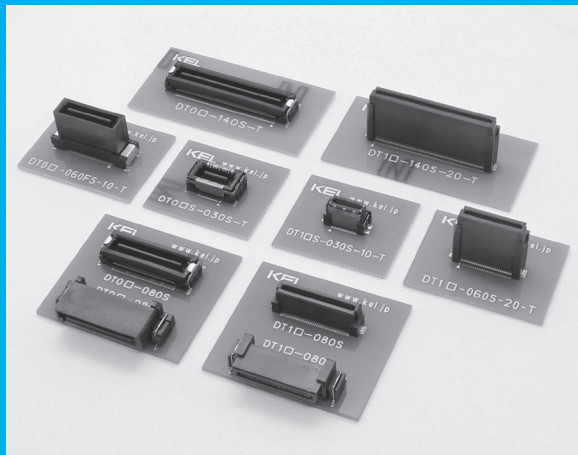


DT SERIES

0.5mm PITCH FLOATING CONNECTOR FOR HIGH-SPEED TRANSMISSION

RoHS
Compliant



FEATURES

- ▶ High-speed serial transmission in the SATA standard level is supported, satisfying all the transmission characteristics required by the SATA Rev 3.0. (Differential impedance: $100\Omega \pm 15\%$)
- ▶ Floating amount $\pm 0.5\text{mm}$ in both X and Y directions.
- ▶ The effective mating length of stacked and vertical connection is $1.5\text{mm}(0.059")$. The effective mating length of the horizontal connection is $1.7\text{mm}(0.067")$.
- ▶ 3 Variations for Stacked / Vertical / Horizontal mating.
- ▶ The stacked mating type has a stacking height of $8\text{mm}(0.315")$ to $20\text{mm}(0.787")$.
- ▶ There are products with shell suitable for ESD / EMC protection.
- ▶ Variations in the number of contacts are from 30 pins to 240 pins.
* Available pin count varies with the product type.
- ▶ Arc-shaped contacts prevent foreign matters which may cause mating error.

ORDER CODE

DT0 - - -

① ② ③ ④ ⑤

*Please order in multiples of the quantity per package.

①	[Type] Receptacle DT00 : Without positioning posts DT00S : Without positioning posts(With shell) DT01 : With positioning posts DT01S : With positioning posts(With Shell)
	[Number of contacts] (S type) 030 : 30pin 040 : 40pin 060 : 60pin 080 : 80pin 100 : 100pin 120 : 120pin 140 : 140pin 160 : 160pin 240 : 240pin
②	(L type) 030 : 30pin 040 : 40pin 060 : 60pin 080 : 80pin 100 : 100pin 140 : 140pin (DT0 □ S) 030 : 30pin 040 : 40pin 100 : 100pin
③	[Contact tail style] S : Straight L : Right angle (not available for DT0 □ S)
④	[Packaging style] Omit : Embossed tape (tape&reel) TR : Tray (S type : 240 pin, L type : 140 pin)
⑤	[Anti-dust tape] T : With anti-dust tape (S type) Omit : Without anti-dust tape (L type)

ORDER CODE

DT1 - - - -

① ② ③ ④ ⑤ ⑥

*Please order in multiples of the quantity per package.

①	[Type] Plug DT10 : Without positioning posts DT10S : Without positioning posts(With shell) DT11 : With positioning posts DT11S : With positioning posts(With shell)
	[Number of contacts] (S type) 030 : 30pin 040 : 40pin 060 : 60pin 080 : 80pin 100 : 100pin 120 : 120pin 140 : 140pin 160 : 160pin 240 : 240pin
②	(L type) 030 : 30pin 040 : 40pin 060 : 60pin 080 : 80pin 100 : 100pin 140 : 140pin (DT1 □ S) 030 : 30pin 040 : 40pin 100 : 100pin
③	[Contact tail style] S : Straight L : Right angle (not available for DT1 □ S)
	[Stacked height] (DT0 □ - □□□ S-□□-T Mated situation) 8 : 8mm 10 : 10mm 11 : 11mm 15 : 15mm 16 : 16mm 17 : 17mm 18 : 18mm 19 : 19mm 20 : 20mm
④	(DT0 □ - □□□ FS-10-T Mated situation) 8 : 18mm 10 : 20mm 11 : 21mm 15 : 25mm 16 : 26mm 17 : 27mm 18 : 28mm 19 : 29mm 20 : 30mm (DT0 □ S/DT1 □ S Mated situation) 10 : 10mm
⑤	[Packaging style] Omit : Embossed tape (Tape&Reel) TR : Tray (S type : 240 pin, L type : 140 pin)
⑥	[Anti-dust tape] T : With anti-dust tape (S type) Omit : Without anti-dust tape (L type)

*As the stack height that can support depends on number of contacts, please refer for the details to our sales representative.

*Please refer to the content of the catalogue of "the DT-FS series" for the details of DT0 □ - □□□ FS-10-T.

