



**ELCO
Fine Pitch SMT
Board to Board Connectors**

Fine Pitch SMT Board to Board Connectors

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Fine Pitch SMT Board to Board Connectors

Product Selector Guide



Series	5602	5645	5087	5046	5047
Pitch	0.4mm	0.5mm	0.5mm	0.5mm	0.5mm
Mated Height	1.5mm	1.5mm	2.0mm 2.5mm	3.0mm 3.5mm 4.0mm 4.5mm	5.0mm 7.0mm
Number of Contacts	* 20 24 30 34 40 50 60 70 80 * * * *	* 20 * 30 * 40 50 60 * 80 * 100 * 120 140	10 * * 30 * * 50 60 * * * * * *	* 20 * 30 * 40 50 60 70 80 90 100 110 120 *	* 20 * 30 * 40 50 60 70 80 90 100 * *
Current Rating	0.5A Max.	0.4A Max.	0.4A Max.	0.4A Max.	0.4A Max.
Voltage Rating	50V Max.	50V Max.	50V Max.	50V Max.	50V Max.
Dielectric Withstanding Voltage	250V rms/min.	250V rms/min.	500V rms/min.	500V rms/min.	500V rms/min.
Insulator Material	Heat-Resisting Resin				
Contact Material	Phosphor Bronze Gold Plating				
Operating Temperature	-25°C ~ +85°C	-25°C ~ +85°C	-25°C ~ +85°C	-25°C ~ +85°C	-25°C ~ +85°C
Page	3-6	7-11	12-17	18-30	31-36

Fine Pitch SMT Board to Board Connectors

Series 5602



Series 5602 is a two-piece 0.4mm pitch, PCB stacking connector. Offered at a 1.5mm stack height, Series 5602 is ideal for high density packaging applications.

Market applications include mobile PC's, PDA's, DVD, Cell Phones and Digital Cameras.

FEATURES

0.4mm fine pitch and low profile connector, with stacking height of 1.5mm. These features result in the highest density stacking connector in the industry.

The connector design provides for an audible click, which confirms that the contacts are properly mated.

Offered with, and without, metal strain relief and boss.

Designed to prevent solder wicking.

Enclosed SMT contacts, provide for high density routing, by allowing traces to be located under the connector.

Ideal for FPC to PCB connections.

Compatible with high temperature, lead free, soldering processes.

Packaging consists of 2,000 connectors per reel.

SPECIFICATIONS

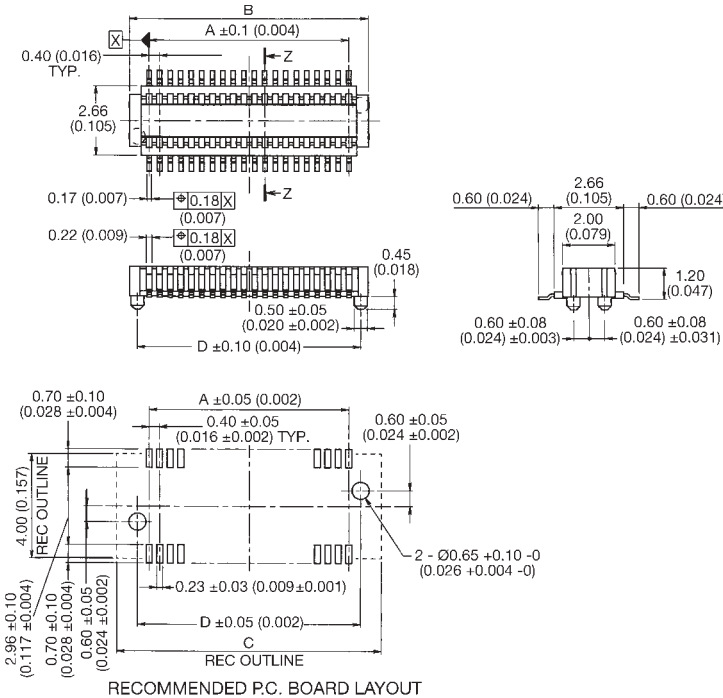
Series	5602
Mated Height	1.5mm
Pitch	0.4mm
Current	0.4A Max
Voltage	50V Max
D.W. Voltage	250V Max/min.
Mating Cycles	30

