

DU SERIES

0.4mm PITCH FLOATING CONNECTOR

RoHS
Compliant



FEATURES

- ▶ Location error offsets $\pm 0.4\text{mm}$ in the XY direction.
- ▶ High reliable design with effective mating length of 1.2mm(0.047").
- ▶ Connectors in a vertical mating type are currently offered.
*Stacked mating type is under development.
- ▶ Downsizing of mounting footprint by 48% for a plug and 31% for a receptacle, compared to our DY Series (0.5 mm pitch connector).
- ▶ Highly reliable contact performance has been achieved by providing box-shaped insulator to protect the contacts.
- ▶ Due to that the bottom of receptacle connector is covered with resin, circuit may be printed under the connector.
- ▶ Provided with or without an anti-dust tape.
- ▶ Suction surface ensured for automatic mounting. (DU1□)

ORDER CODE

DU0 □ - □ □ □ **SB**

① ② ③

*Please order in multiples of the quantity per package.

- ① **[Type]** Receptacle **DU00** : Without positioning posts **DU01** : With positioning posts
- ② **[Number of contacts]** **080** : 80 pin **110** : 110 pin **120** : 120 pin **200** : 200 pin
- ③ **[Contact tail style]** **SB** : Straight

ORDER CODE

DU1 □ - □ □ □ **LB**

① ② ③

*Please order in multiples of the quantity per package.

- ① **[Type]** Plug **DU10** : Without positioning posts **DU11** : With positioning posts
- ② **[Number of contacts]** **080** : 80 pin **110** : 110 pin **120** : 120 pin **200** : 200 pin
- ③ **[Contact tail style]** **LB** : Right angle

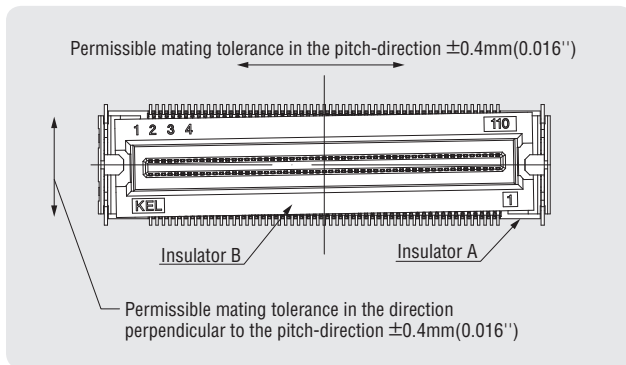
SPECIFICATIONS

Material and plating		Electrical Characteristics	
Insulator material	Glass-filled LCP(UL94V-0), Black	Current rating	0.4A per contact (Limited pins depending on the number of contacts)
Contact material	Copper alloy	Contact resistance	100mΩ max.
Contact plating	Gold over Nickel	Dielectric withstanding voltage	200V AC for 1 minute
Retention clip material	Copper alloy	Insulation resistance	100MΩ min. at 250V DC
Retention clip plating	Tin over Nickel	Operating temperature	-40°C to +85°C

Floating Structure

When the connector is mounted on the printed circuit board, a location error in the two directions of horizontal and vertical (XY direction) may occur at both connectors. In addition, if each printed circuit board is fixed to a case by screws after mating connectors, the connectors may have to compensate for the location error because a gap occurs during screwing the printed circuit board. A connector having a tolerance to compensate for such an error or gap caused by vibration is called a floating connector.

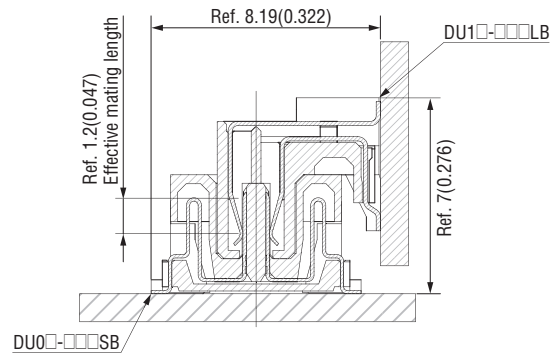
The DU series is a 0.4mm(0.016") fine pitch connector with $\pm 0.4\text{mm}(0.016\text{'})$ floating structure and ensures sufficient compensation for location errors.