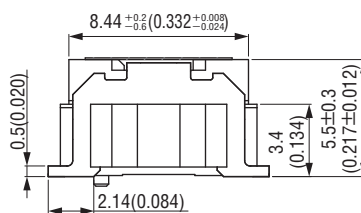
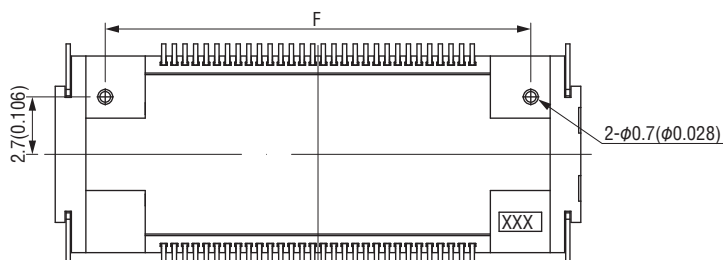
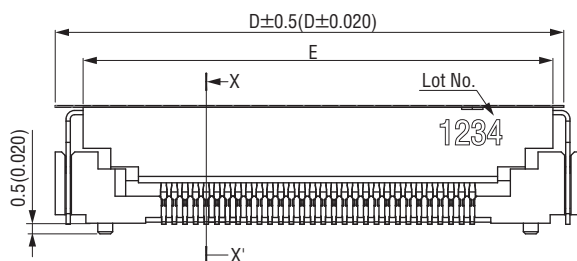
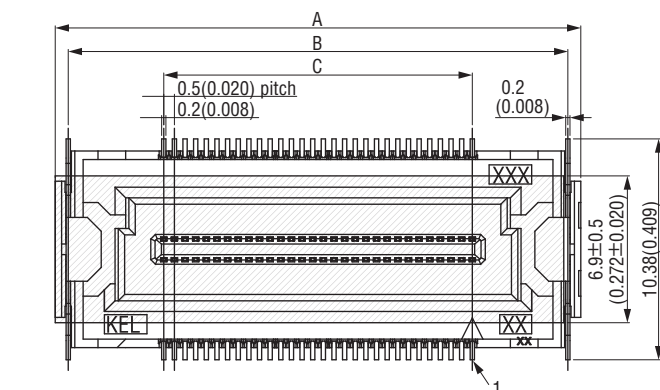
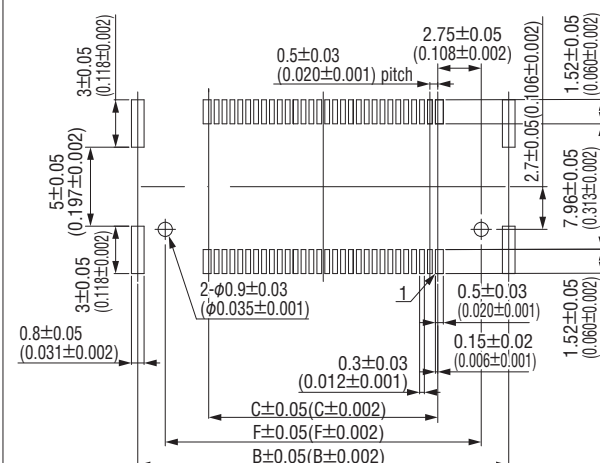
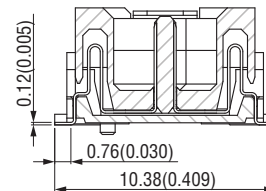
SPECIFICATIONS

Material and plating		Electrical Characteristics	
Insulator material	Glass-filled LCP(UL94V-0), Black	Current rating	0.4A per contact (In the case of simultaneously energizing: 140 pin or less.)
Contact / Shell material	Copper alloy	Contact resistance	80mΩ max.
Contact / Shell 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 +105°C
Material of anti-dust tape	Polyimide		

*Regarding the rated current of the DT series, it is possible to design a current capacity exceeding the standard 0.4 A / pin. i.e. 0.5 A / pin.

Please contact your local KEL sales office.

※If you want this combination, Please consult with our sales representative.


Printed Circuit Board Layout (Component Side View)

