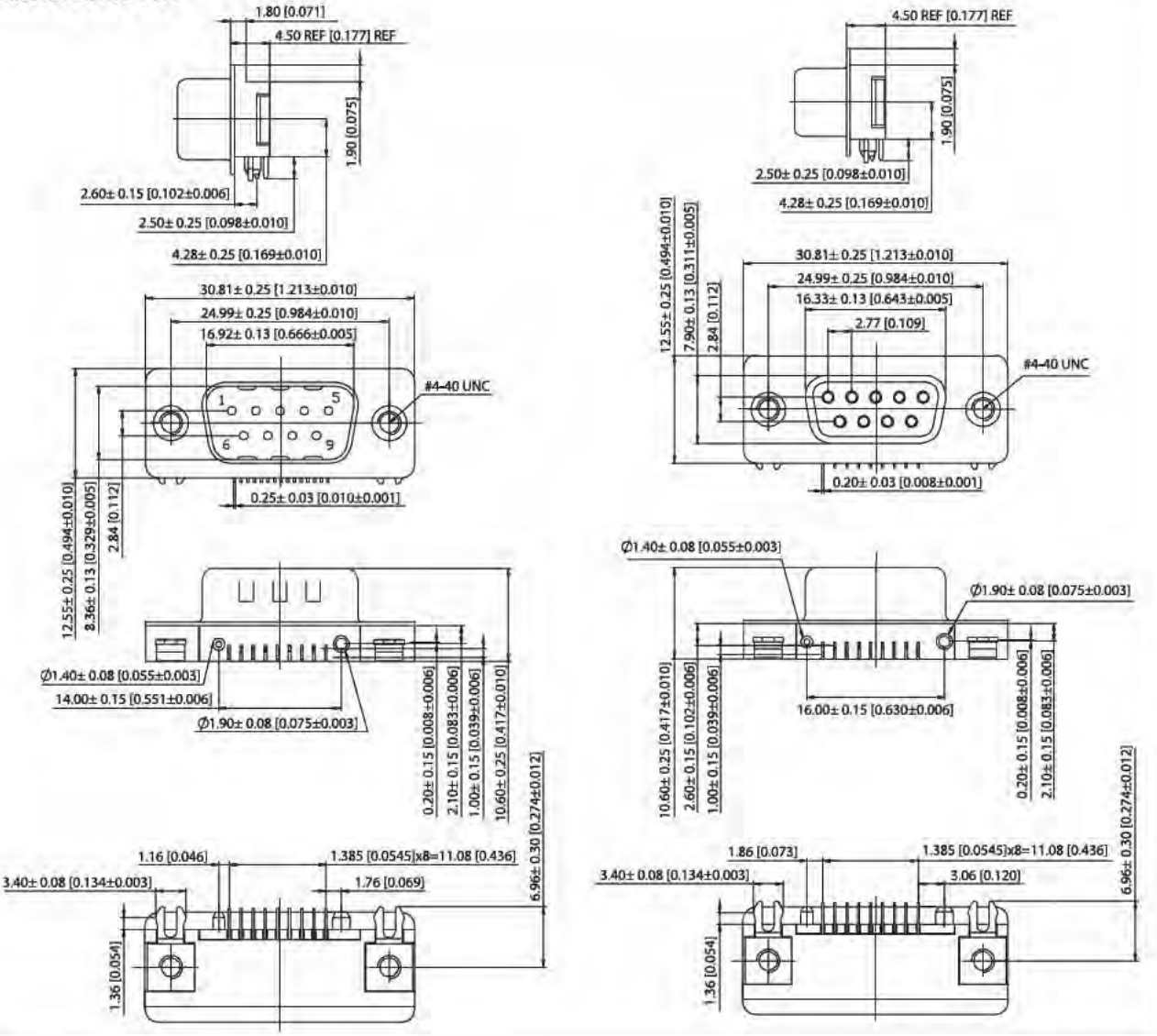


### Electrical

- Contact Resistance: 20m OHMs Max at 1 Amp DC.
- Insulation Resistance: 1000 MagOHMs at 500 VDC.
- Dielectric withstanding Voltage: 1000 Vac/Rms 60Hz for 1 Minute
- Current Rating: 3 Amps
- Voltage Rating: 250 Vac/Rms 60Hz



## DIMENSIONS



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# D-Sub Right Angle Slim Type - 223 SERIES

## PART NUMBER OPTIONS

**SDS223-PR - - -**

**CONTACT PLATING**
(All Platings Have .000050" Nickel Underplate)
W = Gold Flash On Contact Surface, Pure Tin On Termination.
B = .000010" Gold On Contact Surface, .000100"Pure Tin On Termination.
U = .000015" Gold On Contact Surface, .000100"Pure Tin On Termination.
C = .000030" Gold On Contact Surface, .000100"Pure Tin On Termination.

