

# SD

D'Sub connectors - Stamped and Formed Contacts

## RIGHT ANGLE BOARD MOUNT CONNECTORS



MAIN CHARACTERISTICS

### Specifications

- Connectors according to: MIL C24308 - NFC 93425-HE5

| Materials and Platings |                                                                                                                      |
|------------------------|----------------------------------------------------------------------------------------------------------------------|
| <b>Shells</b>          | Steel, tin over nickel plating                                                                                       |
| <b>Insulator</b>       | Glass-filled thermoplastic, UL 94V- 0                                                                                |
| <b>Pin contacts</b>    | Brass, selected gold in mating area; 2.54µm (100 µ") min.tin on termination area over 1.27µm (50µ") min.nickel       |
| <b>Socket contact</b>  | Phosphor bronze, selected gold in mating area;2.54µ(100µ") min.tin on termination area over 1.27µm (50µ") min.nickel |
| <b>Rear insert</b>     | Brass, 2.54µm (100µ") min.nickel plated                                                                              |
| <b>Boardlock</b>       | Phosphor bronze or Brass, 2.54µm (100µ") min.nickel plated                                                           |
| <b>Screwlock</b>       | Brass, 2.54µm (100µ") min.nickel plated                                                                              |

| Electrical Data              |                                  |
|------------------------------|----------------------------------|
| <b>Current rating</b>        | 5A                               |
| <b>Voltage rating</b>        | 250V AC/ rms 50Hz                |
| <b>Withstanding voltage</b>  | 1000V AC/rms 50Hz for one minute |
| <b>Insulation resistance</b> | 1000MΩ at 500V DC                |
| <b>Contact resistance</b>    | 15mΩ max                         |

| Climatic Data                |                 |
|------------------------------|-----------------|
| <b>Operating temperature</b> | -55°C to +125°C |
| <b>Salt spray</b>            | 24 hours        |

| Mechanical Data                                                                                                          |               |                     |              |              |
|--------------------------------------------------------------------------------------------------------------------------|---------------|---------------------|--------------|--------------|
| Single contact insertion force                                                                                           |               | 0.54kg (1.19lb) max |              |              |
| Single contact withdrawal force                                                                                          |               | 0.06kg (0.13lb) min |              |              |
| Mating and unmating force                                                                                                |               |                     |              |              |
| Unit: kg ( lb)                                                                                                           |               |                     |              |              |
|                                                                                                                          | A4 Style      |                     | 1A Style     |              |
| No. of Cts                                                                                                               | Mate (max)    | Unmate (min)        | Mate (max)   | Unmate (min) |
| 9                                                                                                                        | 3.05 (6.74)   | 0.36 (0.79)         | 4.6 (10.17)  | 0.4 (0.88)   |
| 15                                                                                                                       | 5.09 (11.24)  | 0.46 (1.01)         | 7.7 (17.02)  | 0.5 (1.10)   |
| 25                                                                                                                       | 8.44 (18.66)  | 0.81 (1.8)          | 12.7 (28.07) | 0.8 (1.77)   |
| 37                                                                                                                       | 12.51 (27.65) | 1.1 (2.47)          | 17.7 (39.12) | 1.2 (2.65)   |
| Standard plating thickness                                                                                               |               |                     |              |              |
| <ul style="list-style-type: none"><li>• gold flash</li><li>• 0.381µm (15µ") gold</li><li>• 0.76 µm (30µ") gold</li></ul> |               |                     |              |              |

DESCRIPTION

The Amphenol "SD" series features precision formed contacts and boardlocks.

This series gives you Amphenol's high standards of quality and reliability to meet all of your commercial requirements.

