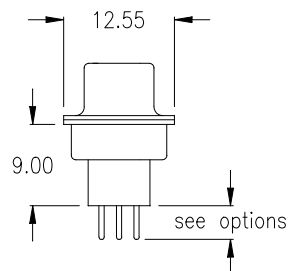
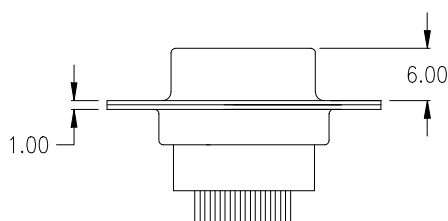
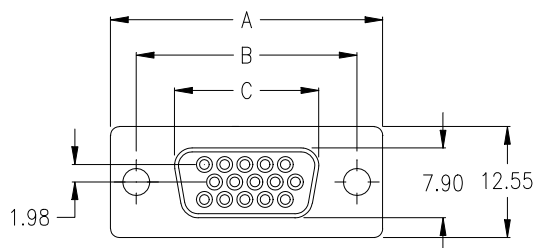


# SH Series - High Density D-Sub B111 raised soldertail type



female



## Ordering Code

**SHF - xxx - B111 - 55 / XXX**

No. of contacts

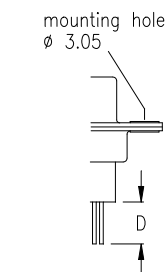
Option

Plating: -55 = gold

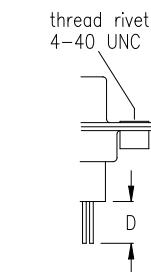
General Specification page 72

| No. of<br>contacts | Dimension             |                       |                       |
|--------------------|-----------------------|-----------------------|-----------------------|
|                    | A                     | B                     | C                     |
| <b>015</b>         | <u>30.81</u><br>1.213 | <u>24.99</u><br>.984  | <u>16.33</u><br>.643  |
| <b>026</b>         | <u>39.14</u><br>1.541 | <u>33.32</u><br>1.312 | <u>24.66</u><br>.971  |
| <b>044</b>         | <u>53.04</u><br>2.088 | <u>47.04</u><br>1.852 | <u>38.38</u><br>1.511 |
| <b>062</b>         | <u>69.32</u><br>2.729 | <u>63.50</u><br>2.500 | <u>54.84</u><br>2.159 |

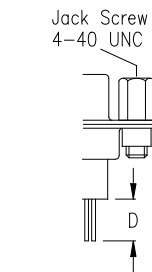
## Options



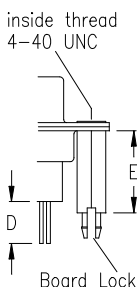
Standard:  
**T0** if „D“ = 5.30mm  
On request:  
**T02** if „D“ = 3.80mm



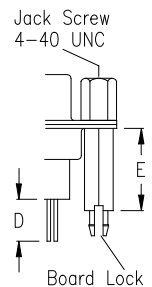
Standard:  
**T** if „D“ = 5.30mm  
On request:  
**T2** if „D“ = 3.80mm



Standard:  
**TJ** if „D“ = 5.30mm  
On request:  
**TJ2** if „D“ = 3.80mm



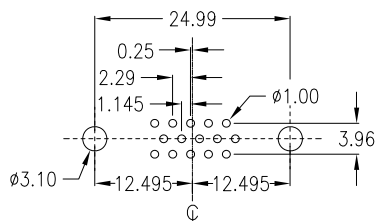
**BR**



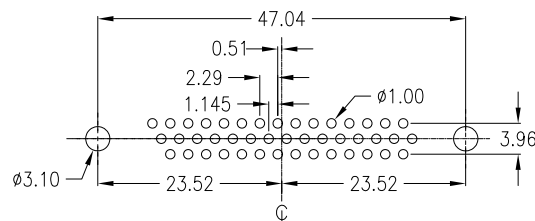
**BR J**

| D    | E     | Option   |
|------|-------|----------|
| 3,80 | 9,60  | <b>1</b> |
| 5,30 | 11,00 | <b>2</b> |
| 7,20 | 12,70 | <b>3</b> |
| 7,40 | 13,50 | <b>5</b> |