Fine Pitch SMT

Board to Board Connectors

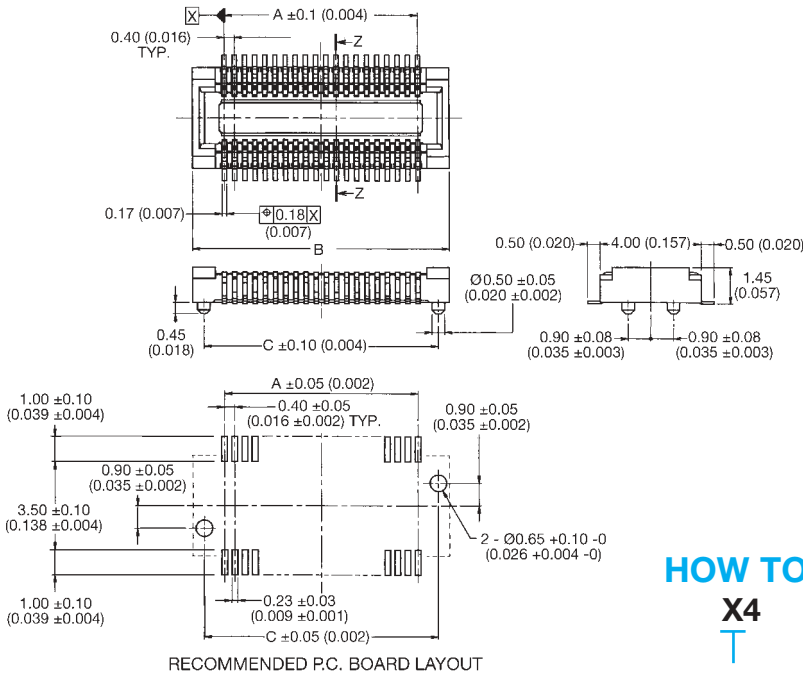
Series 5602 – 1.5mm Mated Height, without Strain Relief

PLUG



No. of Pos.	Dimension			
	A	B	C	D
020	3.6 (0.142)	5.1 (0.201)	6.1 (0.205)	4.5 (0.177)
024	4.4 (0.173)	5.9 (0.232)	6.9 (0.272)	5.3 (0.209)
030	5.6 (0.220)	7.1 (0.280)	8.1 (0.319)	6.5 (0.256)
034	6.4 (0.252)	7.9 (0.311)	8.9 (0.350)	7.3 (0.287)
040	7.6 (0.300)	9.1 (0.358)	10.1 (0.397)	8.5 (0.335)
050	9.6 (0.378)	11.1 (0.437)	12.1 (0.478)	10.5 (0.413)
060	11.6 (0.457)	13.1 (0.516)	14.1 (0.555)	12.5 (0.492)
070	13.6 (0.535)	15.1 (0.594)	16.1 (0.634)	14.5 (0.571)
080	15.6 (0.614)	17.1 (0.673)	18.1 (0.713)	16.5 (0.650)

RECEPTACLE



No. of Pos.	Dimension		
	A	B	C
020	3.6 (0.142)	6.1 (0.240)	5.2 (0.20)
024	4.4 (0.173)	6.9 (0.272)	6.0 (0.236)
030	5.6 (0.220)	8.1 (0.319)	7.2 (0.283)
034	6.6 (0.260)	8.9 (0.350)	8.0 (0.315)
040	7.6 (0.300)	10.1 (0.397)	9.2 (0.361)
050	9.6 (0.378)	12.1 (0.476)	11.2 (0.441)
060	11.6 (0.457)	14.1 (0.555)	13.2 (0.520)
070	13.6 (0.535)	16.1 (0.634)	15.2 (0.598)
080	15.6 (0.614)	18.1 (0.713)	17.2 (0.677)

HOW TO ORDER

X4

Prefix

14 = Plug
24 = Receptacle

5602

Series Number

XXX

Number of Positions

020
024
030
034
040
050
060
070
080

00X

Variation Code

0 = Without Strain Relief and without Boss
1 = Without Strain Relief and with Boss

829

Finish Code

Parts are supplied in tape and reel packaging with 2000 pieces per reel.

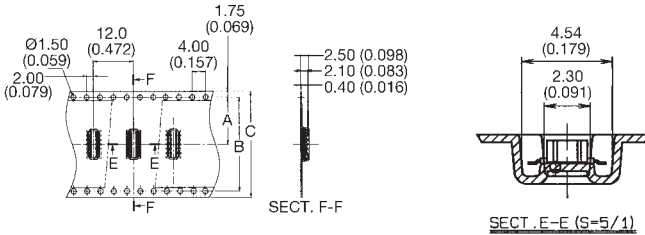
Fine Pitch SMT Board to Board Connectors

Series 5602

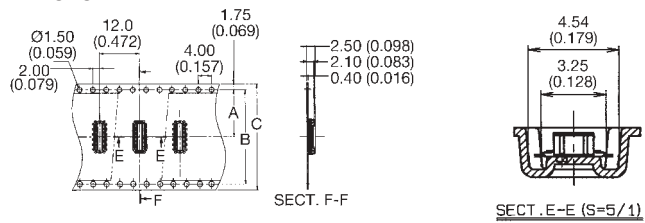
Tape and Reel Package for Mated Height 1.5mm

