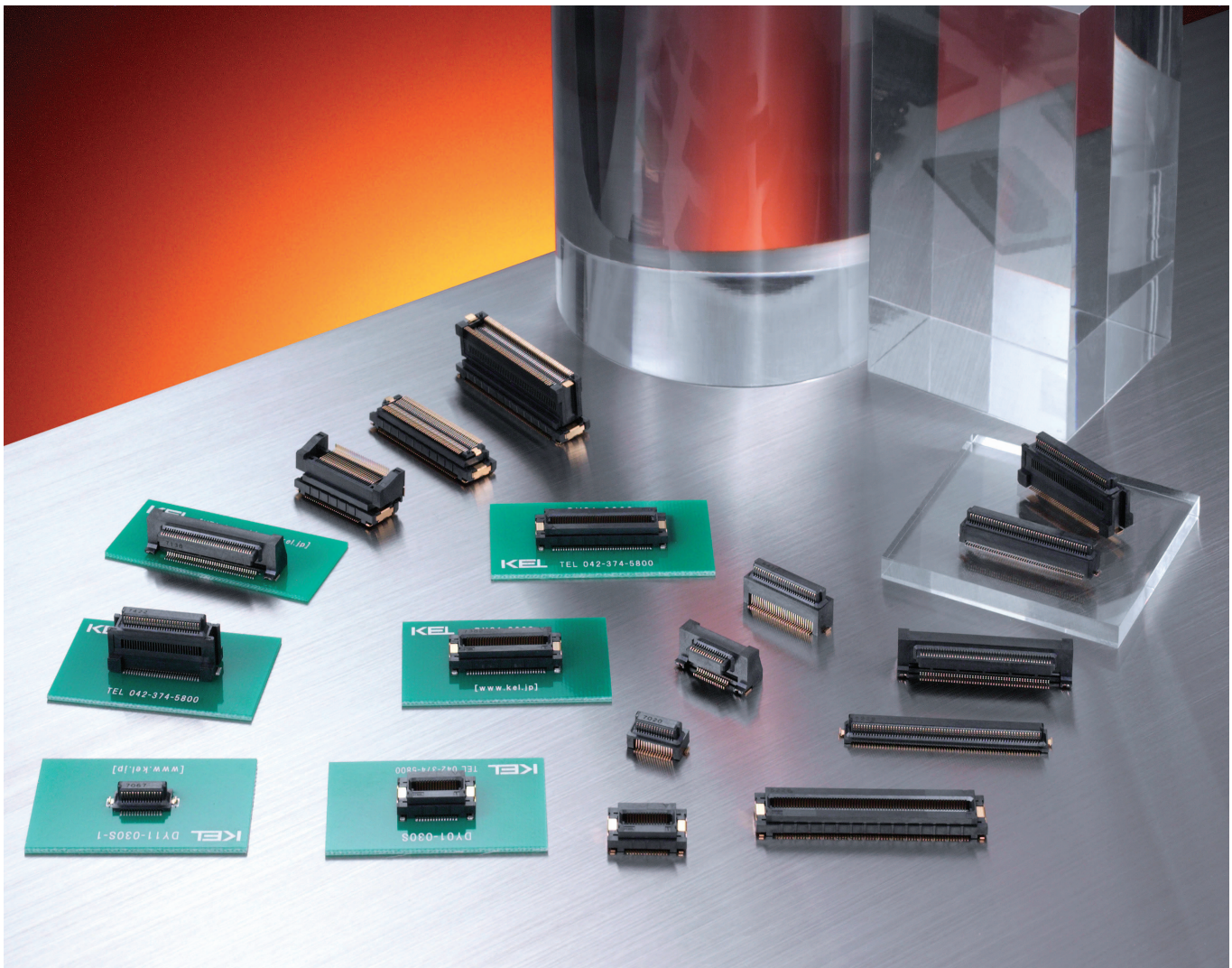


# Floating Connector with 0.5mm Pitch $\pm 0.5\text{mm}$ Displacement in XY Direction

## DY SERIES



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**B.C.E. S.r.l.**

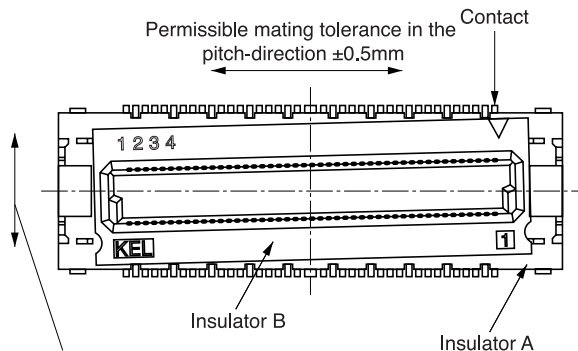
Via Regina Pacis, 54/c – I 41049 Sassuolo - (MO)  
**Tel:** (+39) 0536 811616 - **Fax:** (+39) 0536 811500  
**E-mail.:** [bce@bce.it](mailto:bce@bce.it) • **Home Page :** [www.bce.it](http://www.bce.it)