**SHELL PLATING**
0. $Cr^{+}3$ Yellow Chrome
1. Nickel
2. Tin (Standard)
3. $Cr^{+}6$ Yellow Chrome

**CONTACT TYPE**
M : MALE
F : FEMALE

**NO. OF PINS**
09 : 09 POSITIONS
25 : 25 POSITIONS (FEMALE)

**INSULATOR COLOR**
1.Black
2.Blue (Standard)
3.White

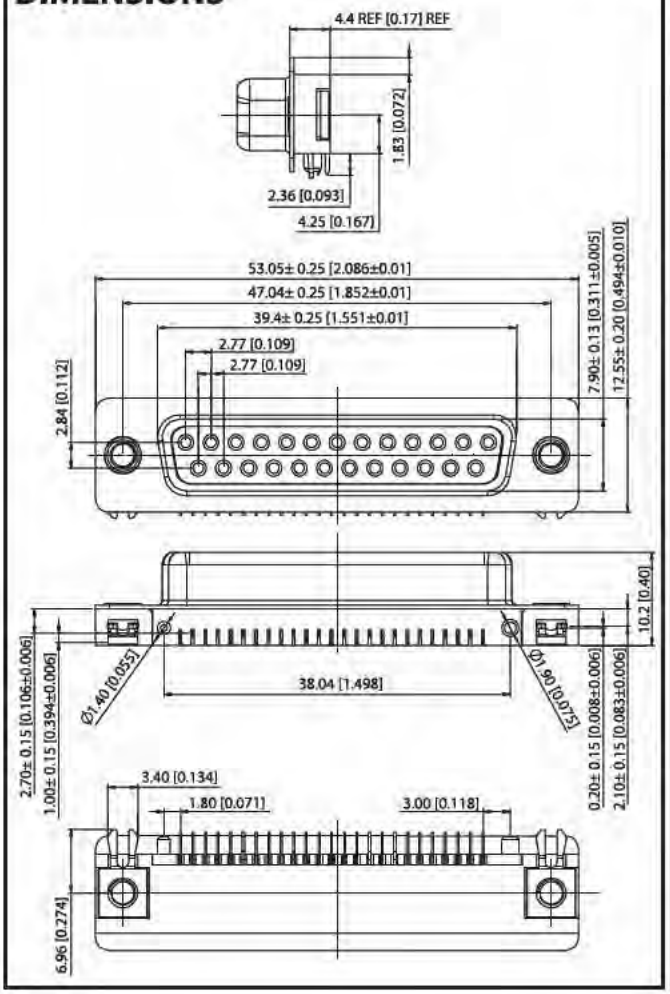
**RIVET OPTIONS**
0. None
1. Grounding Strap #4-40 Threaded on PANEL
2. Grounding Strap #4-40 Threaded on PCB & PANEL
3. Grounding Hook Boardlock+2 Prong

**FLANGE MOUNTING OPTION**
0. Ø3.05mm [Ø0.120] Clearance Hole
1. #4-40 Female Thread
8. #4-40 UNC (4.8 X 11.8mm [0.19X 0.46]) Female Screwlock Installed
9. #4-40 UNC (4.8 X 11.8mm [0.19X 0.46]) Female Screwlock Bulk-Packed

