

I/O CONNECTOR FOR DOCKING STATION  
0.6mm PITCH (B/B TYPE)

# DS01 SERIES





**FEATURES**

- 0.6mm contact pitch in a high density miniature connector
- 5 row lead arrangement saves board space
- Alignment plate slides for easy placement (see below)
- Solid diecast shell
- Large guides allow smooth mating and accomodates mating misalignment of up to  $\pm 2.5\text{mm}$
- Low profile with 8mm height
- PPS insulator resists SMT soldering temperatures
- Metal shell and Diecast shell control EMI

**SPECIFICATIONS**

**Connector**

- Insulator : Glass-filled LCP (UL 94V-0), White
- Contact material : Phosphor Bronze
- Contact plating :
  - Contact area :  $0.25\mu\text{m}$  min. Gold over Nickel
  - Terminal area :  $2\mu\text{m}$  min. Tin alloy over Nickel
- Diecast shell material : Zinc alloy
- Diecast shell plating : Nickel over Copper
- Metal shell material : Steel
- Metal shell plating : Nickel over Copper
- Current rating : 0.5A per contact
- Contact resistance :  $50\text{m}\Omega$  max.
- Dielectric withstanding voltage : 315V AC for 1 minute
- Insulation resistance :  $1,000\text{M}\Omega$  min. at 500V DC
- Operating temperature :  $-55^\circ\text{C}$  to  $+85^\circ\text{C}$
- Insertion force : 10kg max. / 240 pin
- Withdrawal force : 1.6kg min. / 240 pin

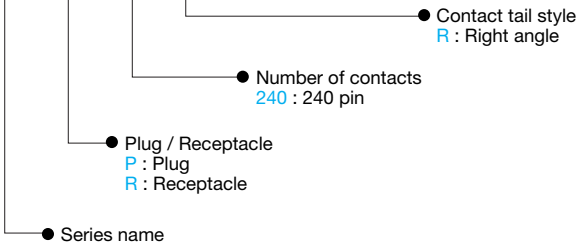
**Guide pin/Guide bushing**

- Material : Steel
- Plating : Nickel over Copper

**ORDER CODE**

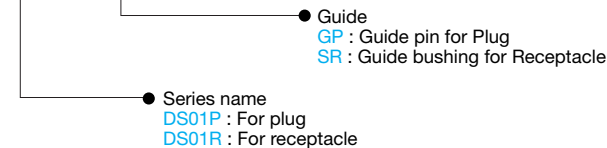
■ Connector

**DS01-240R**



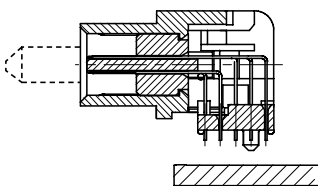
■ Guide pin / Guide bushing

**DS01-01**



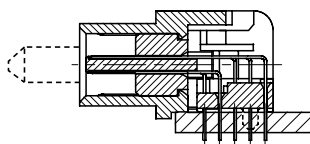
**ALIGNMENT PLATE SLIDE MECHANISM**

**Before connector is placed on the board**



- Connector is placed on the board with alignment plate low to align contact tails.

**After connector is placed on the board**



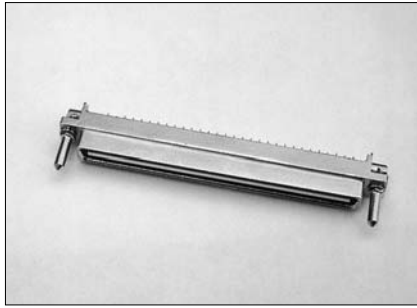
- Alignment plate slides up.

- Positioning bosses for placement are located on the alignment plate.
- Bosses go in the board and alignment plate slides up on contact tails to assure proper alignment.

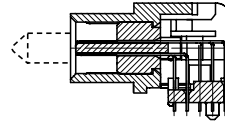
\* Delivered with alignment plate down.

