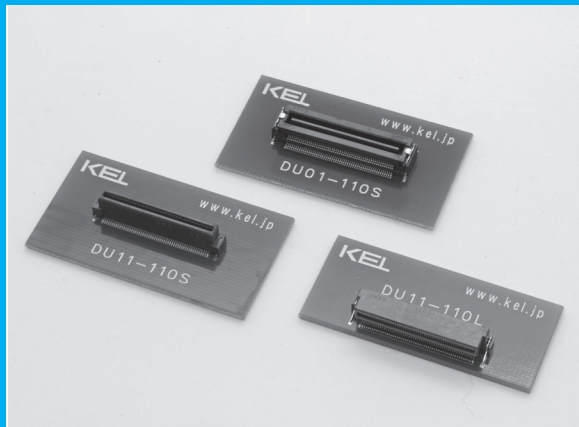


DU SERIES

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").
*Stack height 5 mm $\pm 1.1\text{mm}$ (Effective mating length)
- ▶ Stacked mating and vertical mating combinations.
- ▶ A high heat resistance type of + 105°C is available.
- ▶ Compared to the DY series (0.5 mm pitch), the PCB occupying area is reduced.
- ▶ 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.

ORDER CODE

DU0 - SB -

① ② ③ ④ ⑤

*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 **140** : 140 pin **200** : 200 pin
- ③ **[Contact tail style]** **S** : Straight
- ④ **[Gold plating thickness of contact part]** **B** : 0.1 μm min.
- ⑤ **[Anti-dust tape]** **T** : With anti-dust tape **No code** : Without anti-dust tape

ORDER CODE

DU1 - **B** - -

① ② ③ ④ ⑤ ⑥

*Please order in multiples of the quantity per package.

- ① **[Type]** Plug **DU10** : Without positioning posts **DU11** : With positioning posts
DU12 : Without positioning posts(High heat resistance type: Straight type only)
- ② **[Number of contacts]** (S type) **080** : 80 pin **110** : 110 pin **200** : 200 pin
(L type) **080** : 80 pin **110** : 110 pin **120** : 120 pin **140** : 140 pin **200** : 200 pin
- ③ **[Contact tail style]** **S** : Straight **L** : Right angle
- ④ **[Gold plating thickness of contact part]** **B** : 0.1 μm min.
- ⑤ **[Stacked height]** **5** : 5 mm (110 pin) **7** : 7 mm (80 pin, 200 pin)
- ⑥ **[Anti-dust tape]** **T** : With anti-dust tape(S type) **No code** : Without anti-dust tape(L type)

SPECIFICATIONS

Material and plating		Electrical Characteristics	
Insulator material	Glass-filled LCP(UL94V-0), Black	Current rating *1	0.4A per contact *2
Contact material	Copper alloy	Contact resistance	100m Ω max.
Contact plating	Gold over Nickel	Dielectric withstanding voltage	200V AC for 1 minute
Retention clip material	Copper alloy	Insulation resistance	100M Ω min. at 250V DC
Retention clip plating	Tin over Nickel	Operating temperature	-40°C to +85°C *3
Anti-dust tape material	Polyimide		

*1. Depending on the number of contacts and the mating combination, it may be possible to obtain a current value that exceeds the current rating.

Please contact your local KEL sales office.

*2. In the case of the mating combination of DU0 -110SB- and DU12-110SB-5-T, the current rating is 0.35A per contact.

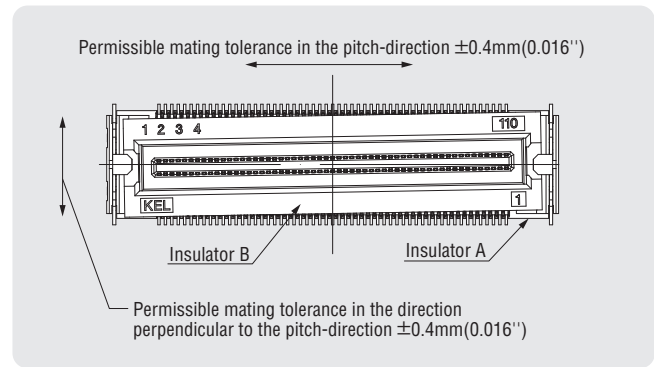
*3. In the case of the mating combination of DU0 -110SB- and DU12-110SB-5-T is compatible with high temperatures of +105°C.

