

# DT-E-FS SERIES

RoHS  
Compliant

8Gbps EQUIVALENT TRANSMISSION COMPATIBLE 0.5mm PITCH FLOATING CONNECTOR / WITH POWER CONTACT AND HIGH STACK TYPE (RECEPTACLE HEIGHT 10mm TYPE)



## FEATURES

- ▶ High-speed serial transmission equivalent to 8Gbps
- ▶ With 4 power terminals (6.0A per contact)
- ▶ The floating amount is secured at  $\pm 1.2\text{mm}$  in the XY direction.
- ▶ Highly reliable design with effective mating length of 1.5mm.
- ▶ With or without positioning posts.
- ▶ Seven types of signal contacts are available, ranging from 30 to 140 pins.
- ▶ The connection type is stacked mating.
- ▶ Stack heights range from 18mm to 30mm.

## ORDER CODE

**DT0** **E** - **030** **FS** - **10** - **T**

①                      ②                      ③                      ④                      ⑤

\*Please order in multiples of the quantity per package.

- |   |   |
|---|---|
| ① | <b>[Type]</b> Receptacle <b>DT00E</b> : Without positioning posts <b>DT01E</b> : With positioning posts   |
| ② | <b>[Number of contacts]</b> <b>030</b> : 30pin <b>040</b> : 40pin <b>060</b> : 60pin <b>080</b> : 80pin <b>100</b> : 100pin <b>120</b> : 120pin <b>140</b> : 140pin |
| ③ | <b>[Contact tail style]</b> <b>FS</b> : Flexible straight   |
| ④ | <b>[Stacked height]</b> <b>10</b> : 10 mm type  |
| ⑤ | <b>[Anti-dust tape]</b> <b>T</b> : With anti-dust tape  |

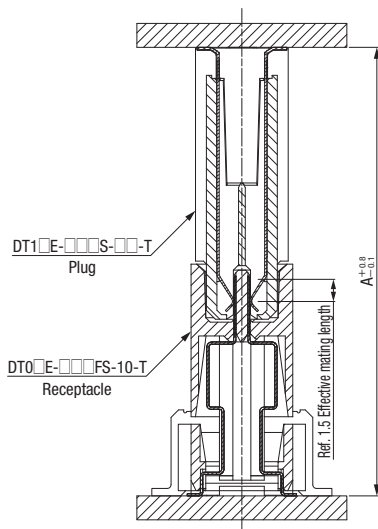
## SPECIFICATIONS

Material and plating		Electrical characteristics	
Insulator material	Glass-filled LCP(UL94V-0), Black	Rated current	0.4A per contact (Signal contact) * 100 pins or less must be energized at the same time. 6.0A per contact (Power contact)
Signal/Power contact material	Copper alloy		Contact resistance
Signal/Power contact plating	(Contact area) Gold over Nickel (Terminal area) Gold over Nickel	Dielectric withstanding voltage	
Retention clip material	Copper alloy	Insulation resistance	100M $\Omega$ min. at 250V DC
Retention clip plating	Tin over Nickel	Operating temperature	-40°C to +105°C
Material of anti-dust tape	Polyimid		

## Mating drawing

Unit : mm

### Stacked mating

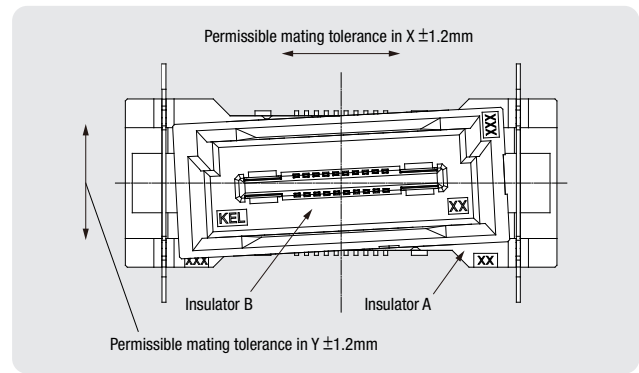


### Product table / Dimensions

Part number	A
DT1□E-□□□S-8-T	18
DT1□E-□□□S-10-T	20
DT1□E-□□□S-15-T	25
DT1□E-□□□S-20-T	30