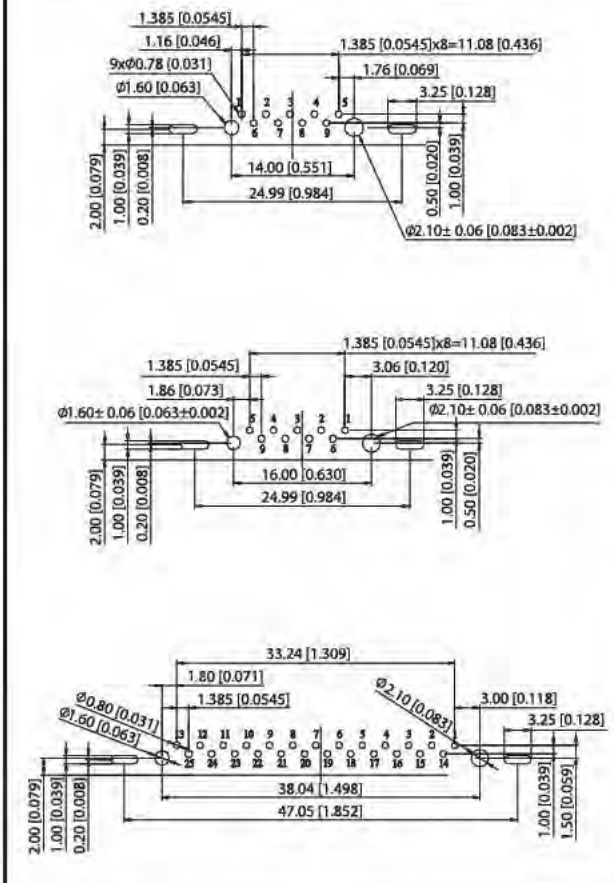
**FERRITE**
N : Without Ferrite

**PIN TYPE**
S : STAMPED PIN

## DIMENSIONS



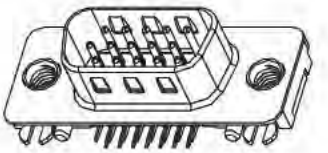

## RECOMMENDED PCB LAYOUT

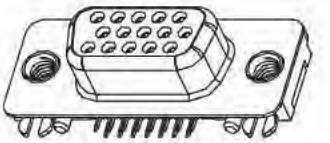


# D-Sub Right Angle Type - 224 SERIES



## SPECIFICATIONS





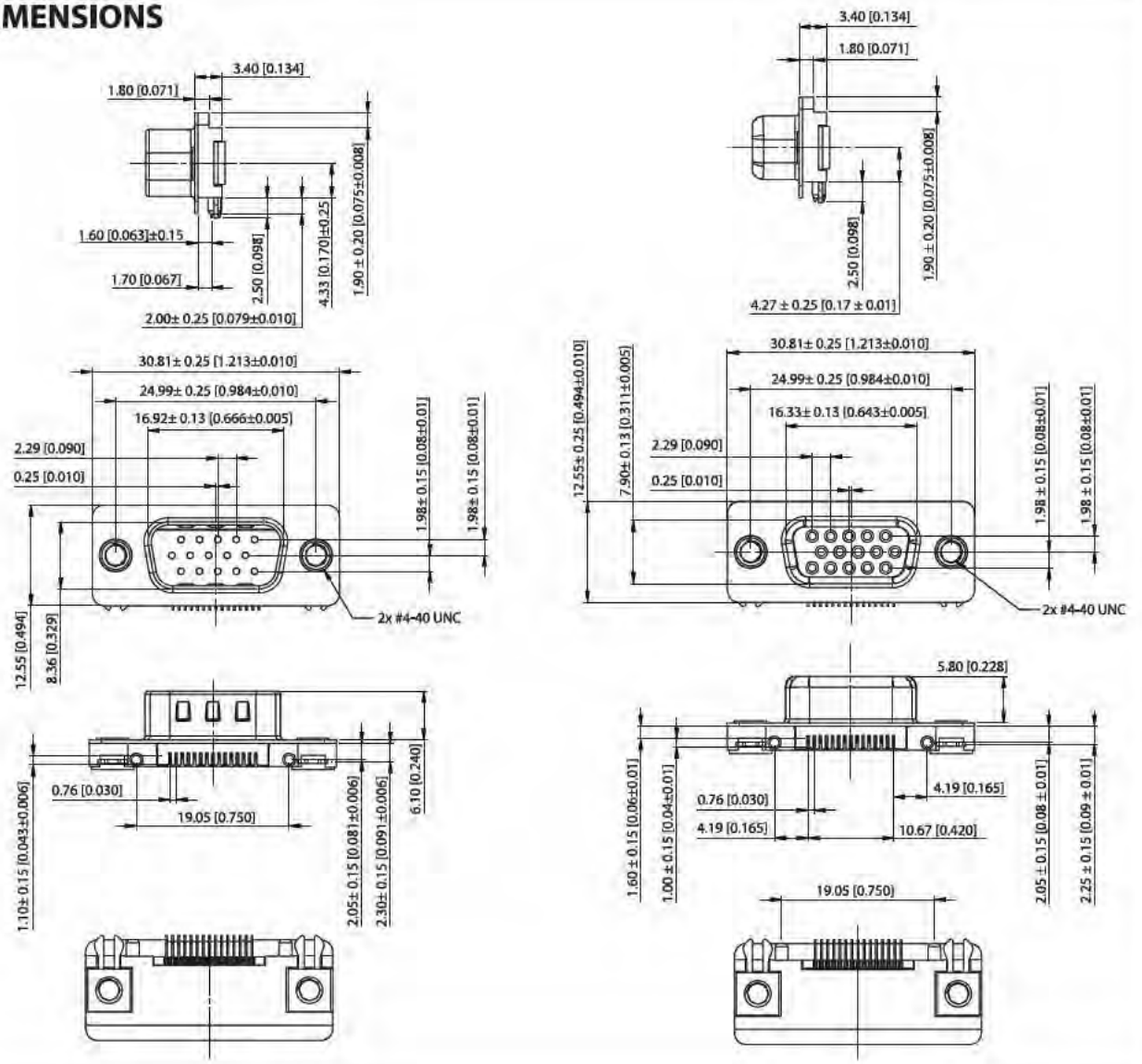
### Material

- Insulator: Glass-Filled Thermoplastic PBT, UL 94V-0
- Contact: Brass
- Clinch Nut: Brass, Nickel Plated
- Boardlock: Brass, Tin Plated
- Screwlock: Steel, Nickel Plated

### Electrical

- Contact Resistance: 20m OHMs Max at 1 Amp DC.
- Insulation Resistance: 1000 MagOHMs at 500 VDC.
- Dielectric withstanding Voltage: 1000 Vac/Rms 60Hz for 1 Minute
- Current Rating: 3 Amps
- Voltage Rating: 250 Vac/Rms 60Hz

## DIMENSIONS



# D-Sub Right Angle Type - 224 SERIES



## PART NUMBER OPTIONS

**SDS224-PR - - - -**

**CONTACT PLATING**
W = 000050" Nickel Underplate,