*Economical  
right angle PCB  
mount  
connectors*

APPLICATIONS

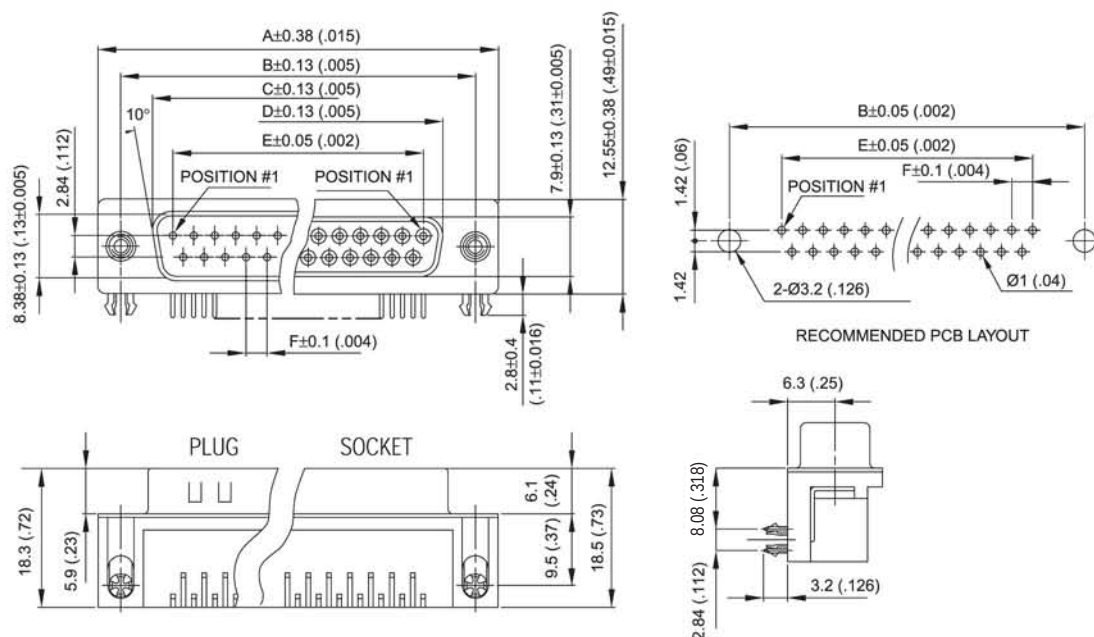
- Industrial
- Telecom
- Any industry standard I / O connections



