

DY03/04 SERIES

0.5mm PITCH FLOATING CONNECTOR / HIGH HEAT RESISTANCE TYPE

RoHS
Compliant



FEATURES

- ▶ The operating temperature supports up to + 105 °C.
- ▶ Location error offsets $\pm 0.5\text{mm}$ in the XY direction.
- ▶ High reliable design with effective mating length of 1.25mm (0.049").
- ▶ Positioning posts are optional for manual mounting.
- ▶ Wide variations of contacts (50, 60, 80, 100, 120 and 140 pins) are available.
- ▶ Stacked mating heights of 5, 11, 12, 13 and 14mm. (0.197, 0.433, 0.472, 0.512 and 0.551")

* Stack height 11mm-14mm type can be used in an environment of + 105 ° C by mating with DY1 □-□□ FSB-□.

ORDER CODE

DY0 □ - □□□ **SB-BT**

① ② ③ ④ ⑤ ⑥

*Please order in multiples of the quantity per package.

- ① **[Type]** Receptacle **DY03** : With positioning posts **DY04** : Without positioning posts
- ② **[Number of contacts]** **050** : 50 pin **060** : 60 pin **080** : 80 pin **100** : 100 pin **120** : 120 pin **140** : 140 pin
- ③ **[Contact tail style]** **S** : Straight
- ④ **[Gold plating thickness of contact part]** **B** : 0.1 μm min.
- ⑤ **[Number of packaging]** **B** : 1,000 pcs per reel
- ⑥ **[Anti-dust tape]** **T** : With anti-dust tape

ORDER CODE

DY1 □ - □□□ **SB-1-T-H**

① ② ③ ④ ⑤ ⑥ ⑦

*Please order in multiples of the quantity per package.

- ① **[Type]** Plug **DY10** : Without positioning posts **DY11** : With positioning posts
- ② **[Number of contacts]** **050** : 50 pin **060** : 60 pin **080** : 80 pin **100** : 100 pin **120** : 120 pin **140** : 140 pin
- ③ **[Contact tail style]** **S** : Straight
- ④ **[Gold plating thickness of contact part]** **B** : 0.1 μm min.
- ⑤ **[Stacked height]** **1** : 5mm(0.197")
- ⑥ **[Anti-dust cover]** **T** : With anti-dust cover
- ⑦ **[Operating temperature]** **H** : - 40°C~ +105°C (However, the condition is that it mate with DY03/04- □□□ SB-BT.)

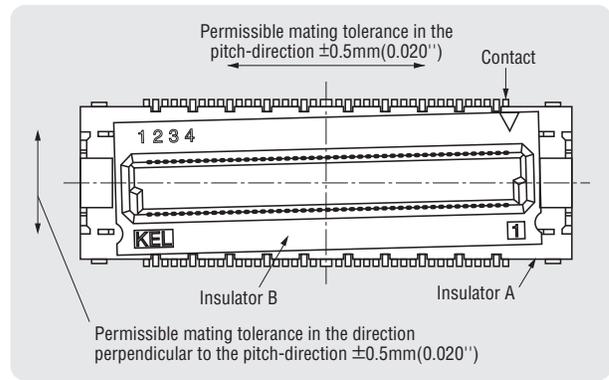
SPECIFICATIONS

Material and plating		Electrical Characteristics	
Insulator material [DY03/04]	Insulator A: Glass-filled LCP (UL94V-0), Black Insulator B: Glass-filled Nylon 9T (UL94V-0), Black	Current rating*	0.4A per contact
Insulator material [DY1□]	Glass-filled LCP (UL94V-0), Black	Contact resistance	80m Ω max.
Contact material	Copper alloy	Dielectric withstanding voltage	200V AC for 1 minute
Contact plating	(Contact area) Gold over Nickel (Terminal area) Gold over Nickel	Insulation resistance	100M Ω min. at 250V DC
Retention clip material	Copper alloy	Operating temperature	-40°C to +105°C
Retention clip plating	Tin over Nickel		
Anti-dust tape material	Polyimide		
Anti-dust cover material	Nylon 9T UL94V-0 , Black		

*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.

Floating Connector

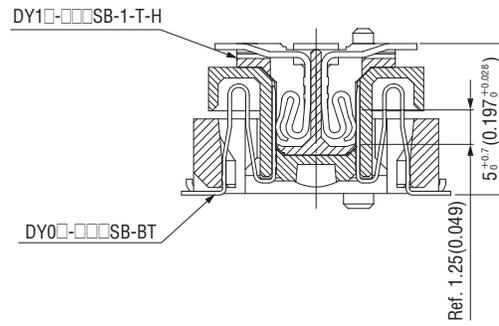
When the connector is mounted on the printed circuit board, a location error in the two directions of horizontal and vertical(XY direction) may occur at both connectors. In addition, if each printed circuit board is fixed to a case by screws after mating connectors, the connectors may have to compensate for the location error because a gap occurs during screwing to 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 DY series is a 0.5mm(0.020") fine pitch connector with $\pm 0.5\text{mm}(0.020\text{'})$ floating mechanism and ensures sufficient compensation for location errors.