**FEATURES**

- 0.5mm pitch floating connector
- Location error offsets  $\pm 0.5\text{mm}$  in the XY direction
- High reliable design with effective contact displacement of 1.25mm
- Suction area for automated mounting provided
- Positioning posts are optional for manual mounting
- Nine size : 30, 40, 50, 60, 80, 90, 100, 120 and 140 pins  
\*Available pin count varies with the product type.
- Plug connector variations : Straight and Right angle
- 2 mating variations (stacked and vertical)
- Ten mating height : 5, 6, 7, 8, 9, 10, 11, 12, 13 and 14mm  
\*11mm : 140 pin type only
- Shape of retention clip forming the large fillet
- RoHS compliance

**Floating Connector**

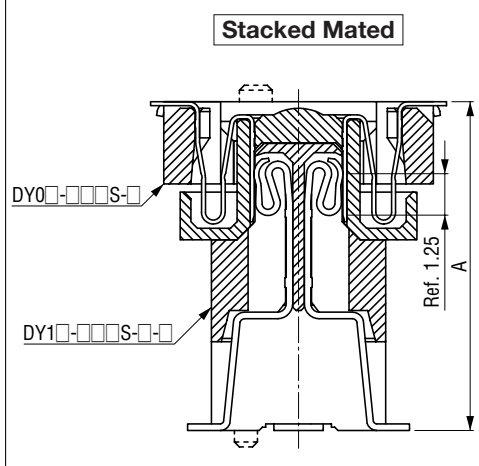


● When the connector is mounted on the printed circuit board, a location error in the two directions of horizontal and vertical (XY direction) may occur at both connectors. In addition, if each printed circuit board is fixed to a case by screws after mating connectors, the connectors may have to compensate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

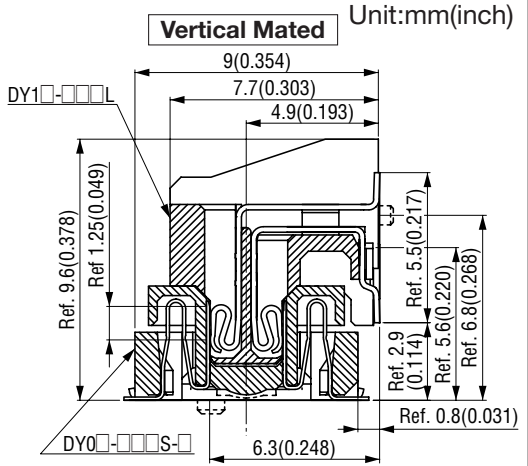
**SPECIFICATIONS**

- Insulator material : Glass-filled LCP (UL94V-0), Black
- Contact material : Copper alloy
- Contact plating : Gold over Nickel
- Retention clip material : Copper alloy
- Retention clip plating : Gold over Nickel
- Current rating : 0.4A per contact  
0.3A per contact (DY1□-□□□L)
- Contact resistance : 80m $\Omega$  max.  
100m $\Omega$  max. (DY1□-□□□L)
- Dielectric withstanding voltage : 200V AC for 1 minute
- Insulation resistance : 100M $\Omega$  min. at 250V DC
- Operating temperature :  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$

**Mating Combination**



Part Number	A
DY1□-□□□S-1-□	5(0.197)
DY1□-□□□S-2	6(0.236)
DY1□-□□□S-3	7(0.276)
DY1□-□□□S-4	8(0.315)
DY1□-□□□S-5	9(0.354)
DY1□-□□□S-6	10(0.394)





● ORDER CODE

**DY 0** - - - **S** -

- Connector type  
00 : Receptacle, Without positioning posts  
01 : Receptacle, With positioning posts
- Series name  
DY : 0.5mm pitch floating connector
- Contact tail style  
S : Straight, SMT
- Number of contacts  
030 : 30 pin 090 : 90 pin  
040 : 40 pin 100 : 100 pin  
050 : 50 pin 120 : 120 pin  
060 : 60 pin 140 : 140 pin  
080 : 80 pin
- Number of packaging  
Omit : 1000pcs. per reel  
A : 500pcs. per reel

● ORDER CODE

**DY 1** - - - **S** - -

- Connector type  
10 : Plug, Without positioning posts  
11 : Plug, With positioning posts
- Series name  
DY : 0.5mm pitch floating connector
- Contact tail style  
S : Straight, SMT
- Stacked height  
1 : 5 mm 4 : 8 mm  
2 : 6 mm 5 : 9 mm  
3 : 7 mm 6 : 10 mm
- Number of contacts  
030 : 30 pin 080 : 80 pin  
040 : 40 pin 100 : 100 pin  
050 : 50 pin 120 : 120 pin  
060 : 60 pin 140 : 140 pin
- Number of packaging  
Omit : 500pcs. per reel (Stacked height 6 to 10mm)  
1,000pcs. per reel (Stacked height 5mm)  
A : 500pcs. per reel (Stacked height 5mm)



\*The product of 30 pin, 40 pin and 50 pin corresponds to the type of 5mm, 6mm and 7mm in the stack height.



