

Surface Mount Technology (SMT) board connectors

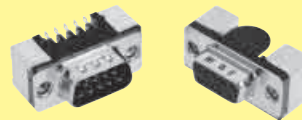
Page

***D-Sub – SMT***

Technical characteristics .....

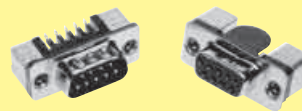
**21.02**

Standard versions .....



**21.04**

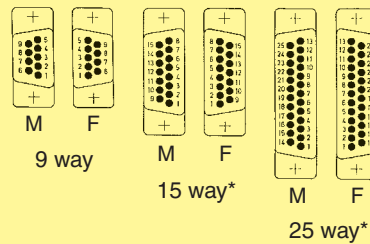
Low-profile versions .....



**21.06**

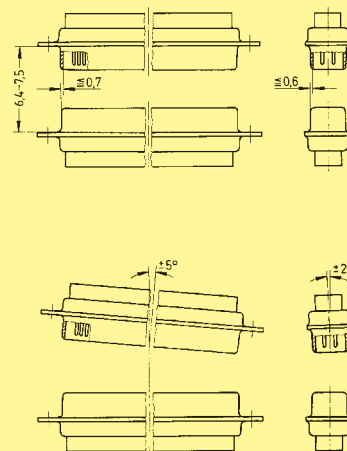
|                                       |   |
|---------------------------------------|---|
| Number of contacts                    | 9, 15*, 25*   |
| Working current                       | 5 A   |
| Test voltage $U_{r.m.s.}$             | 1 kV  |
| Clearance and creepage                | $\geq 1.0$ mm   |
| Contact resistance                    | $< 25$ m $\Omega$   |
| Insulation resistance                 | $< 5$ G $\Omega$  |
| Temperature range                     | as per profile JEDEC 020 D  |
| Terminations                          | Solder pins for P.C.B. pads   |
| <b>Materials</b>                      |   |
| Mouldings                             | LCP black<br>UL 94-V0   |
| Contacts                              | Phosphorus bronze   |
| Grounding die                         | Zamac   |
| Shell                                 | Steel   |
| <b>Contact surface</b>                |   |
| Contact zone                          | selectively gold-plated<br>according to performance level <sup>1)</sup> |
| Grounding die                         | Pure tin  |
| Shell                                 | Nickel plated   |
| <b>Insertion and withdrawal force</b> |   |
| – insertion max. per connector:       | 30 N  |
| – withdrawal min. per connector:      | 3.3 N   |

Contact arrangement View from termination side



M = Male connector  
F = Female connector

Mating conditions as per DIN 41 652



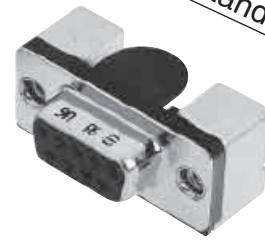
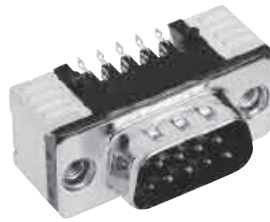
SMT technology

<sup>1)</sup> Performance level 3, 50 mating cycles, no gas test  
Performance level 2 as per CECC 75 301-802, 250 mating cycles, 4 days 4 mixed gas test – IEC 60512  
Performance level 1 as per CECC 75 301-802, 500 mating cycles, 10 days 4 mixed gas test – IEC 60512  
\* Available on request