Mating Drawing

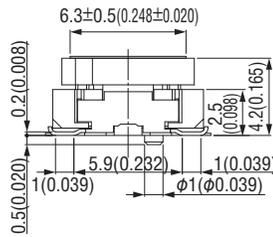
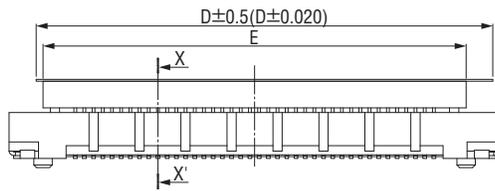
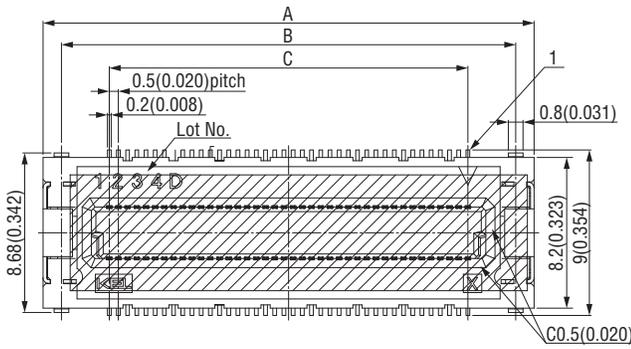
Unit : mm(inch)

◆ Stacked Mating

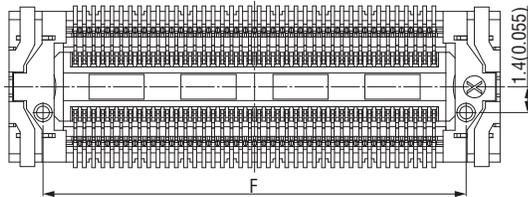
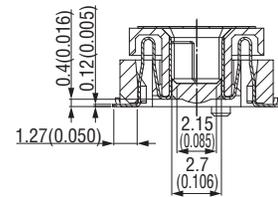


DY0□-□□□SB-BT (Receptacle, Straight, High heat resistance type)

Unit : mm(inch)

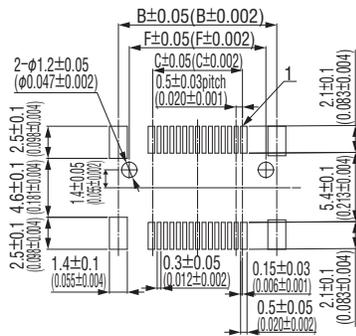


X-X' Cross Section

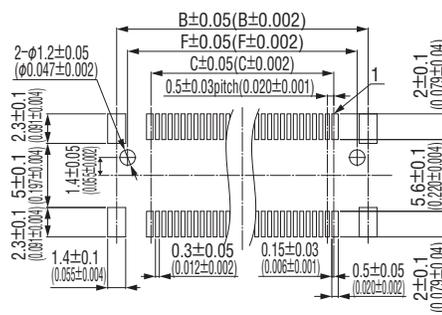


Printed Circuit Board Layout (Component Side View)

For 50 pin



For 60,80,100,120,140 pin



Packaging style

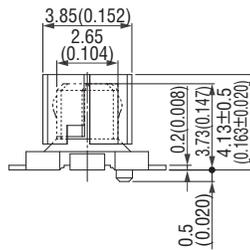
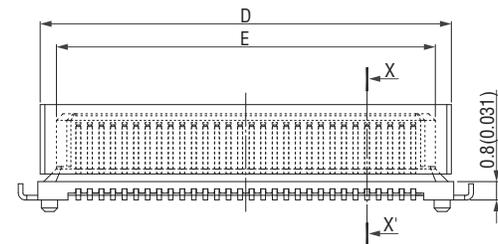
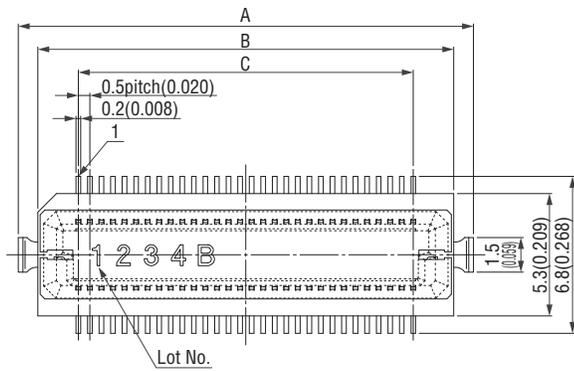
Embossed tape