● ORDER CODE

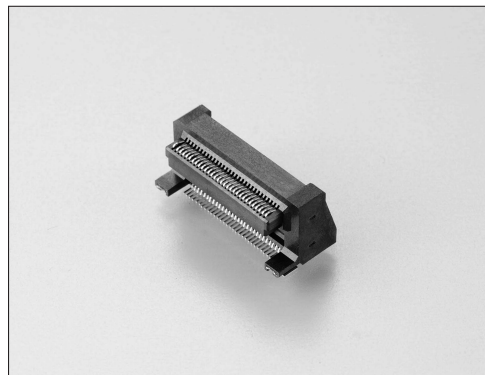
**DY 1** - - - **FS** -

- Connector type  
10 : Plug, Without positioning posts  
11 : Plug, With positioning posts
- Series name  
DY : 0.5mm pitch floating connector
- Contact tail style  
FS : Flexible stacking straight, SMT
- Stacked height  
1 : 11mm (140 pin only)  
2 : 12 mm  
3 : 13 mm  
4 : 14 mm
- Number of contacts  
060 : 60 pin 120 : 120 pin  
080 : 80 pin 140 : 140 pin  
100 : 100 pin

● ORDER CODE

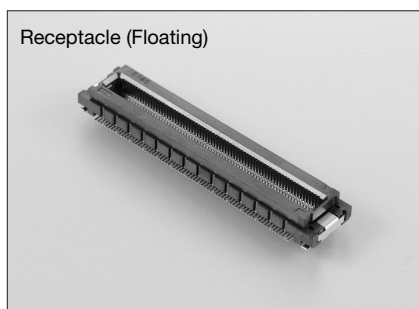
**DY 1** - - - **L**

- Connector type  
10 : Plug, Without positioning posts  
11 : Plug, With positioning posts
- Series name  
DY : 0.5mm pitch floating connector
- Contact tail style  
L : Right angle, SMT
- Number of contacts  
030 : 30 pin 080 : 80 pin  
040 : 40 pin 090 : 90 pin  
050 : 50 pin 100 : 100 pin  
060 : 60 pin

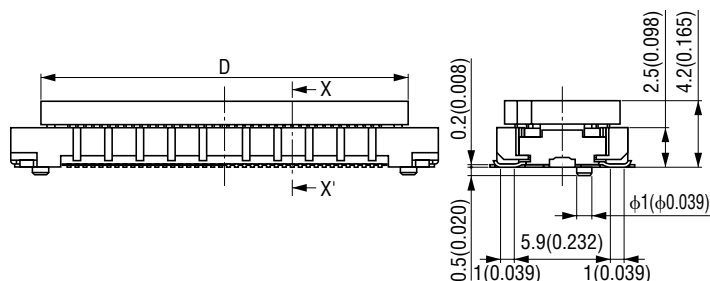
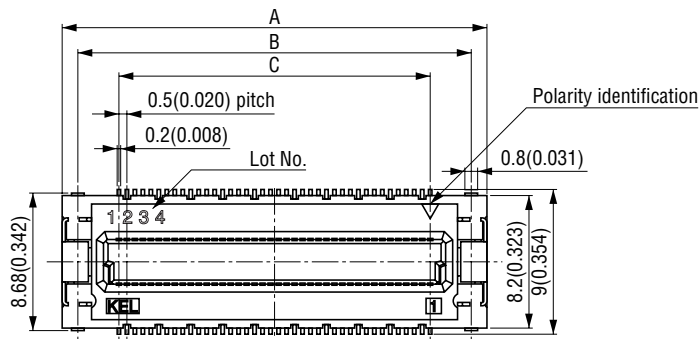
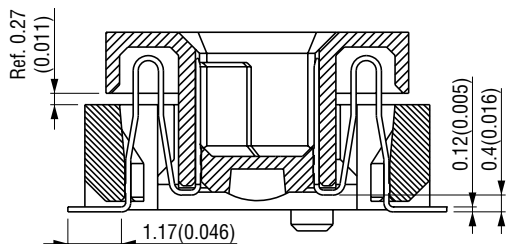


**DY0□-□□□S-□ (Receptacle)**

Unit:mm(inch)

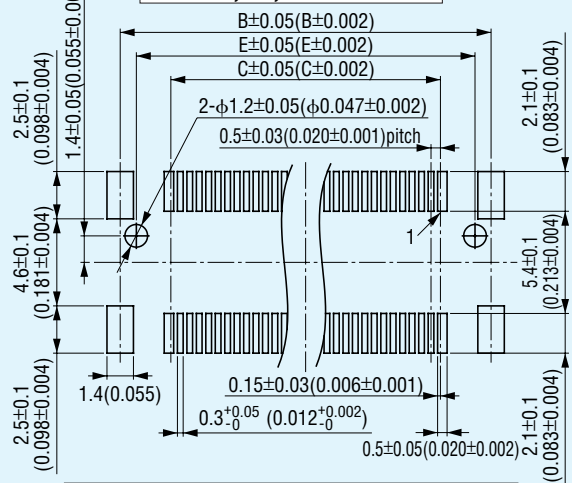


**X-X' Cross Section**

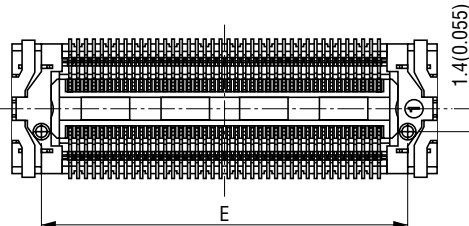
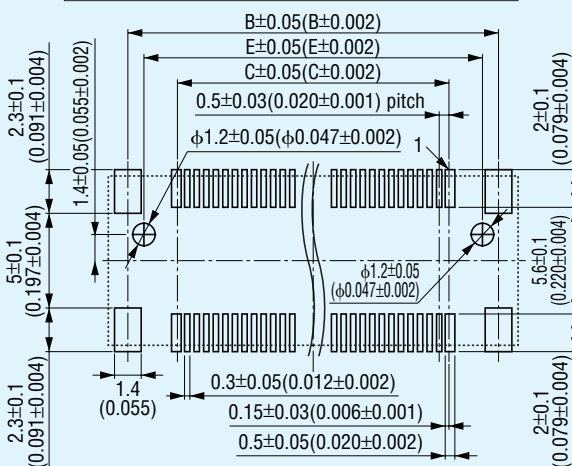


