

SD

D'Sub connectors - Stamped and Formed Contacts

STRAIGHT PCB TERMINATION STANDARD and HIGH DENSITY



Specifications

- Connectors according to: MIL C24308 - NFC 93425-HE5
- UL File: E149426

CHARACTERISTICS

| Materials and Platings | |
|------------------------|---|
| Shells | Steel, tin over nickel plating |
| Insulator | Glass-filled thermoplastic, UL 94V- 0 |
| Contacts | Brass, selected gold in mating area; 2.54µm (100 µ") min.tin on termination area over 1.27µm (50µ") min.nickel |
| Rear insert | Brass, 2.54µm (100µ") min.nickel plated |
| Boardlock | Brass, 2.54µm (100µ") min.nickel plated |
| Screwlock | Brass, 2.54µm (100µ") min.nickel plated (removable) |

| Electrical Data | |
|------------------------------|--|
| Current rating | Standard Density:5A High Density:3A |
| Voltage rating | 250V AC/ rms 50Hz |
| Withstanding voltage | 1000V AC/rms 50Hz for one minute |
| Insulation resistance | 1000MΩ at 500V DC |
| Contact resistance | 20mΩ max |

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

| Mechanical Data | | | | | |
|--|----|--|--------------|---------------|--------------|
| Single contact insertion force | | 0.54kg (1.19lb) max | | | |
| Single contact withdrawal force | | SD : 0.06kg (0.13lb) min HD : 0.02kg (0.044lb) min | | | |
| Mating and unmating force Unit: kg (lb) | | | | | |
| No. of Cts | | SD | | HD | |
| SD | HD | Mate (max) | Unmate (min) | Mate (max) | Unmate (min) |
| 9 | 15 | 3.05 (6.74) | 0.36 (0.79) | 3.81 (8.42) | 0.52 (1.14) |
| 15 | 26 | 5.09 (11.24) | 0.46 (1.01) | 5.95 (13.16) | 1.05 (2.32) |
| 25 | 44 | 8.44 (18.66) | 0.81 (1.8) | 9.26 (20.46) | 1.37 (3.02) |
| 37 | 62 | 12.51 (27.65) | 1.1 (2.47) | 13.48 (29.78) | 1.76 (3.88) |
| 50 | 78 | 14.65 (32.38) | 1.6 (3.56) | 15.82 (34.96) | 2.02 (4.46) |
| Standard plating thickness | | <ul style="list-style-type: none"> • Gold flash • 0.4µm (15µ") Gold • 0.76 µm (30µ") Gold | | | |

DESCRIPTION

The Amphenol SD series features precision formed contacts, and insulator with closed entry contacts cavities. This series gives you Amphenol's high standards of quality and reliability to meet all of your commercial requirements.

*Economical
straight PCB
mount connectors*

APPLICATIONS

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

SD / E6



Amphenol

Standard Density



* see chart "panel mounting option"

| Nb OF CONTACTS | DIMENSIONS mm (inch) | | | | | | |
|----------------|----------------------|--------------|--------------|--------------|--------------|--------------|-------------|
| | A | B | C | D | E | F | X |
| 9 | 30.84 (1.21) | 24.99 (.98) | 16.92 (.67) | 16.24 (.64) | 11.09 (.44) | 19.28 (.76) | 2.77 (.109) |
| 15 | 39.24 (1.54) | 33.32 (1.31) | 24.7 (.972) | 24.56 (.97) | 19.39 (.76) | 27.51 (1.08) | 2.77 (.109) |
| 25 | 53.04 (2.09) | 47.04 (1.85) | 38.96 (1.53) | 38.38 (1.51) | 33.24 (1.31) | 41.30 (1.63) | 2.77 (.109) |
| 37 | 69.32 (2.73) | 63.50 (2.50) | 55.42 (2.18) | 54.76 (2.16) | 49.86 (1.96) | 57.71 (2.27) | 2.77 (.109) |
| 50 | 67 (2.64) | 61.11 (2.41) | 52.86 (2.08) | 52.34 (2.06) | 44.32 (1.75) | 55.3 (2.18) | 2.77 (.109) |



50 CONTACTS

High Density



| Nb OF CONTACTS | DIMENSIONS mm (inch) | | | | | |
|----------------|----------------------|--------------|--------------|--------------|--------------|-------------|
| | A | B | C | D | E | X |
| 15 | 30.84 (1.21) | 24.99 (.98) | 16.92 (.67) | 16.24 (.64) | 19.28 (.76) | 2.29 (.090) |
| 26 | 39.24 (1.54) | 33.32 (1.31) | 24.7 (.972) | 24.56 (.97) | 27.51 (1.08) | 2.29 (.090) |
| 44 | 53.04 (2.09) | 47.04 (1.85) | 38.96 (1.53) | 38.38 (1.51) | 41.30 (1.63) | 2.29 (.090) |
| 62 | 69.32 (2.73) | 63.50 (2.50) | 55.42 (2.18) | 54.76 (2.16) | 57.71 (2.27) | 2.41 (.095) |
| 78 | 67 (2.64) | 61.11 (2.41) | 52.86 (2.08) | 52.34 (2.06) | 55.3 (2.18) | 2.41 (.095) |



Panel mounting option



H + VF or G + VFM
Front Female Screwlock



H or G
Threaded Rear Insert



4F or 3F
Fixed Front Screwlock



H or G + RM5
Standoff + Boardlock

| | RM5 RM8 | RM5G RM8G |
|---|------------|--------------|
| X | 6.0(.236) | 12.7(.500) |
| Y | 4.2(.165) | 3.2(.126) |
| J | 6.2(.244) | 10.1(.397) |



H or G + RM8
Front Screwlock, Standoff + Boardlock

Examples: L 717 SD E H 09 P OL2 RM5 C309
L 77 SD E 09 S OL2 4F

How to order

L **OL2** ... **C309**

RoHS Compliant

| | |
|--------------|--|
| Gold flash | 77: tinned shell for receptable 717: tinned shell + dimples for plug |
| 0.4µm (15µ") | 177: tinned shell for receptable 777: tinned shell + dimples for plug |

Series:
SD = Standard density
HD = High density

| Shell size: | SD | HD |
|-------------|----|----|
| E = | 9 | 15 |
| A = | 15 | 26 |
| B = | 25 | 44 |
| C = | 37 | 62 |
| D = | 50 | 78 |

Rear mounting option:
H = 4-40 rear insert
G = M3 rear insert
H or G required with VF, VFM RM5 or RM8

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

Front mounting option:
no digit = 3.05mm rivet
RM5 = Threaded standoff + boardlock
RM8 = Front screwlock, standoff + boardlock
VF = Screwlock 4-40
VFM = Screwlock M3
4F = Fixed screwlock 4-40
3F = Fixed screwlock M3

Termination:
Straight, for PCB mount

Contact type:
P = Plug
S = Socket

Configuration:
09,15,25,37,50 = SD
15,26,44,62,78 = HD

For special request, please consult factory

Do not hesitate to contact us for further information



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