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.

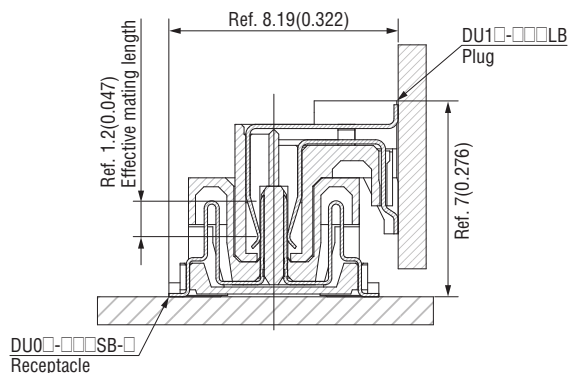
The DU series is a 0.4mm(0.016") fine pitch connector with $\pm 0.4\text{mm}(0.016\text{'})$ floating structure and ensures sufficient compensation for location errors.



Mating Drawing

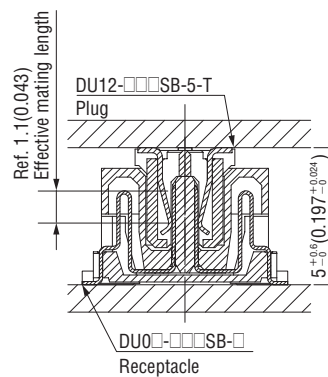
Unit : mm(inch)