X-X' Cross Section

Product Table / Dimensions

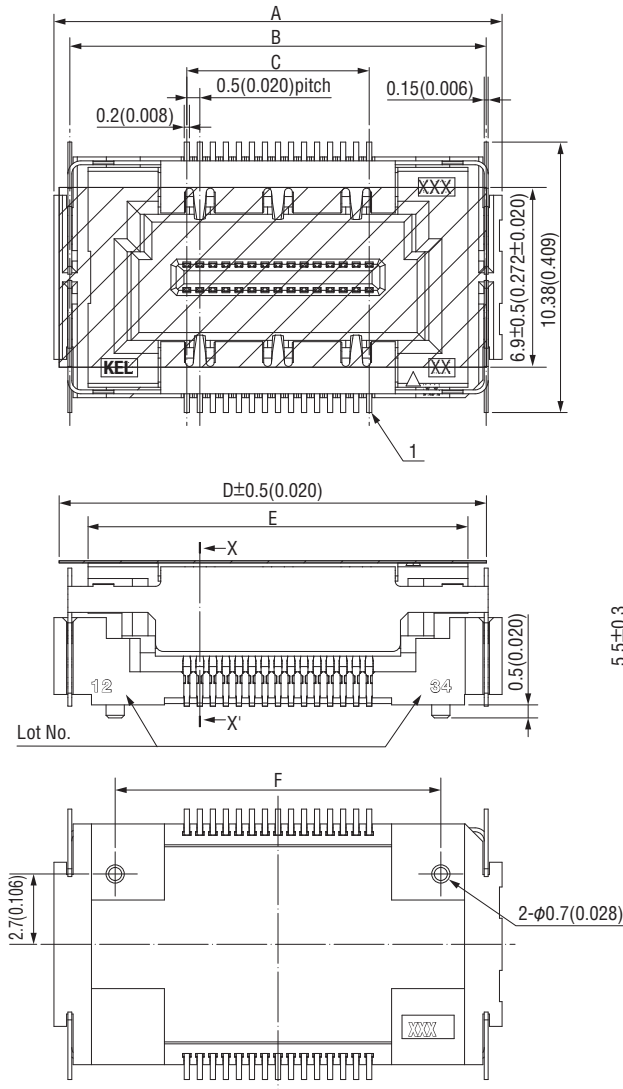
No. of contacts	Part Number	A	B	C	D	E	F	No. of packaging	
								Embossed tape	Tray
30	DT0□-030S-T	17.2 (0.677)	15.98 (0.629)	7.0 (0.276)	16.4 (0.646)	14.58 (0.574)	12.5 (0.492)	800	—
40	DT0□-040S-T	19.7 (0.776)	18.48 (0.728)	9.5 (0.374)	18.9 (0.744)	17.08 (0.672)	15.0 (0.591)	800	—
60	DT0□-060S-T	24.7 (0.972)	23.48 (0.924)	14.5 (0.571)	23.9 (0.941)	22.08 (0.869)	20.0 (0.787)	800	—
80	DT0□-080S-T	29.7 (1.169)	28.48 (1.121)	19.5 (0.768)	28.9 (1.138)	27.08 (1.066)	25.0 (0.984)	800	—
100	DT0□-100S-T	34.7 (1.366)	33.48 (1.318)	24.5 (0.965)	33.9 (1.335)	32.08 (1.263)	30.0 (1.181)	800	—
120	DT0□-120S-T	39.7 (1.563)	38.48 (1.515)	29.5 (1.161)	38.9 (1.531)	37.08 (1.460)	35.0 (1.378)	800	—
140	DT0□-140S-T	44.7 (1.760)	43.48 (1.712)	34.5 (1.358)	43.9 (1.728)	42.08 (1.657)	40.0 (1.575)	800	—
160	DT0□-160S-T	49.7 (1.957)	48.48 (1.909)	39.5 (1.555)	48.9 (1.925)	47.08 (1.854)	45.0 (1.772)	800	—
240	DT0□-240S-T	69.7 (2.744)	68.48 (2.696)	59.5 (2.343)	68.9 (2.713)	67.08 (2.641)	65.0 (2.559)	800	—
240	DT0□-240S-TR-T	69.7 (2.744)	68.48 (2.696)	59.5 (2.343)	68.9 (2.713)	67.08 (2.641)	65.0 (2.559)	—	20

* 240 pin connectors are supplied in trays, and the minimum purchase quantity is 200.
Please place your order in multiples of the minimum quantity.

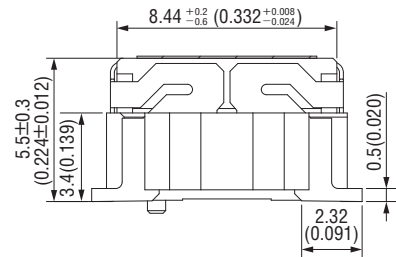
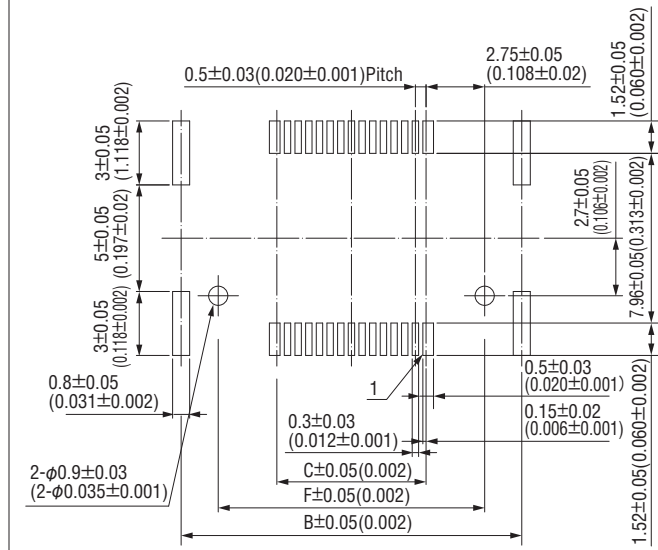
Packaging style	
Embossed tape	Tray

DT0□S-□□□S-T (Receptacle straight with shell)

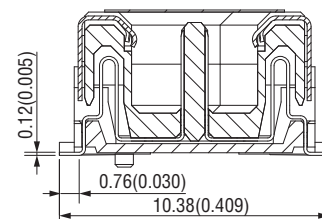
Unit : mm(inch)



Printed Circuit Board Layout (Component Side View)