DS01P-240P (Plug)

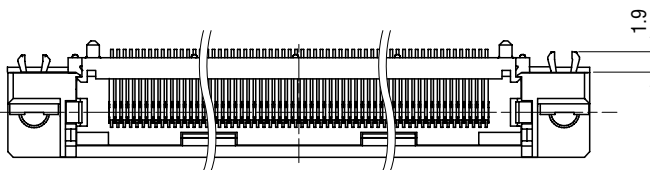
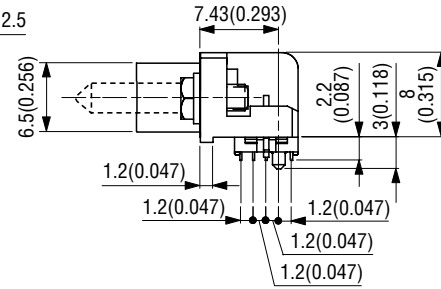
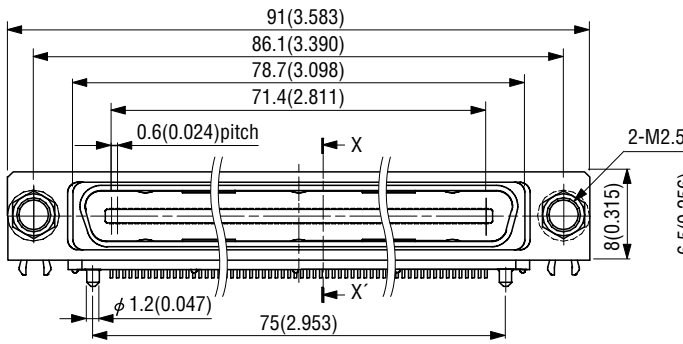
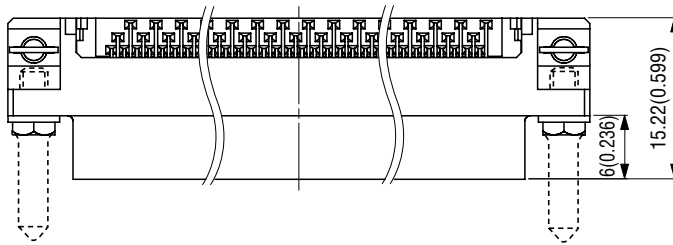
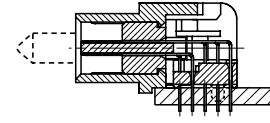
Unit : mm(inch)



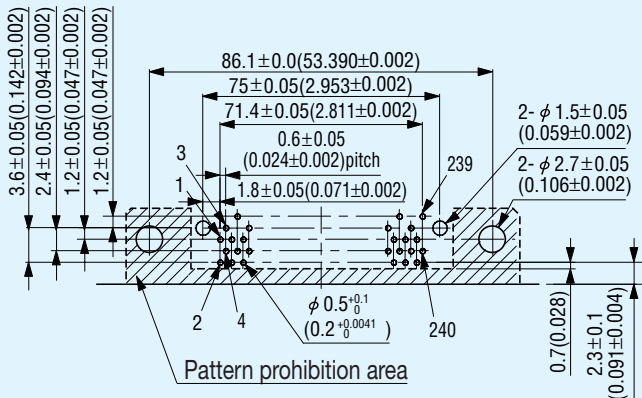
X-X' Cross Section



After placement

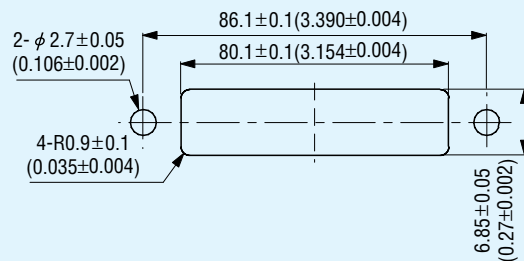


Printed Circuit Board Layout (Component Side View)



■ Panel cut out

Recommended panel thickness  
1(0.039) or less

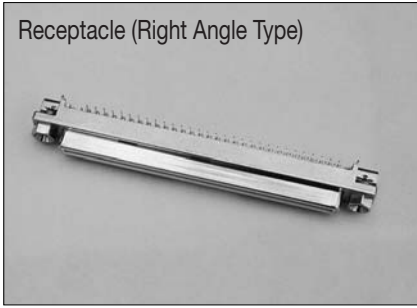


Recommended board thickness  $t = 0.8 \sim 1.6 \pm 0.19$  (0.031 ~ 0.063 ± 0.007)

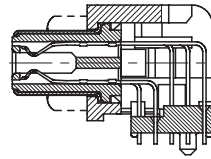
**DS01R-240R (Receptacle)**

Unit : mm(inch)