Product Table / Dimensions

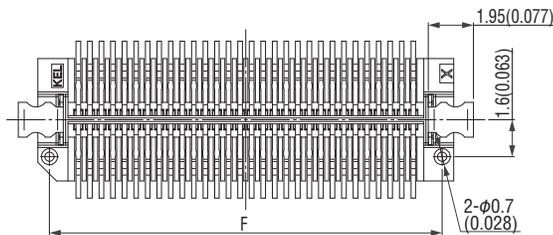
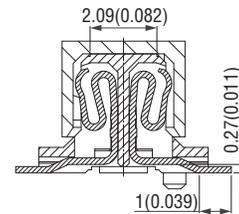
No. of contacts	Part Number	A	B	C	D	E	F	Number of packaging
50	DY0□-050SB-BT	19.2 (0.756)	17.2 (0.677)	12.0 (0.472)	17.3 (0.681)	15.5 (0.610)	15.5 (0.610)	1,000
60	DY0□-060SB-BT	21.7 (0.854)	19.7 (0.776)	14.5 (0.571)	19.8 (0.780)	18.0 (0.709)	18.0 (0.709)	1,000
80	DY0□-080SB-BT	26.7 (1.051)	24.7 (0.972)	19.5 (0.768)	24.8 (0.976)	23.0 (0.906)	23.0 (0.906)	1,000
100	DY0□-100SB-BT	31.7 (1.248)	29.7 (1.169)	24.5 (0.965)	29.8 (1.173)	28.0 (1.102)	28.0 (1.102)	1,000
120	DY0□-120SB-BT	36.7 (1.445)	34.7 (1.366)	29.5 (1.161)	34.8 (1.370)	33.0 (1.299)	33.0 (1.299)	1,000
140	DY0□-140SB-BT	41.7 (1.642)	39.7 (1.563)	34.5 (1.358)	39.8 (1.567)	38.0 (1.496)	38.0 (1.496)	1,000

DY1□-□□□SB-1-T-H (Plug, Straight, High heat resistance type)

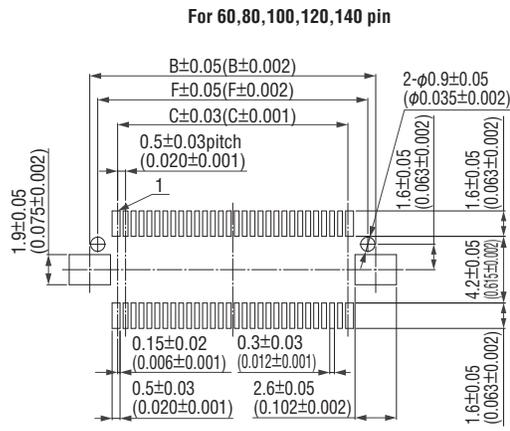
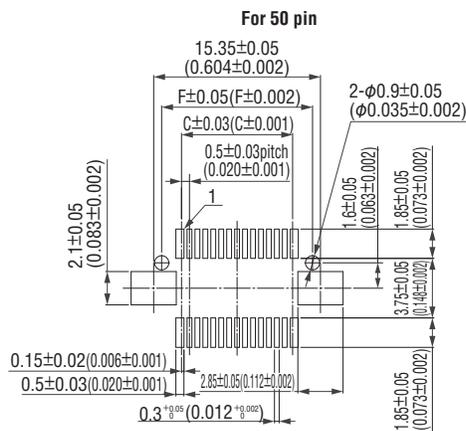
Unit : mm(inch)



X-X' Cross Section



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	Number of packaging
50	DY1□-050SB-1-T-H	17.2 (0.677)	15.5 (0.610)	12.0 (0.472)	15.3 (0.602)	13.9 (0.547)	14.5 (0.571)	1,000
60	DY1□-060SB-1-T-H	19.7 (0.776)	18.0 (0.709)	14.5 (0.571)	17.8 (0.701)	16.4 (0.646)	17.0 (0.669)	1,000
80	DY1□-080SB-1-T-H	24.7 (0.972)	23.0 (0.906)	19.5 (0.768)	22.8 (0.898)	21.4 (0.843)	22.0 (0.866)	1,000
100	DY1□-100SB-1-T-H	29.7 (1.169)	28.0 (1.102)	24.5 (0.965)	27.8 (1.094)	26.4 (1.039)	27.0 (1.063)	1,000
120	DY1□-120SB-1-T-H	34.7 (1.366)	33.0 (1.299)	29.5 (1.161)	32.8 (1.291)	31.4 (1.236)	32.0 (1.260)	1,000
140	DY1□-140SB-1-T-H	39.7 (1.563)	38.0 (1.496)	34.5 (1.358)	37.8 (1.488)	36.4 (1.433)	37.0 (1.457)	1,000