X-X' Cross Section

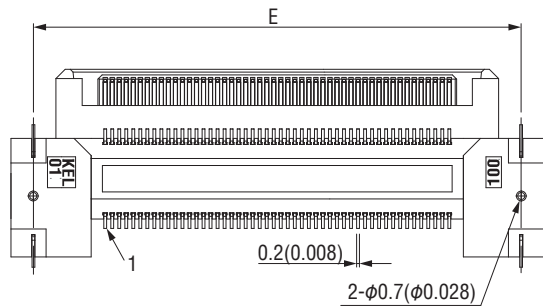
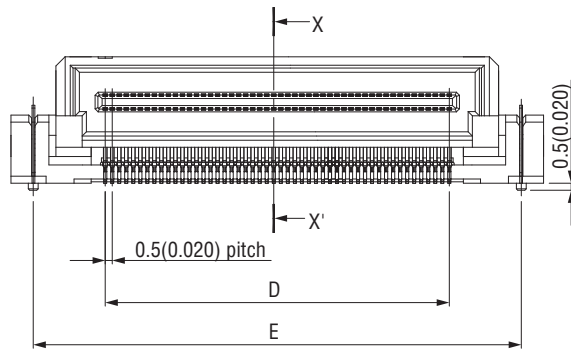
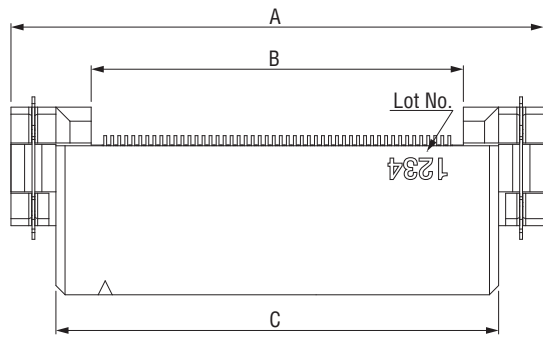
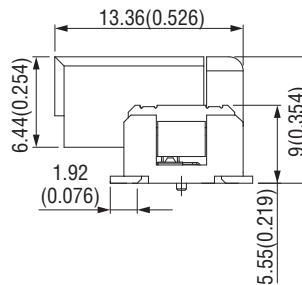
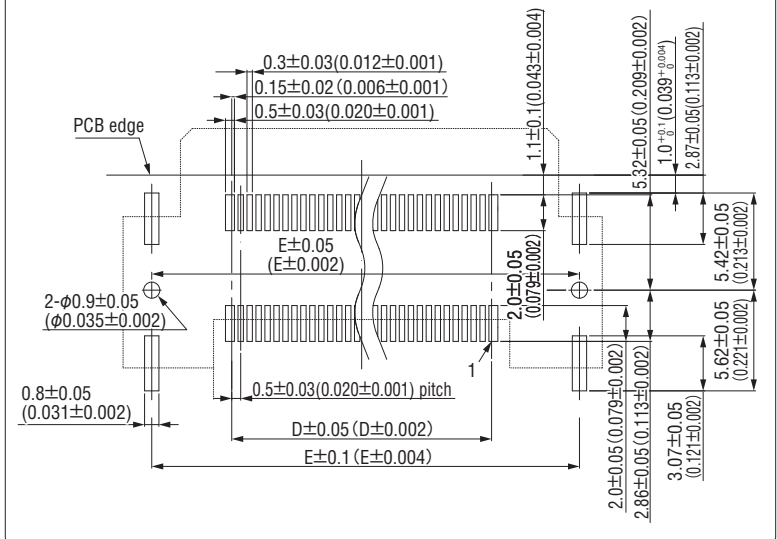
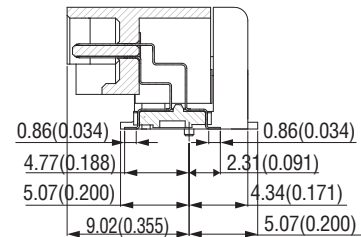


Product Table / Dimensions

No. of contacts	Part Number	Dimensions						No. of packaging
		A	B	C	D	E	F	
30	DT0□S-030S-T	17.2 (0.677)	15.98 (0.629)	7.0 (0.276)	16.4 (0.646)	14.58 (0.574)	12.5 (0.492)	800
40	DT0□S-040S-T	19.7 (0.776)	18.48 (0.728)	9.5 (0.374)	18.9 (0.744)	17.08 (0.672)	15.0 (0.591)	800
100	DT0□S-100S-T	34.7 (1.366)	33.48 (1.318)	24.5 (0.965)	33.9 (1.335)	32.08 (1.263)	30.0 (1.181)	800

Packaging style

Embossed tape


Printed Circuit Board Layout (Component Side View)

X-X' Cross Section

Product Table / Dimensions

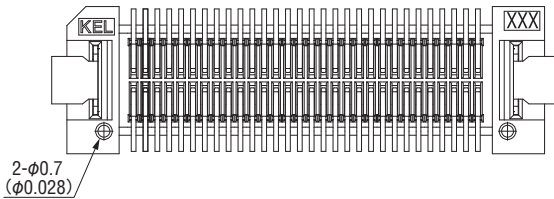
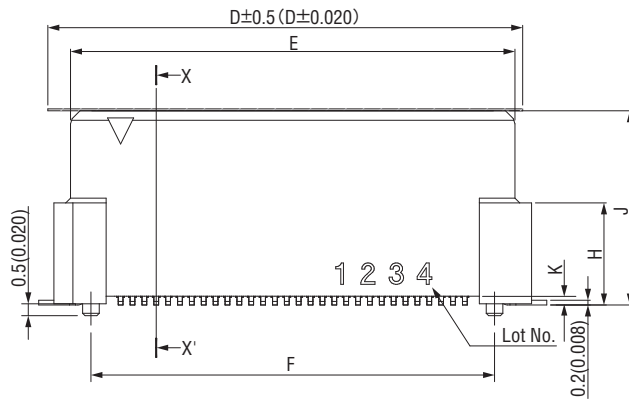
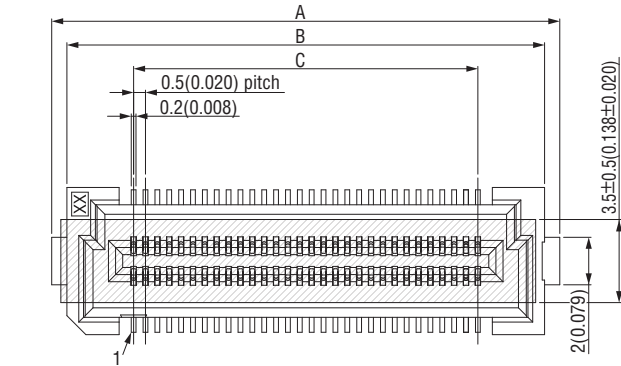
No. of contacts	Part Number	A	B	C	D	E	No. of packaging	
							Embossed tape	Tray
30	DT0□-030L	20.42 (0.804)	9.1 (0.358)	14.02 (0.552)	7.0 (0.276)	17.25 (0.679)	300	—
40	DT0□-040L	22.92 (0.902)	11.6 (0.457)	16.52 (0.650)	9.5 (0.374)	19.75 (0.778)	300	—
60	DT0□-060L	27.92 (1.099)	16.6 (0.654)	21.52 (0.847)	14.5 (0.571)	24.75 (0.974)	300	—
80	DT0□-080L	32.92 (1.296)	21.6 (0.850)	26.52 (1.044)	19.5 (0.768)	29.75 (1.171)	300	—
100	DT0□-100L	37.92 (1.493)	26.6 (1.047)	31.52 (1.241)	24.5 (0.965)	34.75 (1.368)	300	—
140	DT0□-140L-TR	47.92 (1.887)	36.6 (1.441)	41.52 (1.635)	34.5 (1.358)	44.75 (1.762)	—	24