Number of contacts

# 9\*



Standard Versions

SMT stamped solder pins, angled with grounding board locks

| Identification  | No. of contacts | Part No.             |  |                      |  |                      |  |
|---|-----------------|----------------------|--|----------------------|--|----------------------|--|
| <b>Performance levels</b><br>Explanations see page 21.02<br>Other performance levels on request |                 | Performance level 3  |  | Performance level 2  |  | Performance level 1  |  |
| <b>Male connector</b><br>metal shell with dimples   | 9               | 09 55 166 78 ... 741 |  | 09 55 166 68 ... 741 |  | 09 55 166 38 ... 741 |  |
| <b>Female connector</b><br>metal shell  | 9               | 09 55 156 76 ... 741 |  | 09 55 156 66 ... 741 |  | 09 55 156 36 ... 741 |  |
| Please insert digit for flange thread or fitted female screw locks                              |                 |                      |  |                      |  |                      |  |
| M3 ▶ 11<br>4-40 UNC ▶ 12<br>fitted screw locks M3 ▶ 33<br>fitted screw locks 4-40 UNC ▶ 13      |                 |                      |  |                      |  |                      |  |

SMT technology

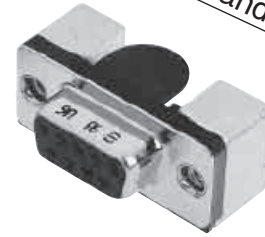
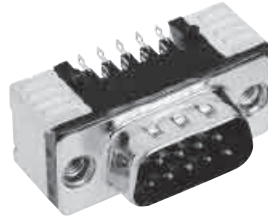
\* 15 and 25 way connectors are available on request  
 Connector dimensions see page 21.05. Mating conditions see page 21.02.