**Printed Circuit Board Layout (Component Side View)**

**For 30, 40, 50 contacts**



**For 60, 80, 90, 100, 120, 140 contacts**



Packaging style  
Embossed tape

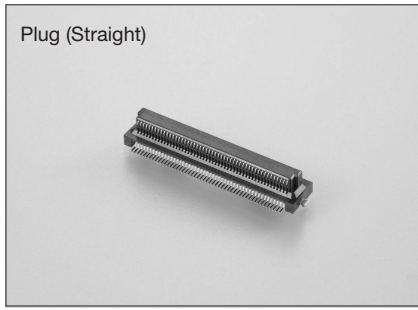
Part Number	Number of packaging
DY0□-□□□S	1,000
DY0□-□□□S-A	500

**Product Table / Dimensions**

No. of contacts	Part Number	A	B	C	D	E
30	DY0□-030S-□	14.2 (0.559)	12.2 (0.480)	7.0 (0.276)	10.5 (0.413)	10.5 (0.413)
40	DY0□-040S-□	16.7 (0.657)	14.7 (0.579)	9.5 (0.374)	13.0 (0.512)	13.0 (0.512)
50	DY0□-050S-□	19.2 (0.756)	17.2 (0.677)	12.0 (0.472)	15.5 (0.610)	15.5 (0.610)
60	DY0□-060S-□	21.7 (0.854)	19.7 (0.776)	14.5 (0.571)	18.0 (0.709)	18.0 (0.709)
80	DY0□-080S-□	26.7 (1.051)	24.7 (0.972)	19.5 (0.768)	23.0 (0.906)	23.0 (0.906)
90	DY0□-090S-□	29.2 (1.150)	27.2 (1.071)	22.0 (0.866)	25.5 (1.004)	25.5 (1.004)
100	DY0□-100S-□	31.7 (1.248)	29.7 (1.169)	24.5 (0.965)	28.0 (1.102)	28.0 (1.102)
120	DY0□-120S-□	36.7 (1.445)	34.7 (1.366)	29.5 (1.161)	33.0 (1.299)	33.0 (1.299)
140	DY0□-140S-□	41.7 (1.642)	39.7 (1.563)	34.5 (1.358)	38.0 (1.496)	38.0 (1.496)

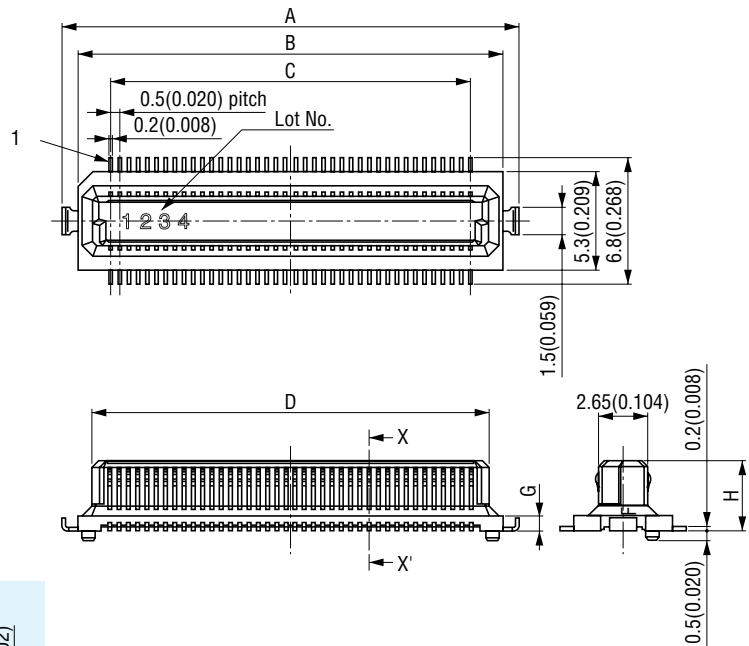
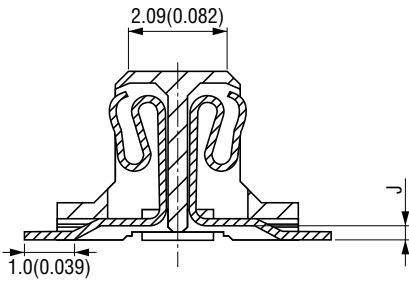
# DY1 □-□□□S-□-□ (Plug, For 5, 6 and 7mm stacked height)

Plug (Straight)