* 140 pin connectors are supplied in trays, and the minimum purchase quantity is 192.
Please place your order in multiples of the minimum quantity.

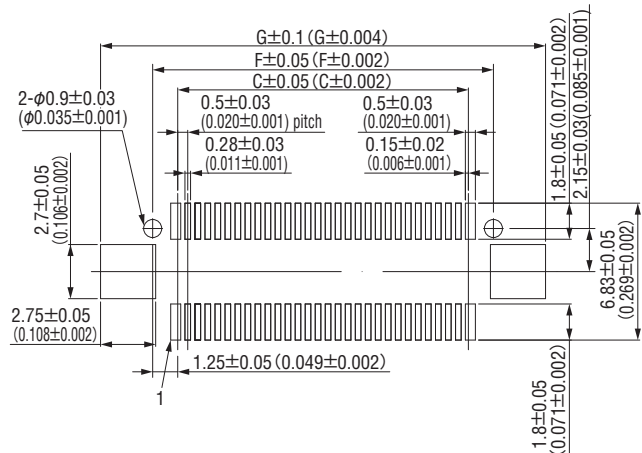
Packaging style	
Embossed tape	Tray

DT1□-□□□S-□□-□□-T (Plug straight , Stacked height 8mm-26mm)

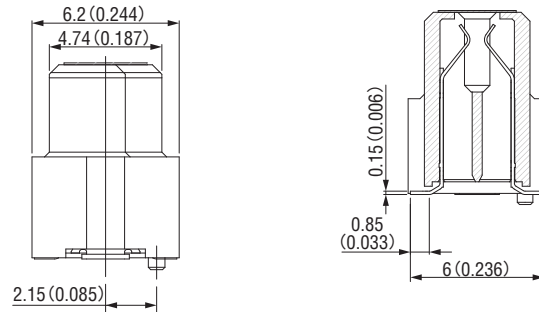
Unit : mm(inch)



Printed Circuit Board Layout (Component Side View)



X-X' Cross Section



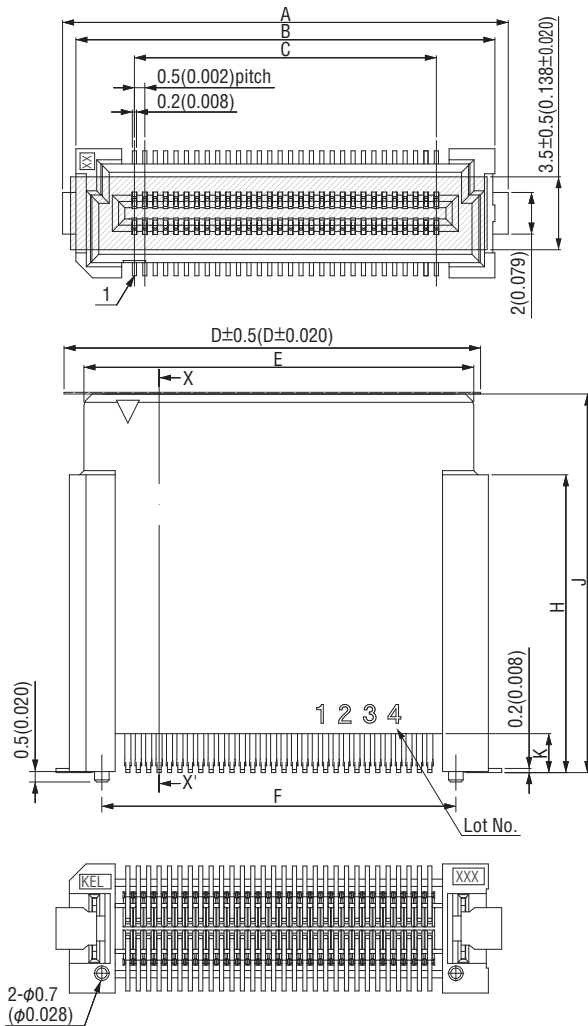
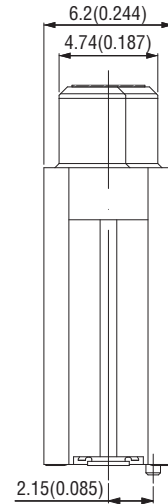
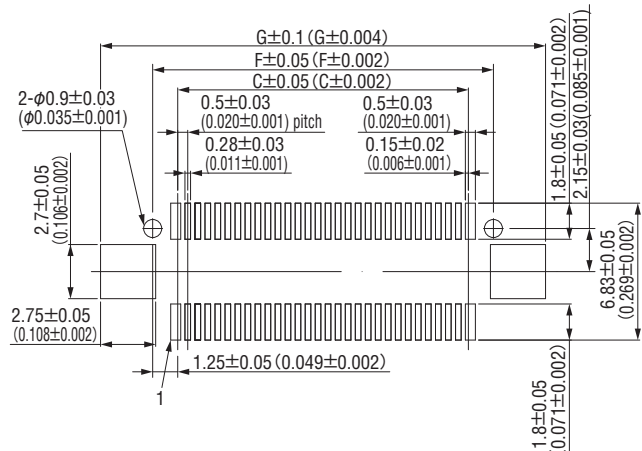
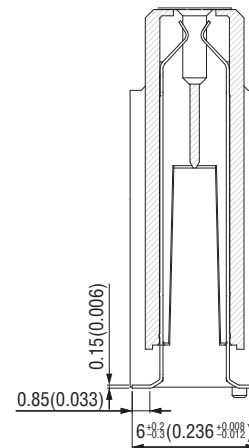
Part Number	H	J	K	Stacked height
DT1□-□□□S-8-T	2.3(0.091)	6.18(0.243)	0.87(0.034)	500
DT1□-□□□S-10-□□-T	4.3(0.169)	8.18(0.322)	0.37(0.015)	500
DT1□-□□□S-11-T	5.3(0.209)	9.18(0.361)	1.37(0.054)	500
DT1□-□□□S-15-T	9.3(0.366)	13.18(0.519)	1.87(0.074)	300
DT1□-□□□S-16-T	10.3(0.406)	14.18(0.558)	0.87(0.034)	300

