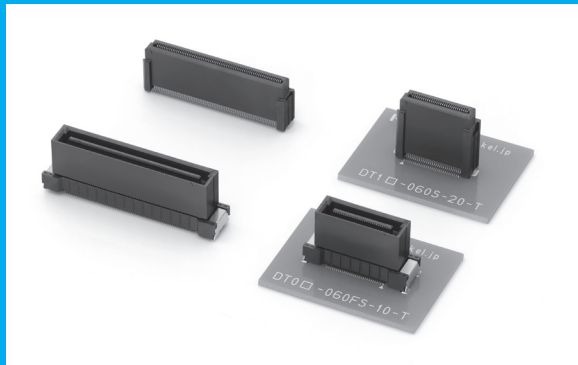


DT-FS SERIES

RoHS
Compliant

0.5mm PITCH FLOATING CONNECTOR FOR HIGH-SPEED TRANSMISSION / HIGH STACK TYPE (RECEPTACLE HEIGHT 10 mm TYPE)



FEATURES

- ▶ Transmission characteristics that support high-speed serial transmission of 8 Gbps.
- ▶ Large floating amount of ± 1.0 mm in the XY directions secured.
- ▶ Highly reliable design with an effective mating length of 1.5 mm.
- ▶ Stack heights are available from 18 mm to 30 mm.
- ▶ The number of contacts supported depends on the stack height.
- ▶ Seven types of contacts are available, from 30 pin to 140 pin.
- ▶ Offer space-saving on the PCB compared to the DT standard type.
- ▶ Arc-shaped contacts prevent foreign matters which may cause mating error.

ORDER CODE

DT0 - **FS-10-T**

①

②

③

④

⑤

*Please order in multiples of the quantity per package.

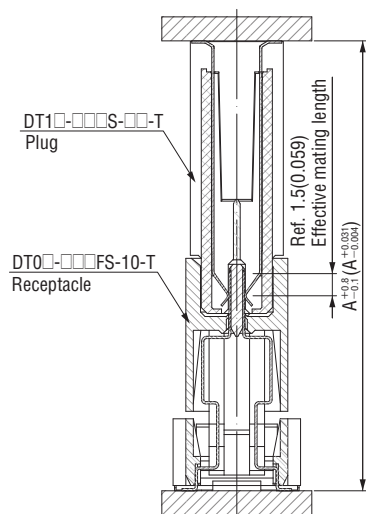
- ① **[Type]** Receptacle **DT00**: Without positioning posts **DT01**: With positioning posts
- ② **[Number of contacts]** **030**: 30 pin **040**: 40 pin **060**: 60 pin **080**: 80 pin **100**: 100 pin **120**: 120 pin **140**: 140 pin
- ③ **[Contact tail style]** **FS**: Flexible straight
- ④ **[Stacked height]** **10**: Height 10 mm type
- ⑤ **[Anti-dust tape]** **T**: With anti-dust tape

SPECIFICATIONS

Material and plating		Electrical Characteristics	
Insulator material	Glass-filled LCP (UV94V-0), Black	Current rating	0.5 A per contact
Contact material	Copper alloy	Contact resistance	80mΩ max.
Contact plating	Gold over Nickel	Dielectric withstanding voltage	200V AC for 1 minute
Retention clip material	Cooper alloy	Insulation resistance	100MΩ min. at 250V DC
Retention clip plating	Gold over Nickel (Tail part)	Operating temperature	-40°C to +105°C
Anti-dust tape material	Polyimide		

Mating Drawing

Unit : mm(inch)



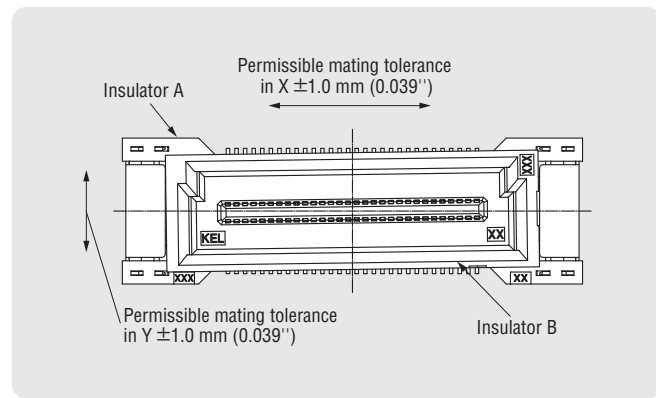
Product Table / Dimensions

Part Number	A
DT10-000 S-8-T	18(0.709)
DT10-000 S-10-T	20(0.787)
DT10-000 S-11-T	21(0.827)
DT10-000 S-15-T	25(0.984)
DT10-000 S-16-T	26(1.024)
DT10-000 S-17-T	27(1.063)
DT10-000 S-18-T	28(1.102)
DT10-000 S-19-T	29(1.142)
DT10-000 S-20-T	30(1.181)

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-FS series is a 0.5 mm (0.020") fine pitch connector with ± 1.0 mm (0.039") floating structure and ensures sufficient compensation for position errors.