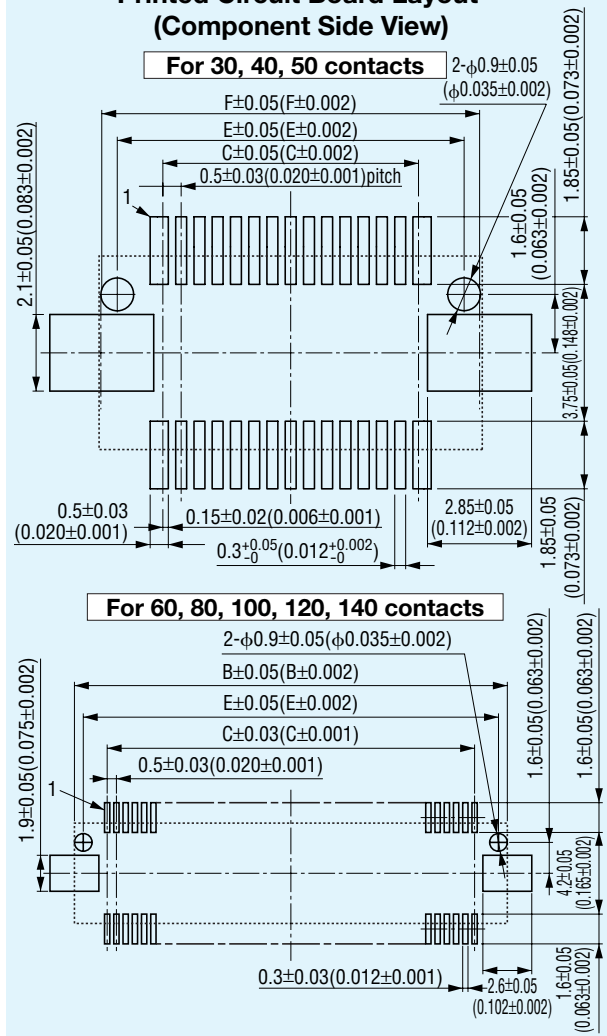


Unit:mm(inch)

X-X' Cross Section



Printed Circuit Board Layout  
(Component Side View)



Stack height

Part Number	Stack height	G	H	J	Number of packaging
DY1□-□□□S-1	5.0 (0.197)	0.8 (0.031)	3.73 (0.147)	0.3 (0.012)	1,000
DY1□-□□□S-1-A	5.0 (0.197)	0.8 (0.031)	3.73 (0.147)	0.3 (0.012)	500
DY1□-□□□S-2	6.0 (0.236)	1.8 (0.071)	4.73 (0.186)	1.3 (0.051)	500
DY1□-□□□S-3	7.0 (0.276)	2.8 (0.110)	5.73 (0.226)	2.3 (0.091)	500

Product Table / Dimensions

No. of contacts	Part Number	A	B	C	D	E	F
30	DY1□-030S-□-□	12.2 (0.480)	10.5 (0.413)	7.0 (0.276)	8.9 (0.350)	9.5 (0.374)	10.35 (0.407)
40	DY1□-040S-□-□	14.7 (0.579)	13.0 (0.512)	9.5 (0.374)	11.4 (0.449)	12.0 (0.472)	12.85 (0.506)
50	DY1□-050S-□-□	17.2 (0.677)	15.5 (0.610)	12.0 (0.472)	13.9 (0.547)	14.5 (0.571)	15.35 (0.610)
60	DY1□-060S-□-□	19.7 (0.776)	18.0 (0.709)	14.5 (0.571)	16.4 (0.646)	17.0 (0.669)	-
80	DY1□-080S-□-□	24.7 (0.972)	23.0 (0.906)	19.5 (0.768)	21.4 (0.843)	22.0 (0.866)	-
100	DY1□-100S-□-□	29.7 (1.169)	28.0 (1.102)	24.5 (0.965)	26.4 (1.039)	27.0 (1.063)	-
120	DY1□-120S-□-□	34.7 (1.366)	33.0 (1.299)	29.5 (1.161)	31.4 (1.236)	32.0 (1.260)	-
140	DY1□-140S-□-□	39.7 (1.563)	38.0 (1.496)	34.5 (1.358)	36.4 (1.433)	37.0 (1.457)	-

Packaging style  
Embossed tape

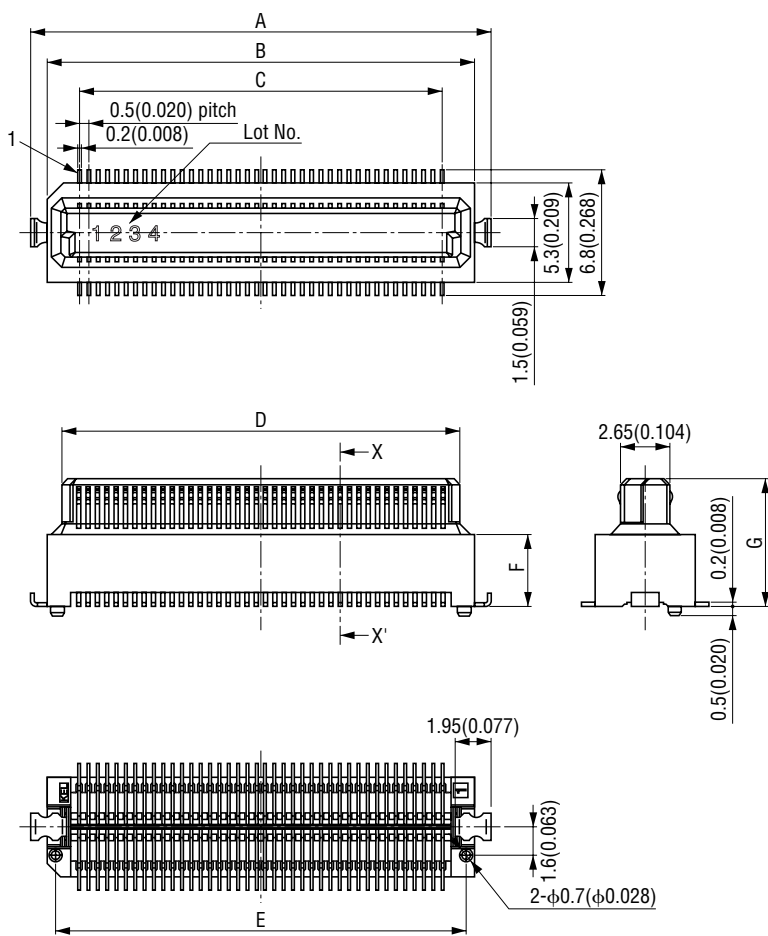
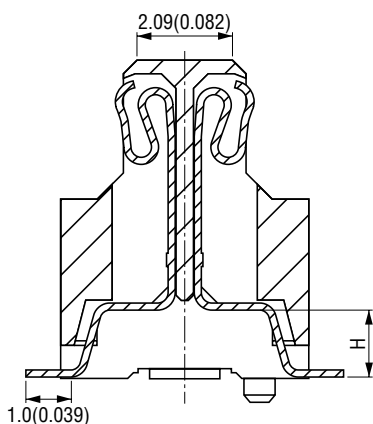
### DY1□-□□□S-□ (Plug, For 8, 9 and 10mm stacked height)