Packaging style	
Embossed tape	Tray

Product Table / Dimensions

No. of contacts	Part Number	A	B	C	D	E	F	G	No. of packaging	
30	DT1□-030S-□□-T	13.9 (0.547)	12.62 (0.497)	7.0 (0.276)	12.5 (0.492)	11.22 (0.442)	9.5 (0.374)	14.7 (0.579)	500	—
40	DT1□-040S-□□-T	16.4 (0.646)	15.12 (0.595)	9.5 (0.374)	15.0 (0.591)	13.72 (0.540)	12.0 (0.472)	17.2 (0.677)	500	—
60	DT1□-060S-□□-T	21.4 (0.843)	20.12 (0.792)	14.5 (0.571)	20.0 (0.787)	18.72 (0.737)	17.0 (0.669)	22.2 (0.874)	500	—
80	DT1□-080S-□□-T	26.4 (1.039)	25.12 (0.989)	19.5 (0.768)	25.0 (0.984)	23.72 (0.934)	22.0 (0.866)	27.2 (1.071)	500	—
100	DT1□-100S-□□-T	31.4 (1.236)	30.12 (1.186)	24.5 (0.965)	30.0 (1.181)	28.72 (1.131)	27.0 (1.063)	32.2 (1.268)	500	—
120	DT1□-120S-□□-T	36.4 (1.433)	35.12 (1.383)	29.5 (1.161)	35.0 (1.378)	33.72 (1.328)	32.0 (1.260)	37.2 (1.465)	300	—
140	DT1□-140S-□□-T	41.4 (1.630)	40.12 (1.580)	34.5 (1.358)	40.0 (1.575)	38.72 (1.524)	37.0 (1.457)	42.2 (1.661)	500	—
160	DT1□-160S-10-T	46.4 (1.827)	45.12 (1.776)	39.5 (1.555)	45.0 (1.772)	43.72 (1.721)	42.0 (1.654)	47.2 (1.858)	500	—
240	DT1□-240S-10-T	66.4 (2.614)	65.12 (2.564)	59.5 (2.343)	65.0 (2.559)	63.72 (2.509)	62.0 (2.441)	67.2 (2.646)	500	—
240	DT1□-240S-10-TR-T	66.4 (2.614)	65.12 (2.564)	59.5 (2.343)	65.0 (2.559)	63.72 (2.509)	62.0 (2.441)	67.2 (2.646)	—	20

* 240 pin connectors are supplied in trays, and the minimum purchase quantity is 160.
Please place your order in multiples of the minimum quantity.


Printed Circuit Board Layout (Component Side View)

X-X' Cross Section


Packaging style
Embossed tape

Part Number	H	J	K	No. of packing
DT1□-□□□S-17-T	11.3 (0.445)	15.18 (0.598)	0.87 (0.034)	250
DT1□-□□□S-18-T	12.3 (0.484)	16.18 (0.637)	1.87 (0.074)	250
DT1□-□□□S-19-T	13.3 (0.524)	17.18 (0.676)	0.87 (0.034)	200
DT1□-□□□S-20-T	14.3 (0.563)	18.18 (0.716)	1.87 (0.074)	200