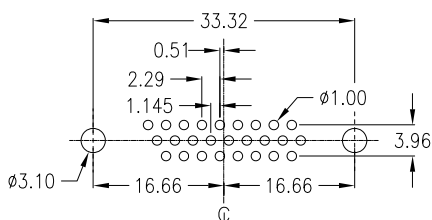
## PCB Layout „female“



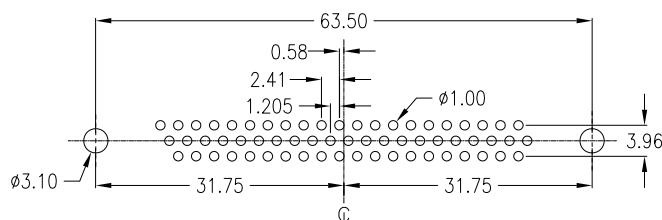
15 pin



44 pin



26 pin



62 pin

## mechanical data

|                                                           |                                                                   |
|-----------------------------------------------------------|-------------------------------------------------------------------|
| Mating force per contact                                  | $\leq 3,4 \text{ N}$                                              |
| Unmating force per contact                                | $\geq 0,2 \text{ N}$                                              |
| Temperature range                                         | $-55^{\circ} \text{ C}$ to $+105^{\circ} \text{ C}$               |
| Processing temperature wave solder (solder bath)          | $+250^{\circ} \text{ C} \pm 0/-5^{\circ} \text{ C}$<br>for 10sec. |
| Processing temperature SMT and "pin in paste"             | $+250^{\circ} \text{ C} \pm 0/-5^{\circ} \text{ C}$<br>for 10sec. |
| Moisture absorption from air 50% rh                       | 0,10%                                                             |
| IDC Connector types accept AWG 26 or AWG 28 standard wire |                                                                   |

## materials and plating (RoHS compliant)

|                                                                                     |                                                                                                                                                                                                              |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Insulator for wave solder technology, standard black<br>- PC 99 colourful insulator | thermoplastic glassfilled UL 94V - 0<br>Yellowish brown - Pantone # 131C 15-pos. female<br>Burgundy - Pantone # 235C 25-pos. female<br>Teal - Pantone # 322C 9-pos. male<br>Blue - Pantone # 661C HD 15-pos. |
| female                                                                              |                                                                                                                                                                                                              |
| Insulator for SMT and "Pin-In-Paste"                                                | Nylon UL 94V-0                                                                                                                                                                                               |
| Shell                                                                               | Steel, Ni plated                                                                                                                                                                                             |
| Bracket                                                                             | Brass, tin plated                                                                                                                                                                                            |
| Male contact<br>- plating                                                           | Copper Alloy (Standard; others on request)<br><b>-95</b> = solder side Sn; contact side Au over Ni<br><b>-55</b> = solder and contact side Au over Ni                                                        |
| Female contact<br>- plating                                                         | Copper Alloy (Standard; others on request)<br><b>-95</b> = solder side Sn; contact side Au over Ni<br><b>-55</b> = solder and contact side Au over Ni<br><b>-NN</b> = Ni                                     |
| D-Sub Accessories (page 70) plating                                                 |                                                                                                                                                                                                              |

## electrical data

|                                         |                                                          |
|-----------------------------------------|----------------------------------------------------------|
| max. Current rating                     | 5 A/25°C 3 A/70°C (High Density types 3A / IDC types 1A) |
| Operating voltage                       | 250 V                                                    |
| Test voltage between contacts           | 1000 V / 50/60 Hz / 1 Minute                             |
| Test voltage between shell and contacts | 1000 V / 50/60 Hz / 1 Minute                             |
| Resistance between mated contacts       | $< 30 \text{ m } \Omega$                                 |
| Insulation resistance                   | $\geq 1000 \text{ M } \Omega$ at 500V DC                 |
| Dielectric strength                     | 1000 V AC min. for 1 Minute                              |
| Volume resistivity                      | $10^{16} \text{ } \Omega \text{ cm}$ (ASTM-D 257 )       |

## available performance classes

E-tec D-Sub connectors comply with Performance Class 3 (min. 50 contact cycles).

Please contact E-tec first for availability of Performance Class 2 (min. 200 contact cycles) and 1 (min. 500 contact cycles)

## D-Sub with Filter ( ferrite )

|                 |         |   |             |
|-----------------|---------|---|-------------|
| Frequency range | 10      | - | 300 MHz     |
| Impedance       | 5 MHz   | - | 15 $\Omega$ |
|                 | 25 MHz  | - | 30 $\Omega$ |
|                 | 100 MHz | - | 50 $\Omega$ |
|                 | 300 MHz | - | 75 $\Omega$ |