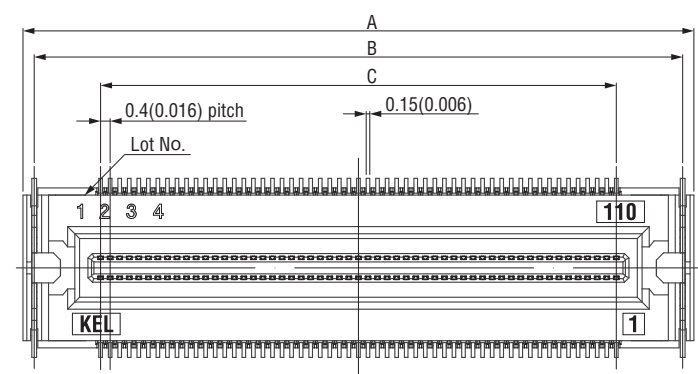
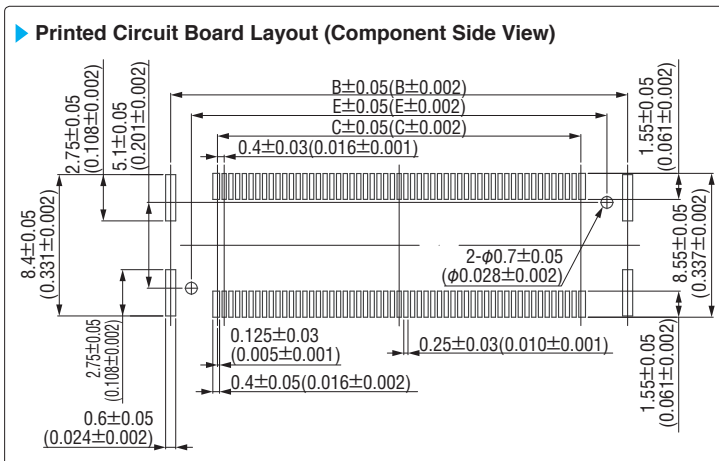
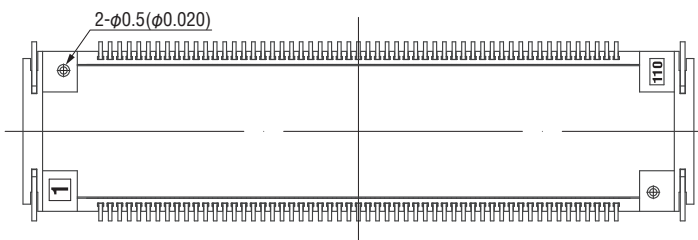
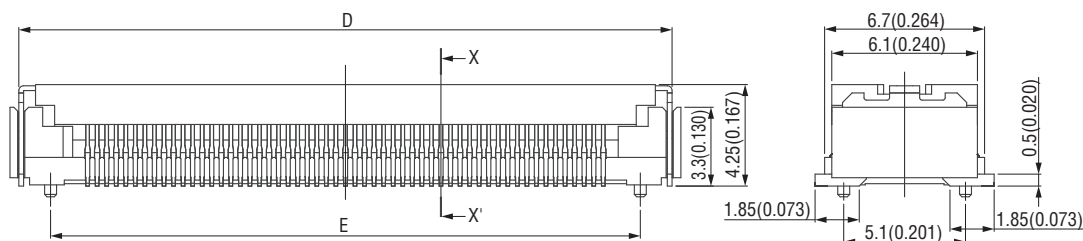
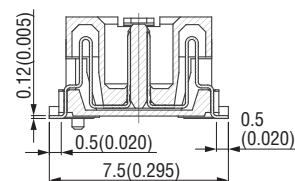


Mating Drawing

Unit : mm(inch)