Vertical Mating

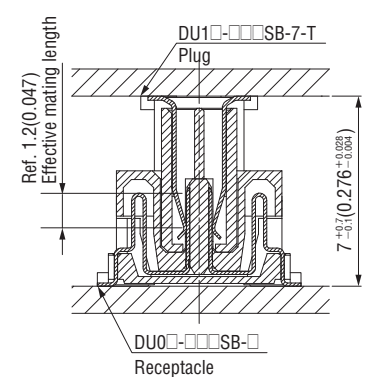


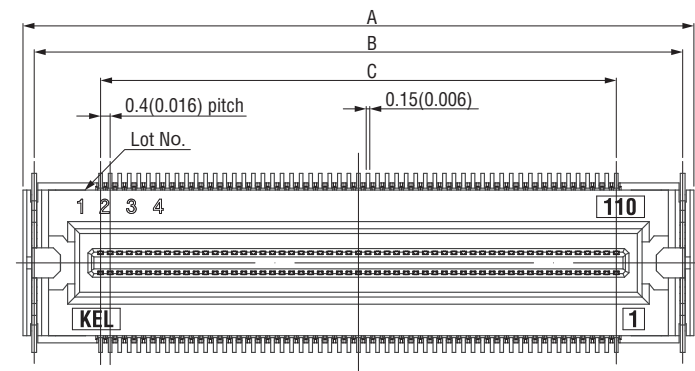
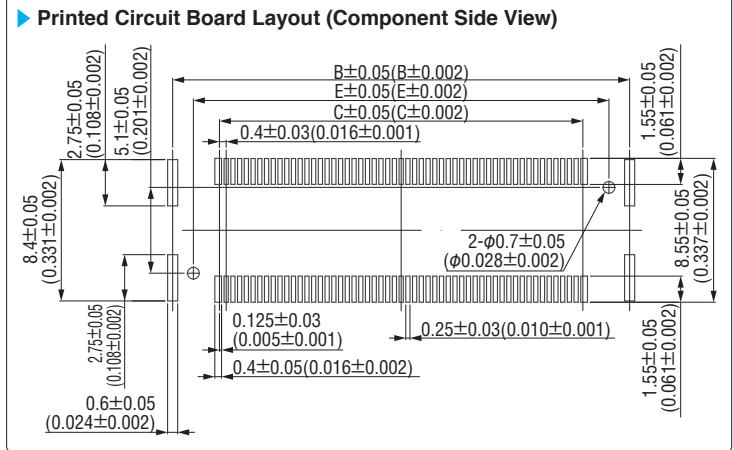
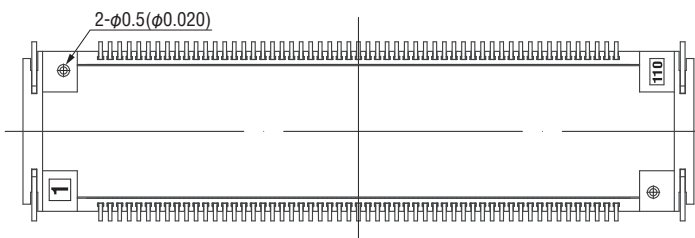
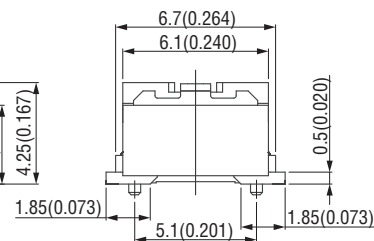
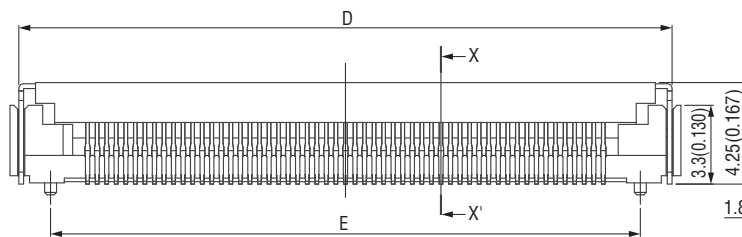
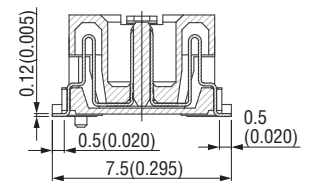
Stacked Mating