# D-Sub



Number of contacts

# 9\*



Standard Versions

SMT stamped solder pins, angled with grounding board locks

Identification

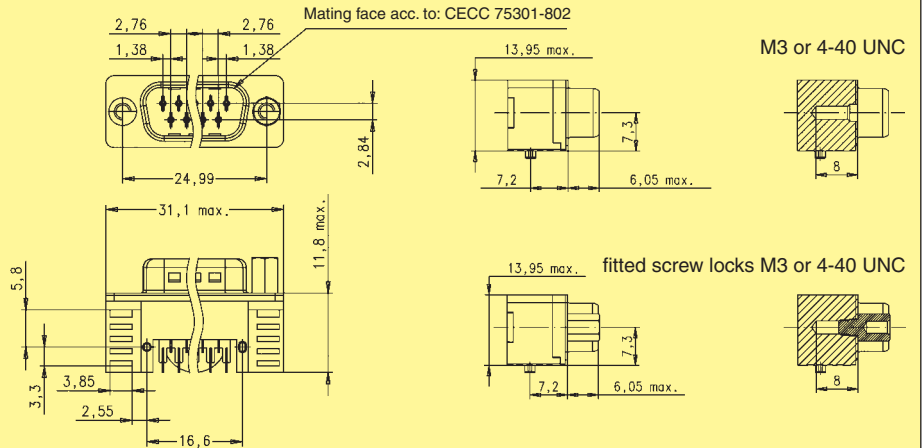
Drawing

Dimensions in mm

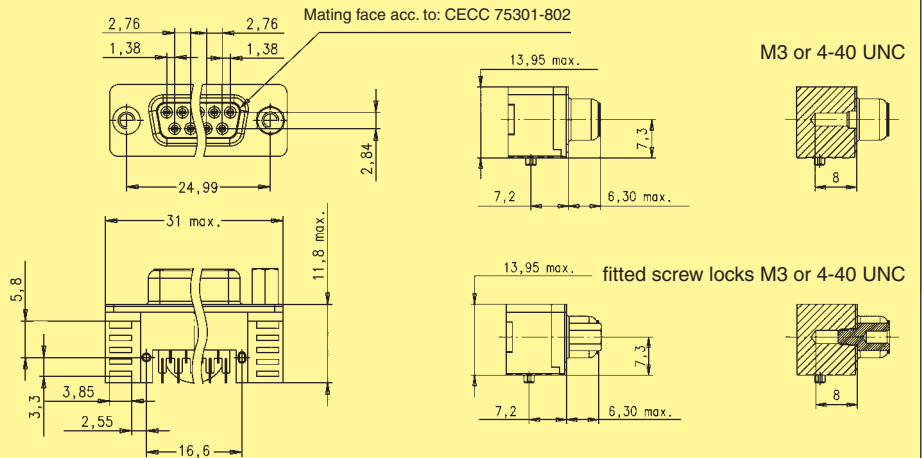
Male connector

M3 or 4-40 UNC

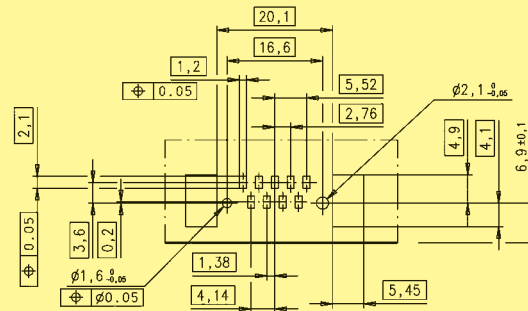
fitted screw locks M3 or 4-40 UNC



Female connector

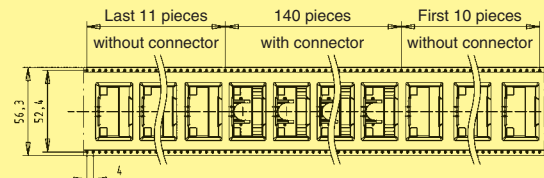


pcb layout



Packaging

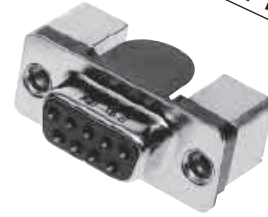
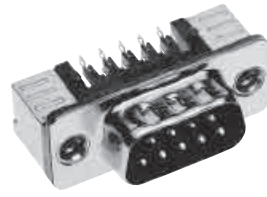
(1 reel = 140 pieces)  
Reel diameter = 330 mm



SMT technology

Number of contacts

# 9\*



Low-Profile Versions

SMT stamped solder pins, angled with grounding board locks

| Identification  | No. of contacts | Part No.             |  |                      |  |                      |  |
|---|-----------------|----------------------|--|----------------------|--|----------------------|--|
| <b>Performance levels</b><br>Explanations see page 21.02<br>Other performance levels on request |                 | Performance level 3  |  | Performance level 2  |  | Performance level 1  |  |
| <b>Male connector</b><br>metal shell with dimples   | 9               | 09 55 166 78 ... 741 |  | 09 55 166 68 ... 741 |  | 09 55 166 38 ... 741 |  |
| <b>Female connector</b><br>metal shell  | 9               | 09 55 156 76 ... 741 |  | 09 55 156 66 ... 741 |  | 09 55 156 36 ... 741 |  |
| Please insert digit for flange thread or fitted female screw locks                              |                 |                      |  |                      |  |                      |  |
| M3 ▶ 15<br>4-40 UNC ▶ 16<br>fitted screw locks M3 ▶ 18<br>fitted screw locks 4-40 UNC ▶ 17      |                 |                      |  |                      |  |                      |  |

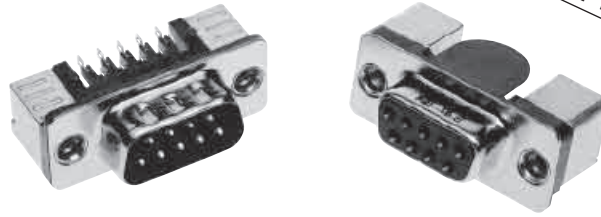
SMT technology

\* 15 and 25 way connectors are available on request  
 Connector dimensions see page 21.07. Mating conditions see page 21.02.