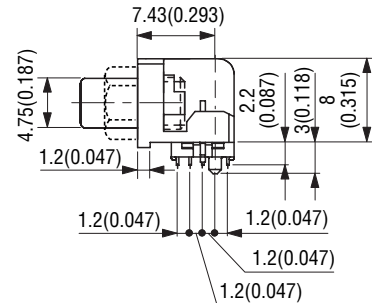
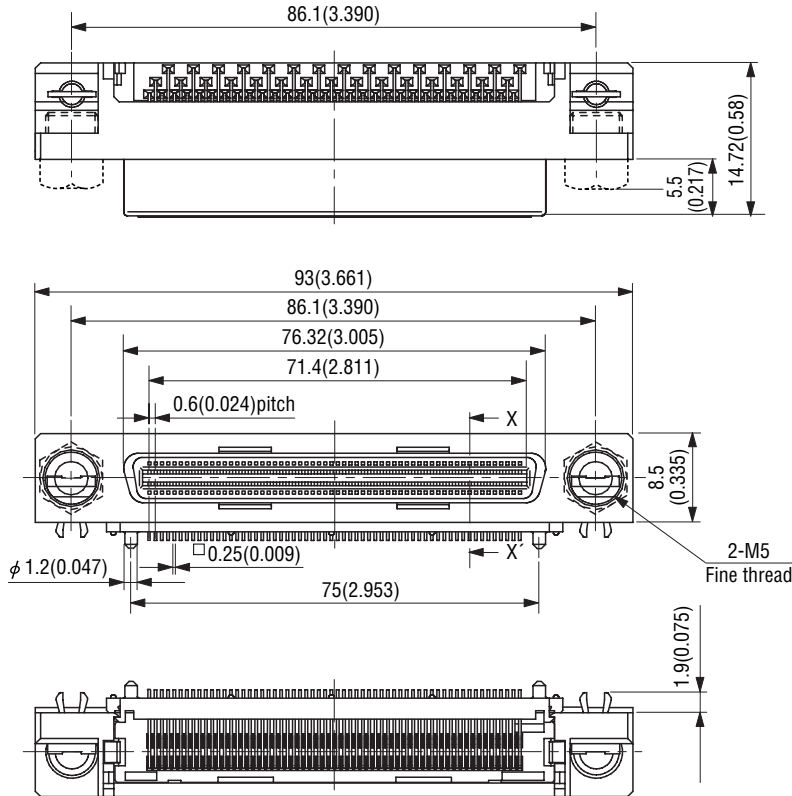
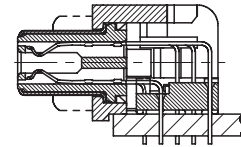
Receptacle (Right Angle Type)