Mating Matrix

Order Code		Receptacle			
		DT0□-□□□S-□□-T (Straight / Standard type)	DT0□-□□□FS-10-T (Straight / Height 10mm type)	DT0□S-□□□S-T (Straight / With shell type)	DT0□-□□□L-□□ (Right angle / Standard type)
Plug	DT1□-□□□S-□□-□□-T (Straight / Standard type)	Stacked mating (Stacked height 8 to 20mm) *1	Stacked mating (Stacked height 18 to 30mm) *1	*2	*2
	DT1□S-□□□S-10-T (Straight / With shell type)	*2	*2	Stacked mating (Stacked height 10mm)	—
	DT1□-□□□L-□□ (Right angle / Standard type)	Vertical mating	Vertical mating	—	Horizontal mating

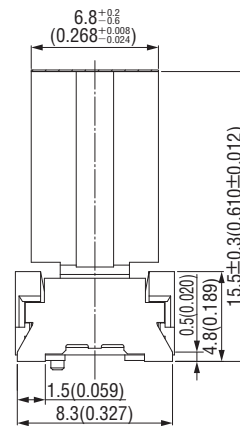
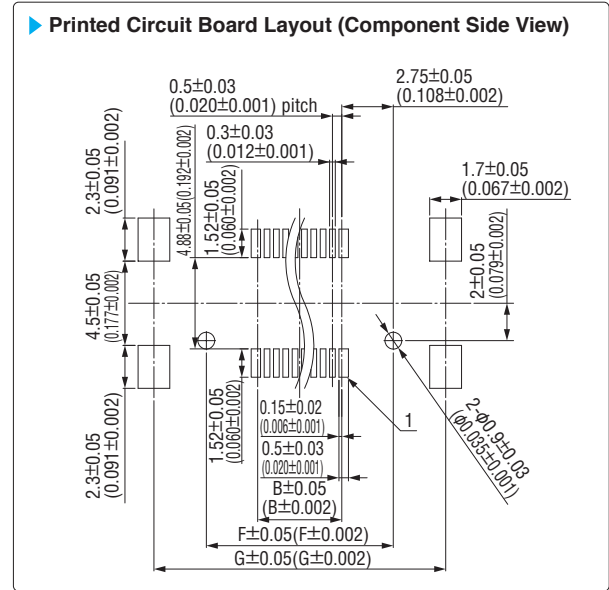
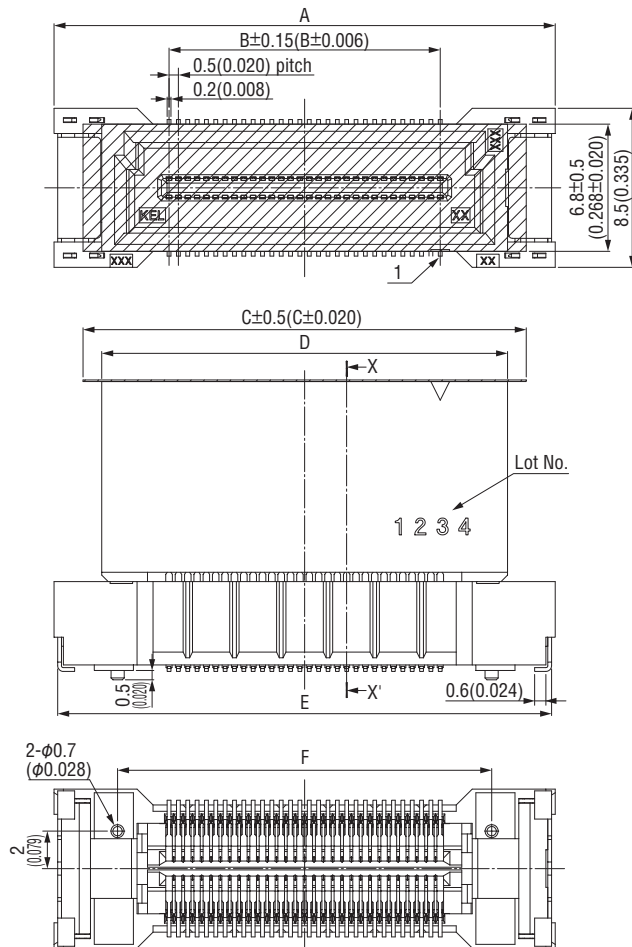
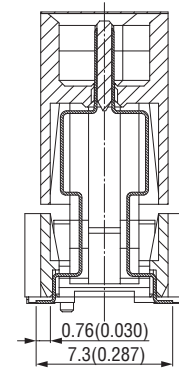
*1 Please note that the corresponding stack height changes depending on the number of contacts.