Vertical Mating



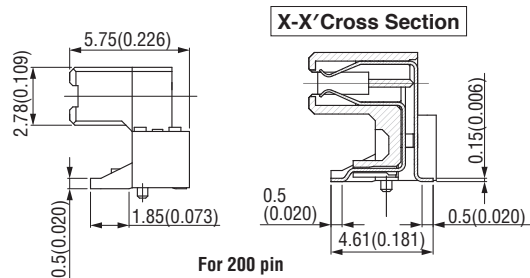
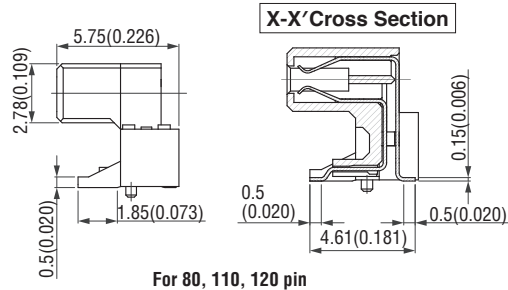
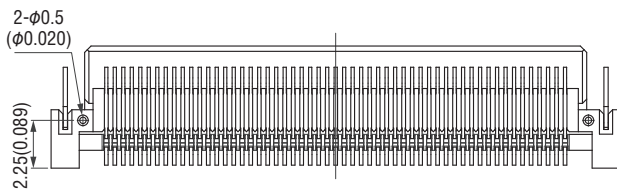
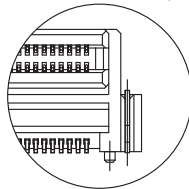
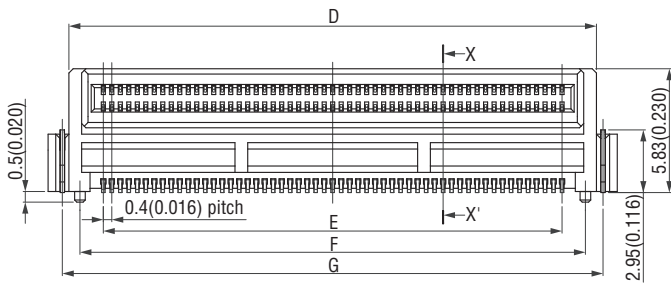
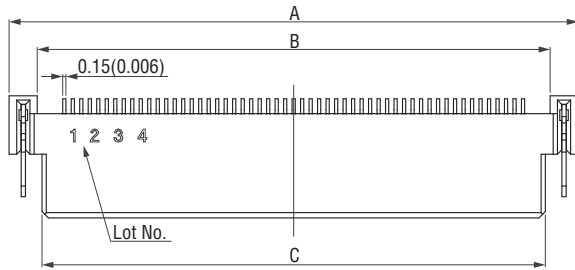
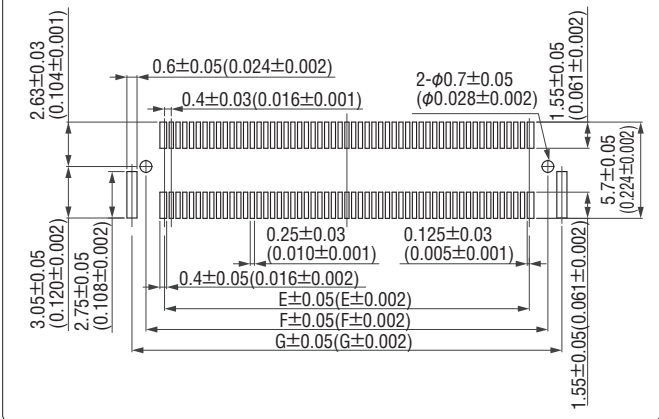

X-X' Cross Section


Packaging style

Embossed tape

► Product Table / Dimensions

No. of contacts	Part Number	A	B	C	D	E	Number of packaging
80	DU0□-080SB	22.1 (0.870)	21.16 (0.833)	15.6 (0.614)	21.36 (0.841)	18.7 (0.736)	1,000
110	DU0□-110SB	28.1 (1.106)	27.16 (1.069)	21.6 (0.850)	27.36 (1.077)	24.7 (0.972)	1,000
120	DU0□-120SB	30.1 (1.185)	29.16 (1.148)	23.6 (0.929)	29.36 (1.156)	26.7 (1.051)	1,000
200	DU0□-200SB	46.1 (1.815)	45.16 (1.778)	39.6 (1.559)	46.36 (1.825)	42.7 (1.681)	1,000

Printed Circuit Board Layout (Component Side View)

 Packaging style
 Embossed tape

Product Table / Dimensions

No. of contacts	Part Number	A	B	C	D	E	F	G	Number of packaging
80	DU1□-080LB	20.8 (0.819)	18.15 (0.715)	17.7 (0.697)	18.84 (0.742)	15.6 (0.614)	17.8 (0.701)	19.46 (0.766)	1,000
110	DU1□-110LB	26.8 (1.055)	24.15 (0.951)	23.7 (0.933)	24.84 (0.978)	21.6 (0.850)	23.8 (0.937)	25.46 (1.002)	1,000
120	DU1□-120LB	28.8 (1.134)	26.15 (1.030)	25.7 (1.012)	26.84 (1.057)	23.6 (0.929)	25.8 (1.016)	27.46 (1.081)	1,000
200	DU1□-200LB	44.8 (1.764)	42.15 (1.659)	41.7 (1.642)	42.84 (1.687)	39.6 (1.559)	41.8 (1.646)	43.46 (1.711)	1,000