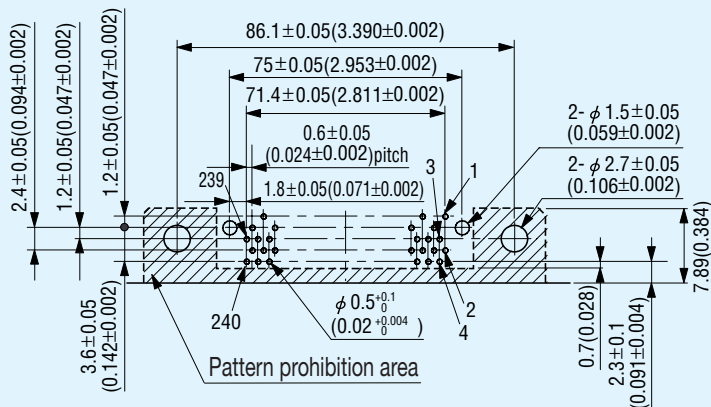
X-X' Cross Section



After placement

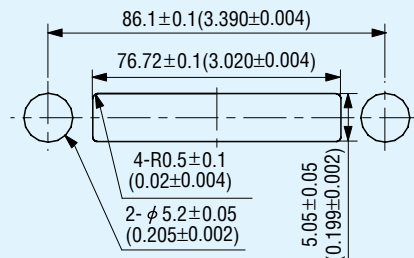


**Printed Circuit Board Layout (Component Side View)**



**Panel cut out**

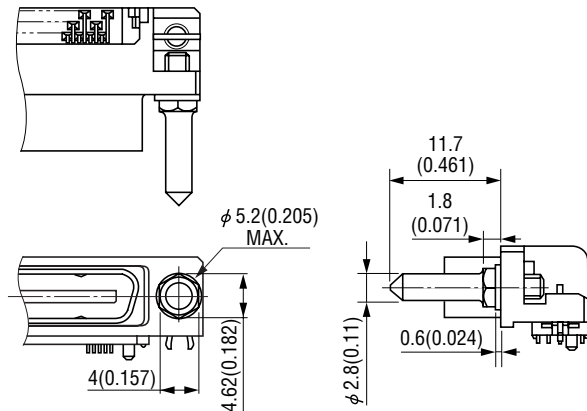
Recommended panel thickness  
1(0.039)or less



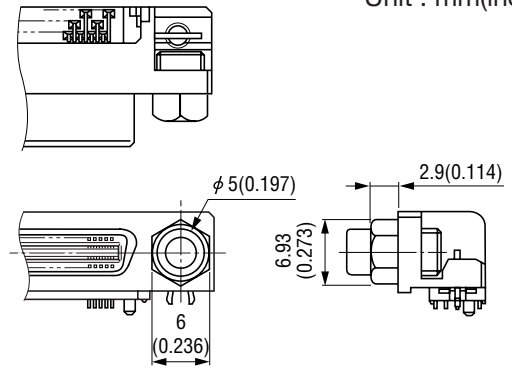
Recommended board thickness t = 0.8-1.6 ± 0.19 (0.031-0.063 ± 0.007)

8855-XXX-174XX Cable Plug Order Code

■DS01P-GR-01



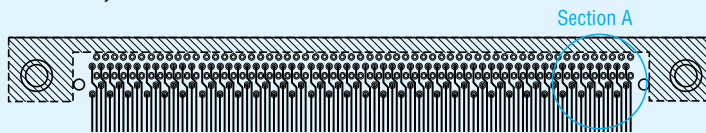
■DS01R-SR-01



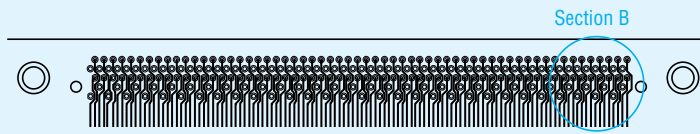
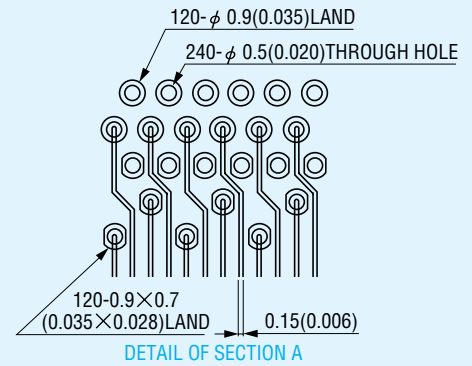
Unit : mm(inch)

Printed Circuit Board Layout (pattern Diagram)

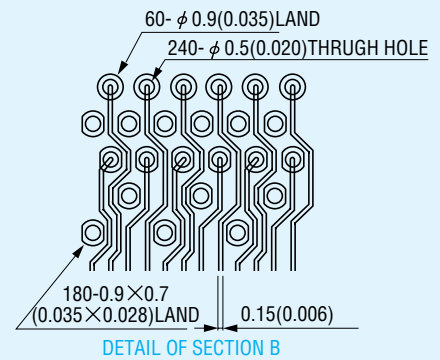
■DS01P/R-240R,DS01R-24R



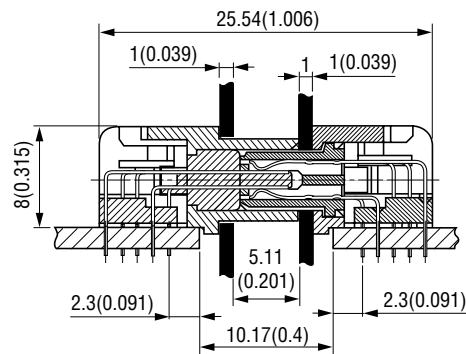
Component side



Soldering side (Viewed from component side)



Mating Application (Horizontal Mating)



Unit : mm(inch)

Specifications and dimensions are subject to change without notice.