**Amphenol**

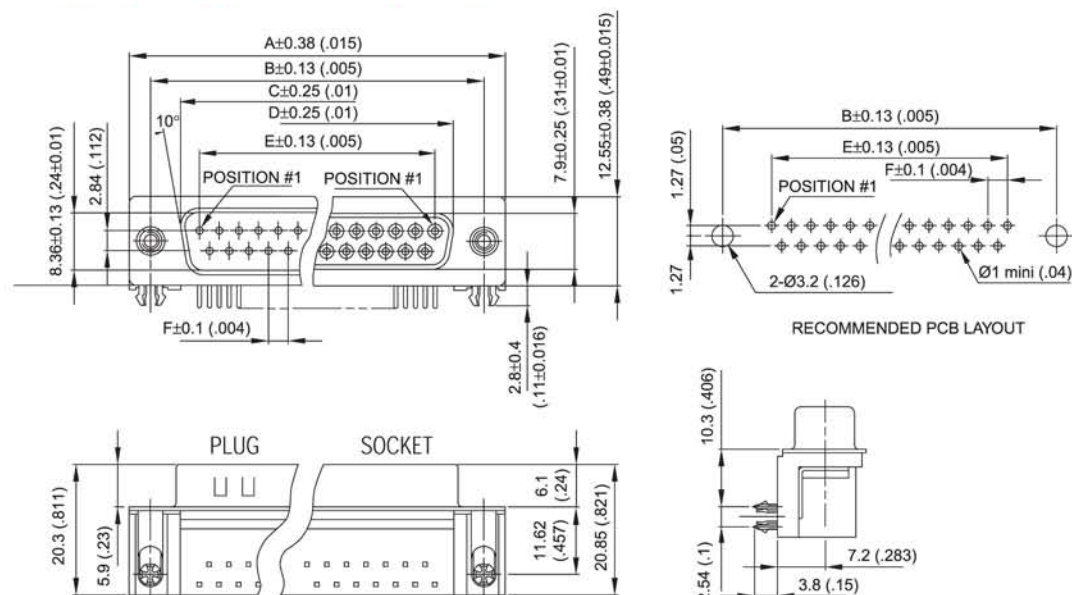
SD / E7

## A4 style (MIL Footprint)



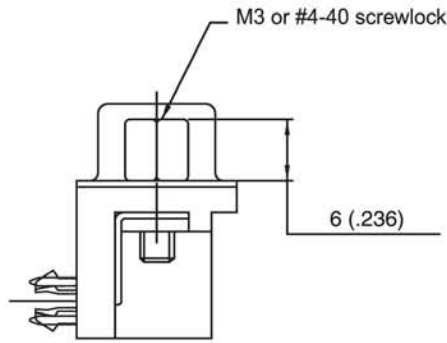
| Nb OF CONTACTS | DIMENSIONS mm (inch) |              |              |              |              |             |
|----------------|----------------------|--------------|--------------|--------------|--------------|-------------|
|                | A                    | B            | C            | D            | E            | F           |
| 9              | 30.84 (1.21)         | 24.99 (.98)  | 16.92 (.67)  | 16.24 (.64)  | 11.09 (.44)  | 2.74 (.108) |
| 15             | 39.14 (1.54)         | 33.32 (1.31) | 25.25 (.99)  | 24.56 (.97)  | 19.39 (.76)  | 2.74 (.108) |
| 25             | 53.04 (2.09)         | 47.04 (1.85) | 38.96 (1.53) | 38.38 (1.51) | 33.24 (1.31) | 2.77 (.109) |
| 37             | 69.32 (2.73)         | 63.50 (2.50) | 55.42 (2.18) | 54.76 (2.16) | 49.86 (1.96) | 2.77 (.109) |

## 1A style (European Footprint)

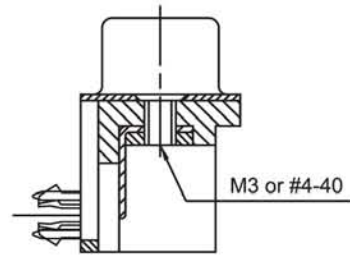


| Nb OF CONTACTS | DIMENSIONS mm (inch) |              |              |              |              |             |
|----------------|----------------------|--------------|--------------|--------------|--------------|-------------|
|                | A                    | B            | C            | D            | E            | F           |
| 9              | 30.84 (1.21)         | 24.99 (.98)  | 16.92 (.67)  | 16.24 (.64)  | 11.96 (.43)  | 2.74 (.108) |
| 15             | 39.1 (1.54)          | 33.32 (1.31) | 25.25 (.99)  | 24.66 (.97)  | 19.18 (.755) | 2.74 (.108) |
| 25             | 53.09 (2.09)         | 47.04 (1.85) | 38.96 (1.53) | 38.38 (1.51) | 33.24 (1.31) | 2.77 (.109) |
| 37             | 69.4 (2.73)          | 63.50 (2.50) | 55.42 (2.18) | 54.84 (2.16) | 49.86 (1.96) | 2.77 (.109) |

Panel mounting option



Front Female Screwlock  
**4F / 3F**



Threaded Rear Insert  
**4R / 3R**

How to order

**L**    **SD**    **CH**    **C309**

|                                        |                                                                          |
|----------------------------------------|--------------------------------------------------------------------------|
| RoHS Compliant                         |                                                                          |
| gold flash                             | 77: tinned shell for receptable<br>717: tinned shell + dimples for plug  |
| 0.4µm (15µ")                           | 177: tinned shell for receptable<br>777: tinned shell + dimples for plug |
| shell size: E, A, B, C                 |                                                                          |
| configuration: 9, 15, 25, 37           |                                                                          |
| contact type:<br>P = pin<br>S = socket |                                                                          |

**plating option:**  
valid only for 0.76µm (30µ")  
part numbers to be written as follow:  
or 77 SD.....C309  
717 SD.....C309

**mounting options:**  
4F = front screwlock 4-40  
3F = front screwlock M3  
4R = rear insert 4-40  
3R = rear insert M3

**PCB locking type:**  
grounding tabs + board locks

**Footprint:**  
1A (European)  
A4 (MIL)

For special request, please consult factory