Stack height : 5mm



Stack height : 7mm



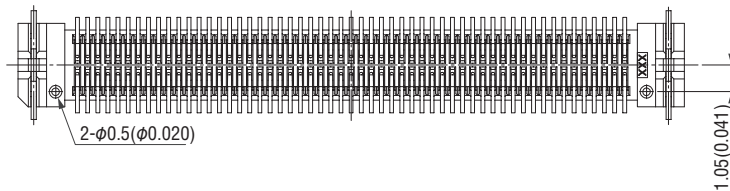
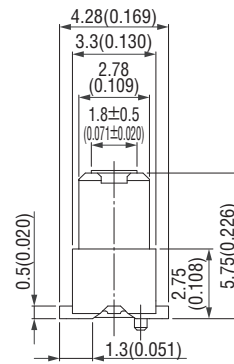
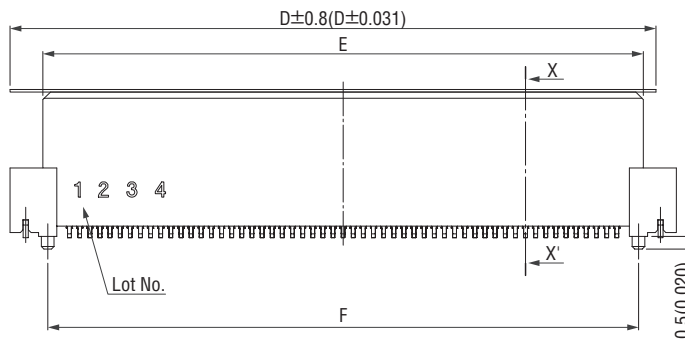
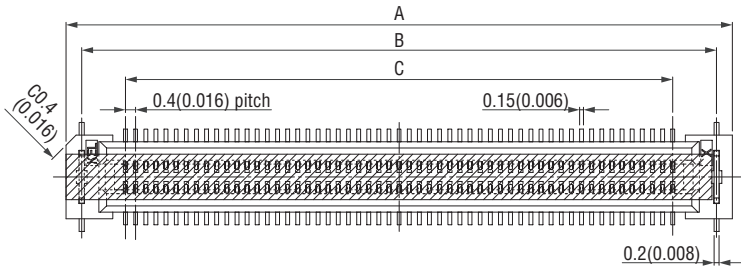
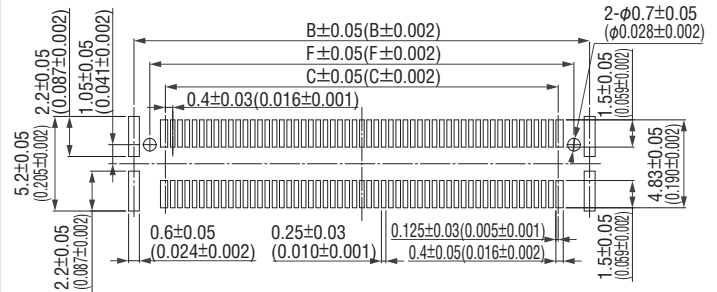
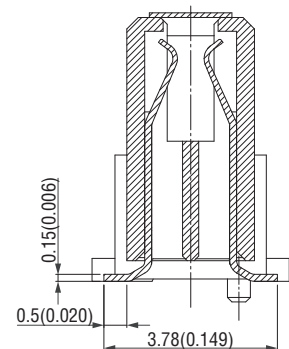

X-X' Cross Section


Packaging style

Embossed tape

▶ Product Table / Dimensions

No. of contacts	Part Number	A	B	C	D	E	Number of packaging
80	DU0-080SB-	22.10 (0.870)	21.16 (0.833)	15.60 (0.614)	21.36 (0.841)	18.70 (0.736)	1,000
110	DU0-110SB-	28.10 (1.106)	27.16 (1.069)	21.60 (0.850)	27.36 (1.077)	24.70 (0.972)	1,000
120	DU0-120SB-	30.10 (1.185)	29.16 (1.148)	23.60 (0.929)	29.36 (1.156)	26.70 (1.051)	1,000
140	DU0-140SB-	34.10 (1.343)	33.16 (1.306)	27.60 (1.087)	33.50 (1.319)	30.70 (1.209)	1,000
200	DU0-200SB-	46.10 (1.815)	45.16 (1.778)	39.60 (1.559)	46.36 (1.825)	42.70 (1.681)	1,000