Plug (Straight)

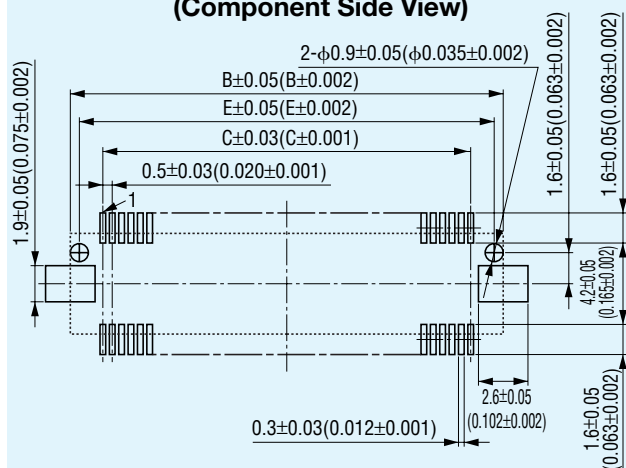


Unit:mm(inch)

X-X' Cross Section



Printed Circuit Board Layout  
(Component Side View)



Packaging style  
Embossed tape

Stack height

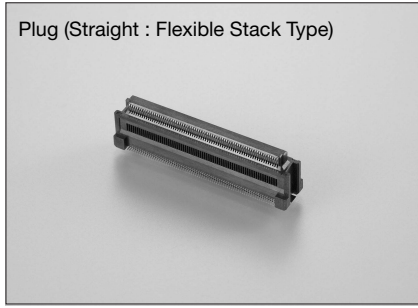
Part Number	Stack height	F	G	H	Number of packaging
DY1□-□□□S-4	8 (0.315)	3.8 (0.150)	6.73 (0.265)	1.4 (0.055)	500
DY1□-□□□S-5	9 (0.354)	4.8 (0.189)	7.73 (0.304)	2.4 (0.094)	500
DY1□-□□□S-6	10 (0.394)	5.8 (0.228)	8.73 (0.344)	3.4 (0.134)	500

Product Table / Dimensions

No. of contacts	Part Number	A	B	C	D	E
60	DY1□-060S-□	19.7 (0.776)	18.0 (0.709)	14.5 (0.571)	16.4 (0.646)	17.0 (0.669)
80	DY1□-080S-□	24.7 (0.972)	23.0 (0.906)	19.5 (0.768)	21.4 (0.843)	22.0 (0.866)
100	DY1□-100S-□	29.7 (1.169)	28.0 (1.102)	24.5 (0.965)	26.4 (1.039)	27.0 (1.063)
120	DY1□-120S-□	34.7 (1.366)	33.0 (1.299)	29.5 (1.161)	31.4 (1.236)	32.0 (1.260)
140	DY1□-140S-□	39.7 (1.563)	38.0 (1.496)	34.5 (1.358)	36.4 (1.433)	37.0 (1.457)