*2 Please contact KEL local representatives when thin combination is required.

Product table for stack type

Stacked height	Part number		Floating amount	Number of contacts									
	Receptacle	Plug		30	40	60	80	100	120	140	160	240	
8mm	DT0□-□□□S-T	DT1□-□□□S-8-T	±0.5mm	○	—	—	—	○	—	○	—	—	
10mm		DT1□-□□□S-10-T		○	○	○	○	—	○	○	○		
11mm		DT1□-□□□S-11-T		—	—	—	—	—	*	○	*	—	
15mm		DT1□-□□□S-15-T		○	○	○	○	○	○	○	○	—	—
16mm		DT1□-□□□S-16-T		○	—	○	—	—	○	—	*	—	
17mm		DT1□-□□□S-17-T		○	○	○	○	○	—	○	—	—	
18mm	DT0□-□□□S-T	DT1□-□□□S-18-T	±0.5mm	○	○	○	○	○	—	○	—	—	
	DT0□-□□□FS-10-T	DT1□-□□□S-8-T	±1.0mm	○	—	—	—	○	—	○	—	—	
19mm	DT0□-□□□S-T	DT1□-□□□S-19-T	±0.5mm	○	○	○	○	○	*	○	—	—	
20mm	DT0□-□□□S-T	DT1□-□□□S-20-T	±0.5mm	○	○	○	○	○	*	○	—	—	
	DT0□-□□□FS-10-T	DT1□-□□□S-10-T	±1.0mm	○	○	○	○	○	*	○	—	—	
21mm	DT0□-□□□FS-10-T	DT1□-□□□S-11-T	±1.0mm	—	—	—	—	—	*	○	—	—	
25mm	DT0□-□□□FS-10-T	DT1□-□□□S-15-T	±1.0mm	○	○	○	○	○	○	○	—	—	
26mm		DT1□-□□□S-16-T		○	—	○	—	—	○	—	—	—	
27mm		DT1□-□□□S-17-T		○	○	○	○	○	—	○	—	—	
28mm		DT1□-□□□S-18-T		○	○	○	○	○	—	○	—	—	
29mm		DT1□-□□□S-19-T		○	○	○	○	○	—	○	—	—	
30mm		DT1□-□□□S-20-T		○	○	○	○	○	*	○	—	—	

* Please contact KEL local representatives when this combination is required.


X-X' Cross Section

 Packaging style
 Embossed tape

Product Table / Dimensions

No. of contacts	Part Number	A	B	C	D	E	F	G	No. of packaging
30	DT0□-030FS-10-T	19.3 (0.760)	7.0 (0.276)	16.2 (0.638)	14.2 (0.559)	18.9 (0.744)	12.5 (0.492)	18.1 (0.713)	250
40	DT0□-040FS-10-T	21.8 (0.858)	9.5 (0.374)	18.7 (0.736)	16.7 (0.657)	21.4 (0.843)	15.0 (0.591)	20.6 (0.811)	250
60	DT0□-060FS-10-T	26.8 (1.055)	14.5 (0.571)	23.7 (0.933)	21.7 (0.854)	26.4 (1.039)	20.0 (0.787)	25.6 (1.008)	250
80	DT0□-080FS-10-T	31.8 (1.252)	19.5 (0.768)	28.7 (1.130)	26.7 (1.051)	31.4 (1.236)	25.0 (0.984)	30.6 (1.205)	250
100	DT0□-100FS-10-T	36.8 (1.449)	24.5 (0.965)	33.7 (1.327)	31.7 (1.248)	36.4 (1.433)	30.0 (1.181)	35.6 (1.402)	250
120	DT0□-120FS-10-T	41.8 (1.646)	29.5 (1.161)	38.7 (1.524)	36.7 (1.445)	41.4 (1.630)	35.0 (1.378)	40.6 (1.598)	250
140	DT0□-140FS-10-T	46.8 (1.843)	34.5 (1.358)	43.7 (1.720)	41.7 (1.642)	46.4 (1.827)	40.0 (1.575)	45.6 (1.795)	250