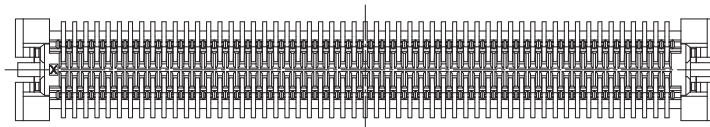
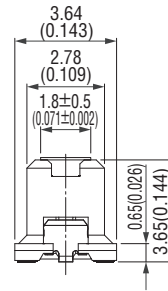
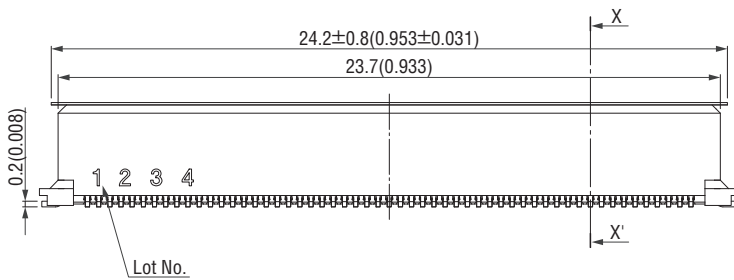
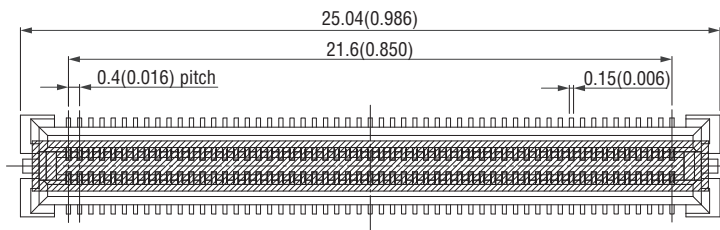
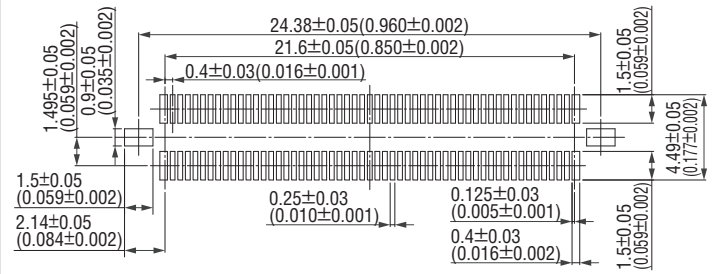
▶ Printed Circuit Board Layout (Component Side View)

X-X' Cross Section


Packaging style
Embossed tape

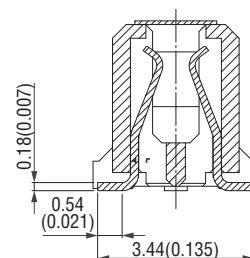
▶ Product Table / Dimensions

No. of contacts	Part Number	A	B	C	D	E	F	Number of packaging
80	DU1□-080SB-7-T	20.30 (0.799)	19.06 (0.750)	15.60 (0.614)	19.50 (0.768)	17.70 (0.697)	17.32 (0.682)	1,000
200	DU1□-200SB-7-T	44.30 (1.744)	43.06 (1.695)	39.60 (1.559)	43.50 (1.713)	41.70 (1.642)	41.32 (1.627)	1,000

▶ Printed Circuit Board Layout (Component Side View)