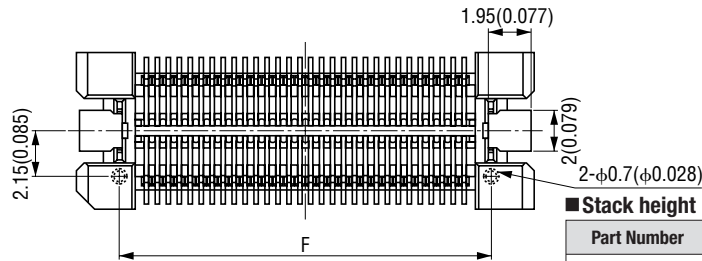
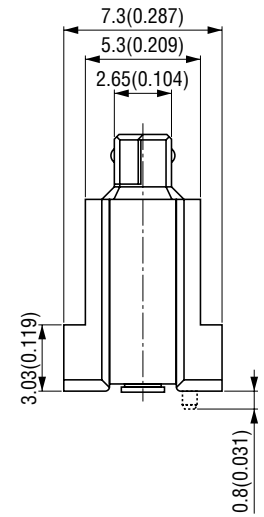
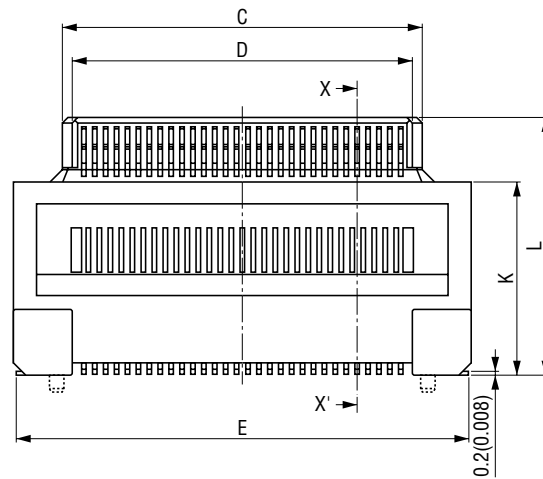
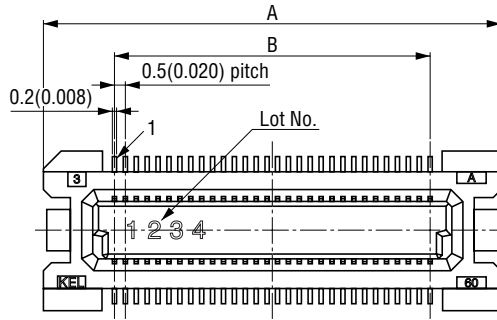
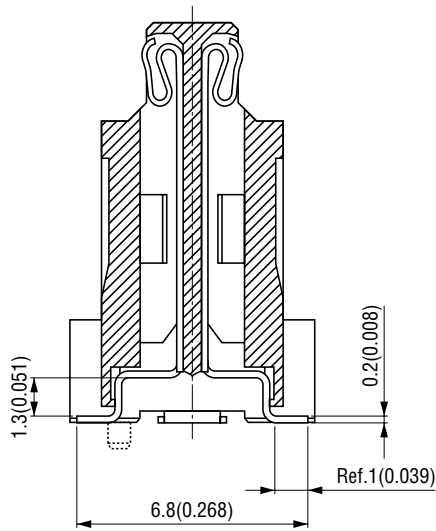
DY1□-□□□FS-□ (Plug, For 11, 12, 13 and 14mm flexible stacked height)

Plug (Straight : Flexible Stack Type)



Unit:mm(inch)

X-X' Cross Section



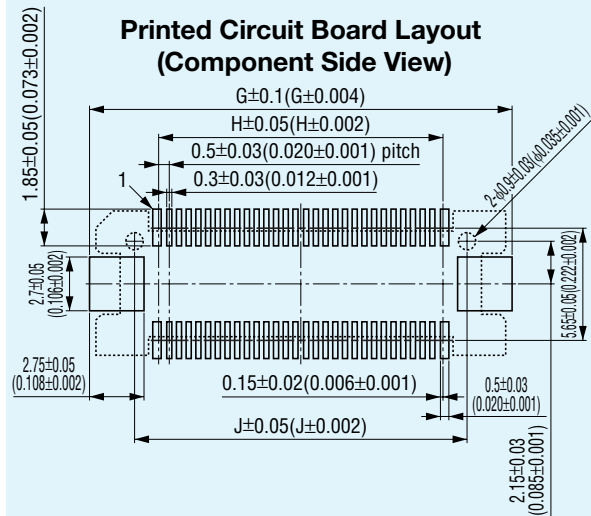
Stack height

Part Number	Stack height	K	L
DY1□-140FS-1	11 (0.433)	6.8 (0.268)	9.73 (0.383)
DY1□-□□□FS-2	12 (0.472)	7.8 (0.307)	10.73 (0.422)
DY1□-□□□FS-3	13 (0.512)	8.8 (0.346)	11.73 (0.462)
DY1□-□□□FS-4	14 (0.551)	9.8 (0.386)	12.73 (0.501)

Packaging style

Tray

Printed Circuit Board Layout  
(Component Side View)



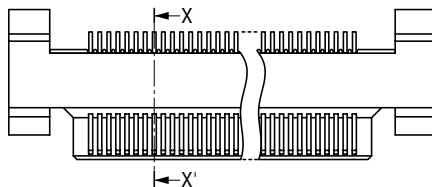
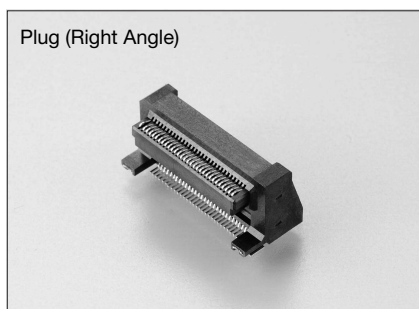
Product Table / Dimensions