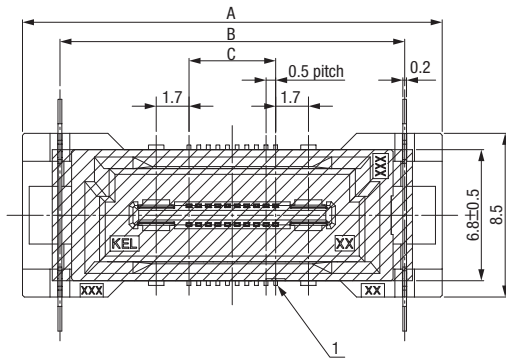
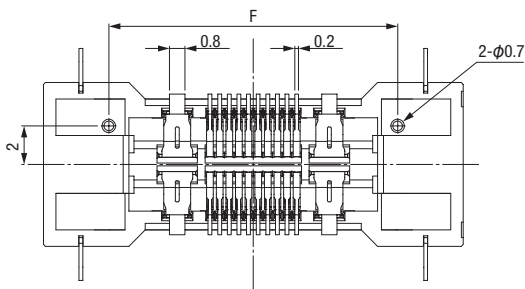
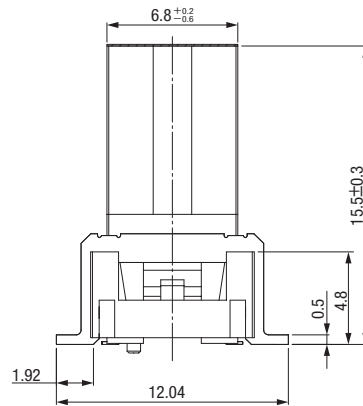
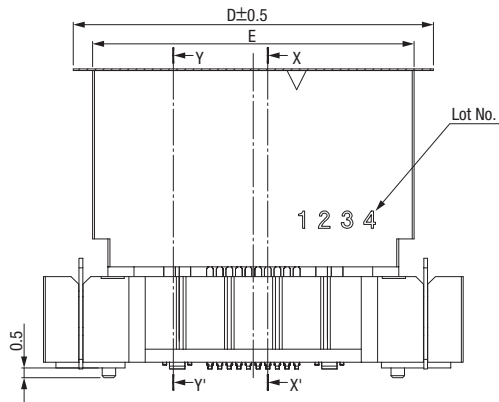
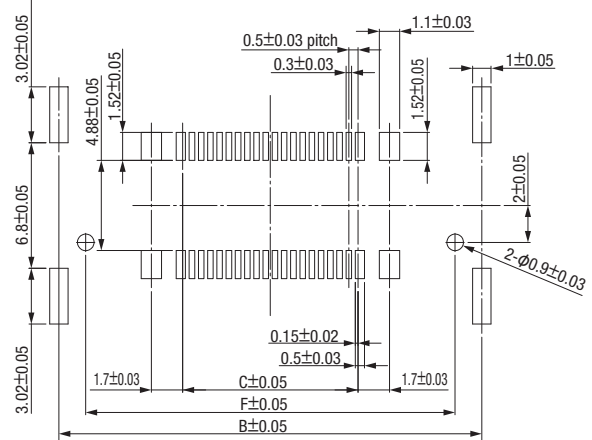
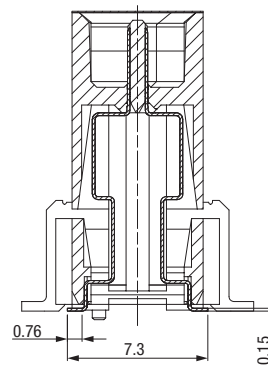
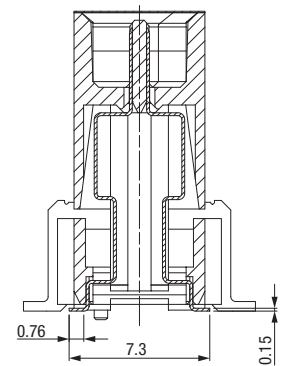
## Floating structure

When the connector is mounted on the printed circuit board, a position 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 position 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 DT-E-FS series is a 0.5mm fine pitch connector with  $\pm 1.2\text{mm}$  floating structure and ensures sufficient compensation for position errors.



## Stacked mating / Product table

Stacked height	Part number		Amount of movement	No. of contacts						
	Receptacle	Plug		30	40	60	80	100	120	140
8mm	DT0□E-□□□S-T	DT1□E-□□□S-8-T	$\pm 0.7\text{mm}$	✓	✓	✓	✓	✓	✓	✓
10mm		DT1□E-□□□S-10-T		✓	✓	✓	✓	✓	✓	✓
15mm		DT1□E-□□□S-15-T		✓	✓	✓	✓	✓	✓	✓
18mm	DT0□E-□□□FS-10-T	DT1□E-□□□S-8-T	$\pm 1.2\text{mm}$	✓	✓	✓	✓	✓	✓	✓
20mm	DT0□E-□□□S-T	DT1□E-□□□S-20-T	$\pm 0.7\text{mm}$	✓	✓	✓	✓	✓	✓	✓
		DT1□E-□□□S-10-T		✓	✓	✓	✓	✓	✓	✓
25mm	DT0□E-□□□FS-10-T	DT1□E-□□□S-15-T	$\pm 1.2\text{mm}$	✓	✓	✓	✓	✓	✓	✓
30mm		DT1□E-□□□S-20-T		✓	✓	✓	✓	✓	✓	✓


**▶ Printed Circuit Board layout (Component side view)**

**X-X' Cross section**

**Y-Y' Cross section**

 Packaging style  
 Embossed tape

**▶ Product table / Dimensions**

No. of contacts	Part number	A	B	C	D	E	F	No. of packaging
30	DT0□E-030FS-10-T	24.3	20.4	7.0	21.2	19.2	17.5	240
40	DT0□E-040FS-10-T	26.8	22.9	9.5	23.7	21.7	20.0	240
60	DT0□E-060FS-10-T	31.8	27.9	14.5	28.7	26.7	25.0	240
80	DT0□E-080FS-10-T	36.8	32.9	19.5	33.7	31.7	30.0	240
100	DT0□E-100FS-10-T	41.8	37.9	24.5	38.7	36.7	35.0	240
120	DT0□E-120FS-10-T	46.8	42.9	29.5	43.7	41.7	40.0	240
140	DT0□E-140FS-10-T	51.8	47.9	34.5	48.7	46.7	45.0	240