X-X' Cross Section



Packaging style

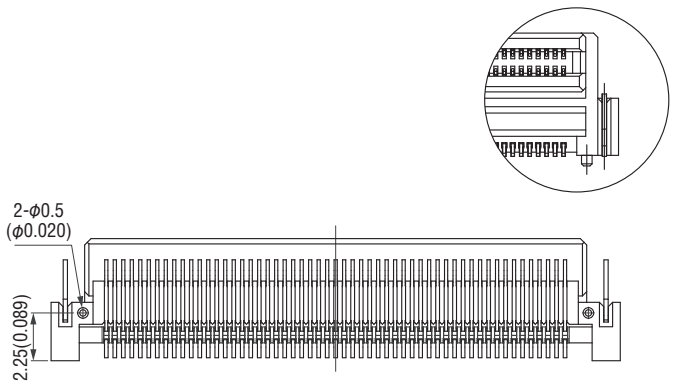
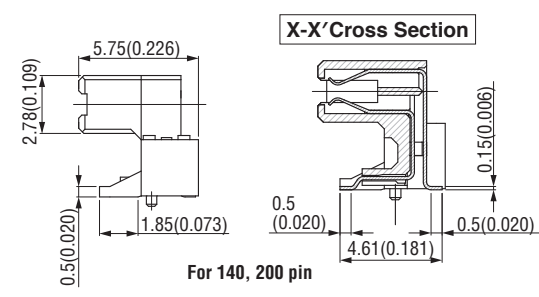
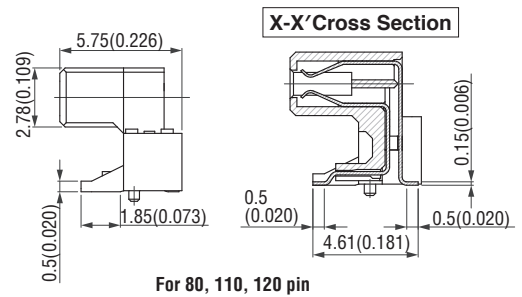
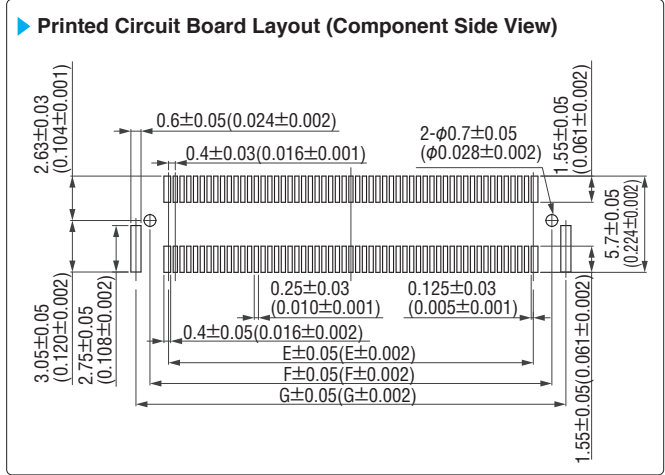
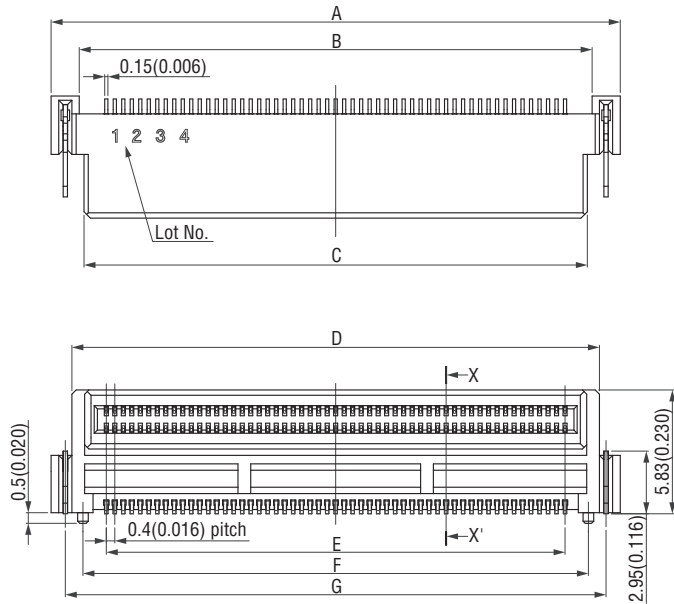
Embossed tape

▶ Product Table

Part Number	Number of packaging
DU12-110SB-5-T	1,000

DU1□-□□□LB (Plug, Right angle)

Unit : mm(inch)



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	20.80 (0.819)	18.15 (0.715)	17.70 (0.697)	18.84 (0.742)	15.60 (0.614)	17.80 (0.701)	19.46 (0.766)	1,000
110	DU1□-110LB	26.80 (1.055)	24.15 (0.951)	23.70 (0.933)	24.84 (0.978)	21.60 (0.850)	23.80 (0.937)	25.46 (1.002)	1,000
120	DU1□-120LB	28.80 (1.134)	26.15 (1.030)	25.70 (1.012)	26.84 (1.057)	23.60 (0.929)	25.80 (1.016)	27.46 (1.081)	1,000
140	DU1□-140LB	32.80 (1.291)	30.15 (1.187)	29.70 (1.169)	30.84 (1.214)	27.60 (1.087)	29.80 (1.173)	31.46 (1.239)	1,000
200	DU1□-200LB	44.80 (1.764)	42.15 (1.659)	41.70 (1.642)	42.84 (1.687)	39.60 (1.559)	41.80 (1.646)	43.46 (1.711)	1,000