No. of contacts	Part Number	A	B	C	D	E	F	G	H	J	Number of packaging
60	DY1□-060FS-□	20.9 (0.823)	14.5 (0.571)	16.4 (0.646)	15.5 (0.610)	20.7 (0.815)	17 (0.669)	21.5 (0.846)	14.5 (0.571)	17 (0.669)	60
80	DY1□-080FS-□	25.9 (1.020)	19.5 (0.768)	21.4 (0.843)	20.5 (0.807)	25.7 (1.012)	22 (0.866)	26.5 (1.043)	19.5 (0.768)	22 (0.866)	50
100	DY1□-100FS-□	30.9 (1.217)	24.5 (0.965)	26.4 (1.039)	25.5 (1.004)	30.7 (1.209)	27 (1.063)	31.5 (1.240)	24.5 (0.965)	27 (1.063)	50
120	DY1□-120FS-□	35.9 (1.413)	29.5 (1.161)	31.4 (1.236)	30.5 (1.201)	35.7 (1.406)	32 (1.260)	36.5 (1.437)	29.5 (1.161)	32 (1.260)	40
140	DY1□-140FS-□	40.9 (1.610)	34.5 (1.358)	36.4 (1.433)	35.5 (1.398)	40.7 (1.602)	37 (1.457)	41.5 (1.634)	34.5 (1.358)	37 (1.457)	40

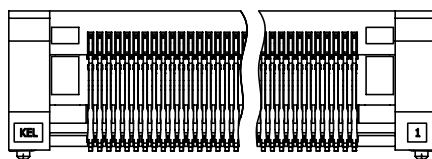
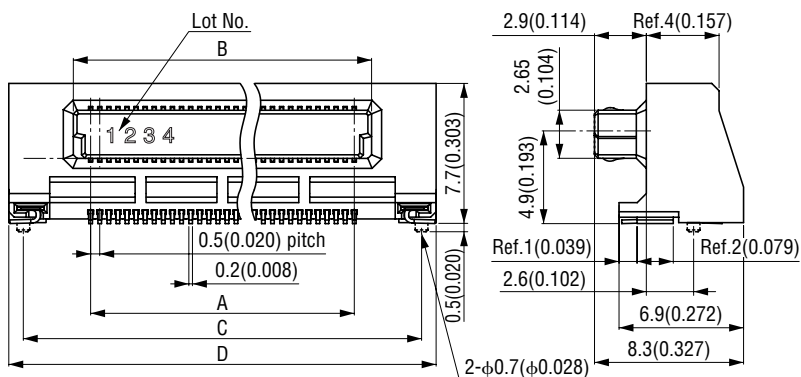
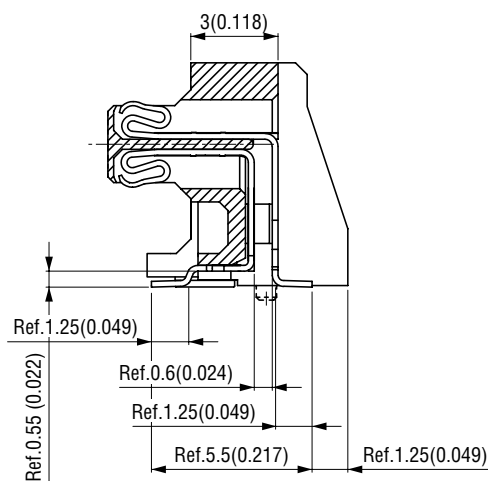
\*Order accepted 500pcs. min. Please contact your local sales office for orders less than 500pcs.

### DY1□-□□□L (Plug, Right angle)

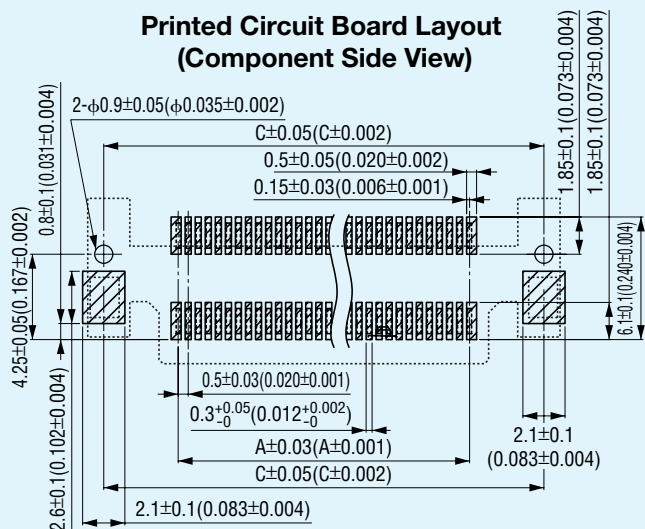
Unit:mm(inch)



#### 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	Number of packaging
30	DY1□-030L	7.0 (0.276)	8.9 (0.350)	14.4 (0.567)	16.0 (0.630)	500
40	DY1□-040L	9.5 (0.374)	11.4 (0.449)	16.9 (0.665)	18.5 (0.728)	500
50	DY1□-050L	12.0 (0.472)	13.9 (0.547)	19.4 (0.764)	21.0 (0.827)	500
60	DY1□-060L	14.5 (0.571)	16.4 (0.646)	21.9 (0.862)	23.5 (0.925)	500
80	DY1□-080L	19.5 (0.768)	21.4 (0.843)	26.9 (1.059)	28.5 (1.122)	500
90	DY1□-090L	22.0 (0.866)	23.9 (0.941)	29.4 (1.157)	31.0 (1.220)	500
100	DY1□-100L	24.5 (0.965)	26.4 (1.039)	31.9 (1.256)	33.5 (1.319)	500

\*Specifications and dimensions are subject to change without notice.