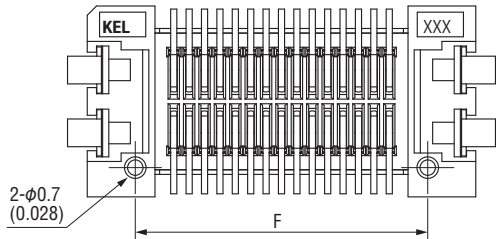
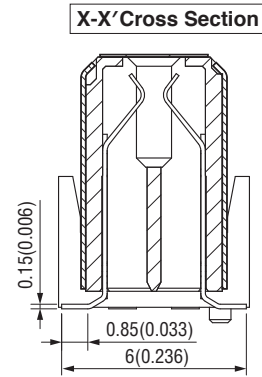
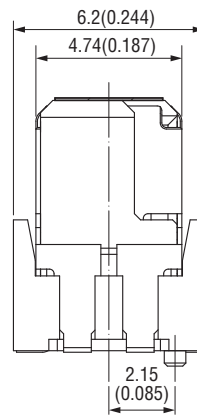
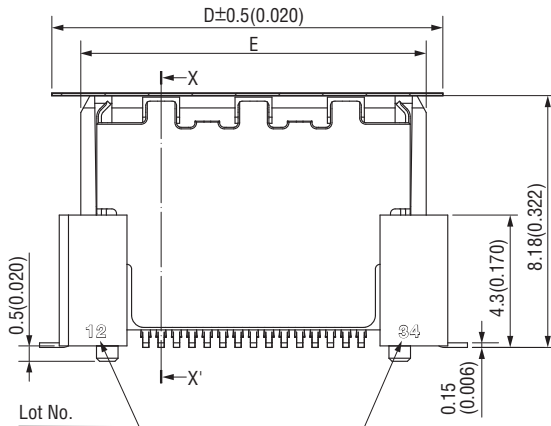
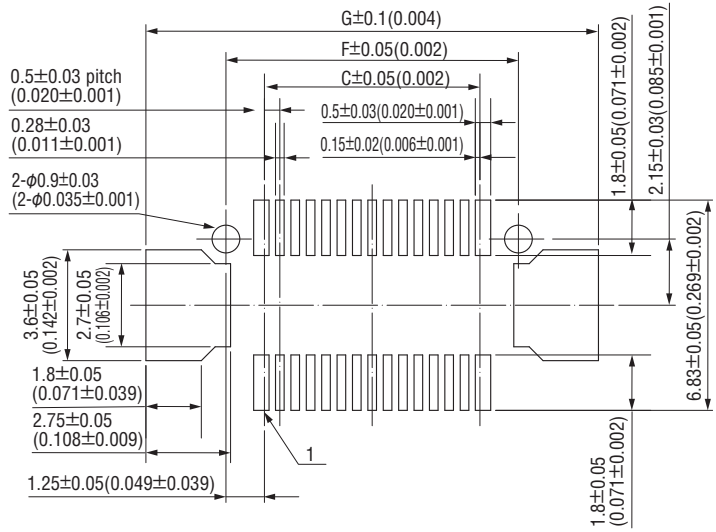
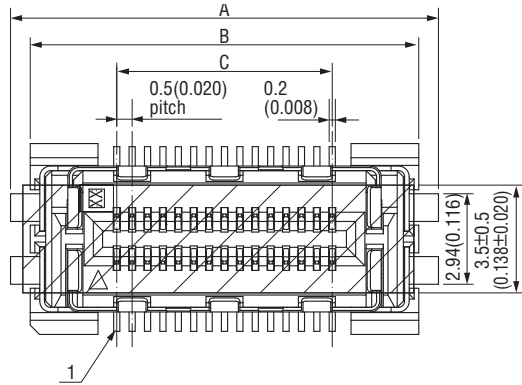
Product Table / Dimensions

No. of contacts	Part Number	A	B	C	D	E	F	G
30	DT1□-030S-□□-T	13.9 (0.547)	12.62 (0.497)	7.0 (0.276)	12.5 (0.492)	11.22 (0.442)	9.5 (0.374)	14.7 (0.579)
40	DT1□-040S-□□-T	16.4 (0.646)	15.12 (0.595)	9.5 (0.374)	15.0 (0.591)	13.72 (0.540)	12.0 (0.472)	17.2 (0.677)
60	DT1□-060S-□□-T	21.4 (0.843)	20.12 (0.792)	14.5 (0.571)	20.0 (0.787)	18.72 (0.737)	17.0 (0.669)	22.2 (0.874)
80	DT1□-080S-□□-T	26.4 (1.039)	25.12 (0.989)	19.5 (0.768)	25.0 (0.984)	23.72 (0.934)	22.0 (0.866)	27.2 (1.071)
100	DT1□-100S-□□-T	31.4 (1.236)	30.12 (1.186)	24.5 (0.965)	30.0 (1.181)	28.72 (1.131)	27.0 (1.063)	32.2 (1.268)
140	DT1□-140S-□□-T	41.4 (1.630)	40.12 (1.580)	34.5 (1.358)	40.0 (1.575)	38.72 (1.524)	37.0 (1.457)	42.2 (1.661)

DT1□S-□□□S-10-T (Plug straight with shell , Stacked height 10mm)

Unit : mm(inch)