Gold Flash On Contact Surface,
.000100" Pure Tin On Termination.

**SHELL PLATING**
1. Nickel
2. Tin (Standard)
3. $Cr^{+}6$ Yellow Chrome
4.Gold Flash

**CONTACT TYPE**
M : MALE
F : FEMALE

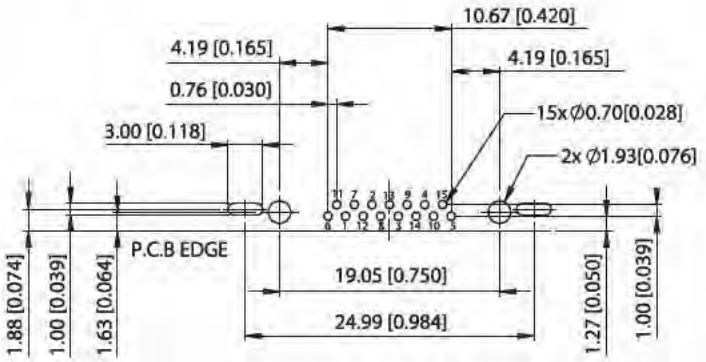
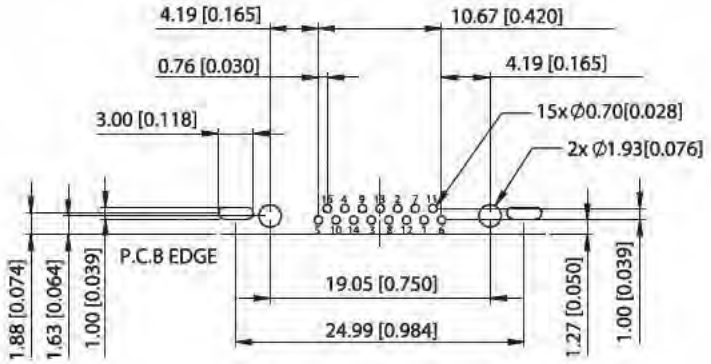
**NO. OF PINS**
15 : 15 POSITIONS

**PIN TYPE**
S : STAMPED PIN

**INSULATOR COLOR**
1.Black
2.Blue (Standard)

**RIVET OPTIONS**
0. None
1. Grounding Strap #4-40 Threaded on PANEL
2. Grounding Strap #4-40 Threaded on PCB & PANEL
3. Grounding Hook Boardlock+2 Prong

**FLANGE MOUNTING OPTION**
0. Ø3.05mm [Ø0.120] Clearance Hole
1. #4-40 UNC Female Thread
8. #4-40 UNC (4.8 X 11.8mm [0.19X 0.46]) Female Screwlock Installed
9. #4-40 UNC (4.8 X 11.8mm [0.19X 0.46]) Female Screwlock Bulk-Packed

**FERRITE**
N : Without Ferrite

## RECOMMENDED PCB LAYOUT