Number of contacts

# 9\*

Low-Profile Versions



SMT stamped solder pins, angled with grounding board locks

Identification

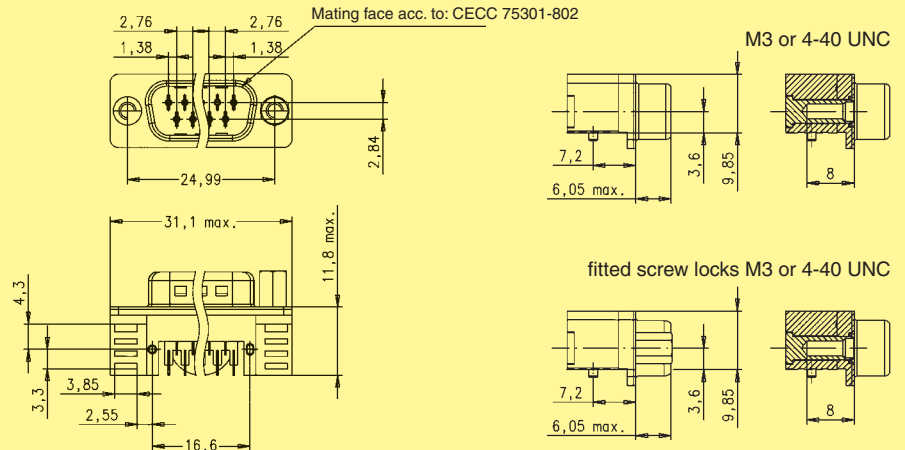
Drawing

Dimensions in mm

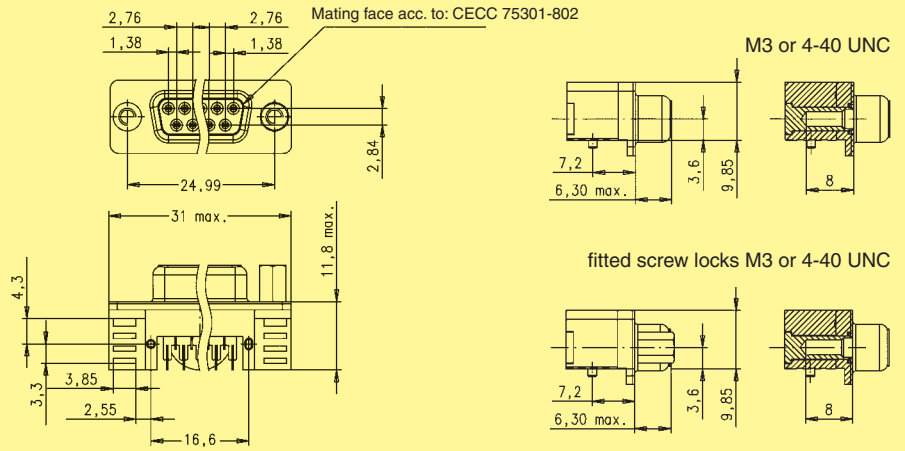
Male connector

M3 or 4-40 UNC

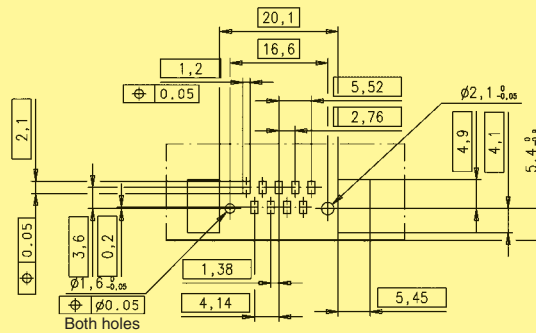
fitted screw locks M3 or 4-40 UNC



Female connector

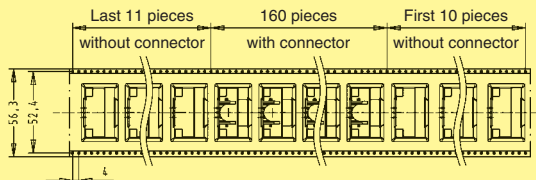


pcb layout



Packaging

(1 reel = 160 pieces)  
Reel diameter = 330 mm



SMT technology