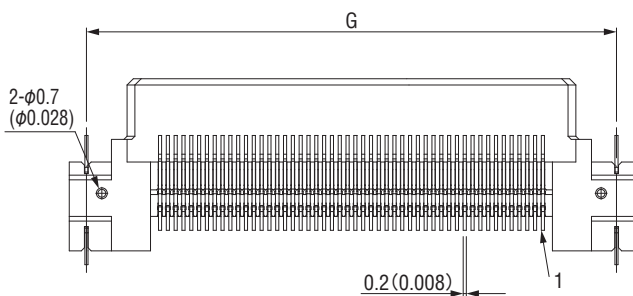
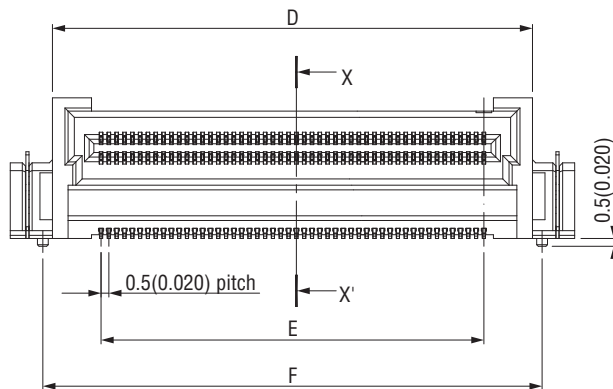
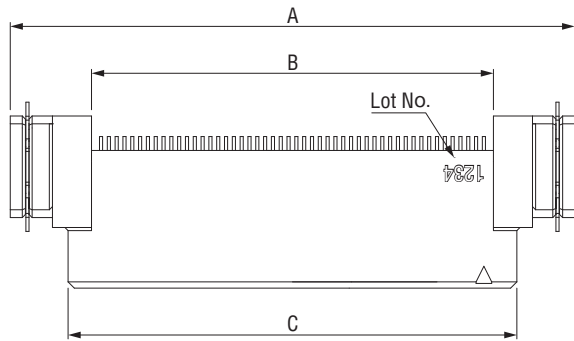
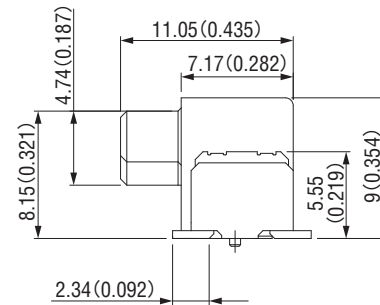
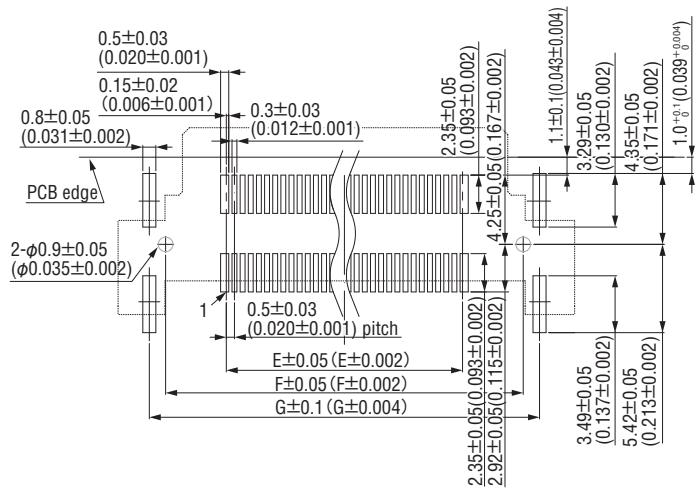
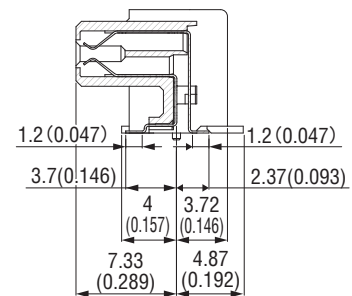
Printed Circuit Board Layout (Component Side View)



Product Table / Dimensions

No. of contacts	Part Number	A	B	C	D	E	F	G	No. of packaging
30	DT1□S-030S-10-T	13.9 (0.547)	12.62 (0.497)	7.0 (0.276)	12.5 (0.492)	11.22 (0.442)	9.5 (0.374)	14.7 (0.597)	500
40	DT1□S-040S-10-T	16.4 (0.646)	15.12 (0.595)	9.5 (0.374)	15.0 (0.591)	13.72 (0.540)	12.0 (0.472)	17.2 (0.677)	500
100	DT1□S-100S-10-T	31.4 (1.236)	30.12 (1.186)	24.5 (0.965)	30.0 (1.181)	28.72 (1.131)	27.0 (1.063)	32.2 (1.268)	500

Packaging style
Embossed tape


Printed Circuit Board Layout (Component Side View)

X-X' Cross Section

Product Table / Dimensions

No. of contact	Part Number	A	B	C	D	E	F	G	No. of packaging	
									Embossed tape	Tray
30	DT1□-030L	18.62 (0.733)	8.22 (0.324)	11.22 (0.442)	13.22 (0.520)	7.0 (0.276)	14.45 (0.569)	16.45 (0.648)	300	—
40	DT1□-040L	21.12 (0.831)	10.72 (0.422)	13.72 (0.540)	15.72 (0.619)	9.5 (0.374)	16.95 (0.667)	18.95 (0.746)	300	—
60	DT1□-060L	26.12 (1.028)	15.72 (0.619)	18.72 (0.737)	20.72 (0.816)	14.5 (0.571)	21.95 (0.864)	23.95 (0.943)	300	—
80	DT1□-080L	31.12 (1.225)	20.72 (0.816)	23.72 (0.934)	25.72 (1.013)	19.5 (0.768)	26.95 (1.061)	28.95 (1.140)	300	—
100	DT1□-100L	36.12 (1.422)	25.72 (1.013)	28.72 (1.131)	30.72 (1.209)	24.5 (0.965)	31.95 (1.258)	33.95 (1.337)	300	—
140	DT1□-140L-TR	46.12 (1.816)	35.72 (1.406)	38.72 (1.524)	40.72 (1.603)	34.5 (1.358)	41.95 (1.652)	43.95 (1.730)	—	24

* 140 pin connectors are supplied in trays, and the minimum purchase quantity is 192.
Please place your order in multiples of the minimum quantity.