PLUG

Without Strain Relief



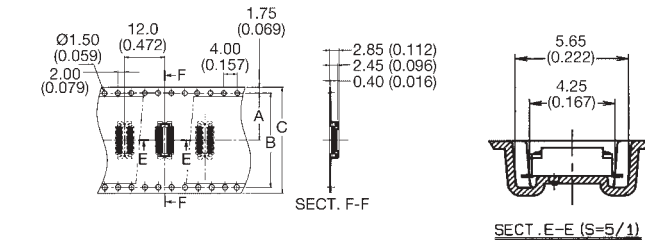
With Strain Relief



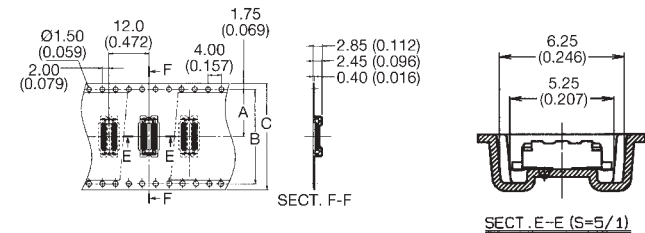
No. of Pos.	Dimension			
	A	B	C	D
020	11.5 (0.453)	—	24 (0.945)	30.4 (1.197)
024	11.5 (0.453)	—	24 (0.945)	30.4 (1.197)
030	11.5 (0.453)	—	24 (0.945)	30.4 (1.197)
034	11.5 (0.453)	—	24 (0.945)	30.42 (1.197)
040	11.5 (0.453)	—	24 (0.945)	30.4 (1.197)
050	14.2 (0.559)	28.4 (0.921)	32 (1.260)	38.4 (1.512)
060	14.2 (0.559)	28.4 (0.921)	32 (1.260)	38.4 (1.512)
070	14.2 (0.559)	28.4 (0.921)	32 (1.260)	38.4 (1.512)
080	14.2 (0.559)	28.4 (0.921)	32 (1.260)	38.4 (1.512)

RECEPTACLE

Without Strain Relief



With Strain Relief



No. of Pos.	Dimension			
	A	B	C	D
020	11.5 (0.453)	—	24 (0.945)	30.4 (1.197)
024	11.5 (0.453)	—	24 (0.945)	30.4 (1.197)
030	11.5 (0.453)	—	24 (0.945)	30.4 (1.197)
034	11.5 (0.453)	—	24 (0.945)	30.42 (1.197)
040	11.5 (0.453)	—	24 (0.945)	30.4 (1.197)
050	14.2 (0.559)	28.4 (0.921)	32 (1.260)	38.4 (1.512)
060	14.2 (0.559)	28.4 (0.921)	32 (1.260)	38.4 (1.512)
070	14.2 (0.559)	28.4 (0.921)	32 (1.260)	38.4 (1.512)
080	14.2 (0.559)	28.4 (0.921)	32 (1.260)	38.4 (1.512)

HOW TO ORDER

X4

Prefix

14 = Plug
24 = Receptacle

5602

Series Number

XXX

Number of Positions

020
024
030
034
040
050
060
070
080

00X

Variation Code

0 = Without Strain Relief and without Boss
1 = Without Strain Relief and with Boss
2 = With Strain Relief and without Boss
3 = With Strain Relief and with Boss

829

Finish Code

Specification of the catalog might be changed without notice.
Please verify our drawing and specification with your design.
Parts are supplied in tape and reel packaging with 2000 pieces per reel.

Fine Pitch SMT Board to Board Connectors

Series 5645



Series 5645 is 0.5mm pitch and 1.5mm mated height low-profile board to board connector, designed for high density mounting, especially for a need of low-profile mating.

FEATURES

Pitch is 0.5mm. Mated height is 1.5mm which is a low-profile design. These features contribute to small sized board design.

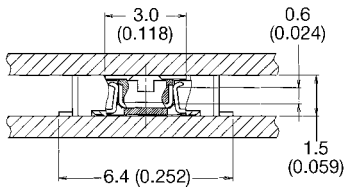
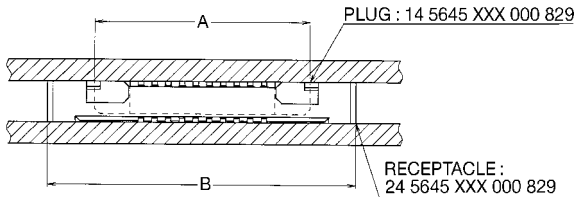
Low-profile, super compact and offers high reliability.

This product has a metal strain relief which improves board peeling strength when soldered.

Connector design assists pre mating misalignment. Designed for protecting soldering wicking.

Designed for pick and place mounting. Parts are supplied in tape and reel with 2000 pieces per reel.

Contact sales office for details of other available pin counts.



SPECIFICATIONS

Series	5645
Mated Height	1.5mm
Pitch	0.5mm
Current	0.4A Max
Voltage	50V Max
D.W. Voltage	250V rms/min
Mating Cycles	30

No. of Pos.	Dimension	
	A	B
020	7.9 (0.311)	11.3 (0.445)
030	10.4 (0.409)	13.8 (0.543)
040	12.9 (0.508)	16.3 (0.642)
050	15.4 (0.606)	18.8 (0.740)
060	17.9 (0.705)	21.3 (0.839)
080	22.9 (0.902)	26.3 (1.035)
100	27.9 (1.098)	31.3 (1.232)
120	32.9 (1.295)	36.3 (1.429)
140	37.9 (1.492)	41.3 (1.626)

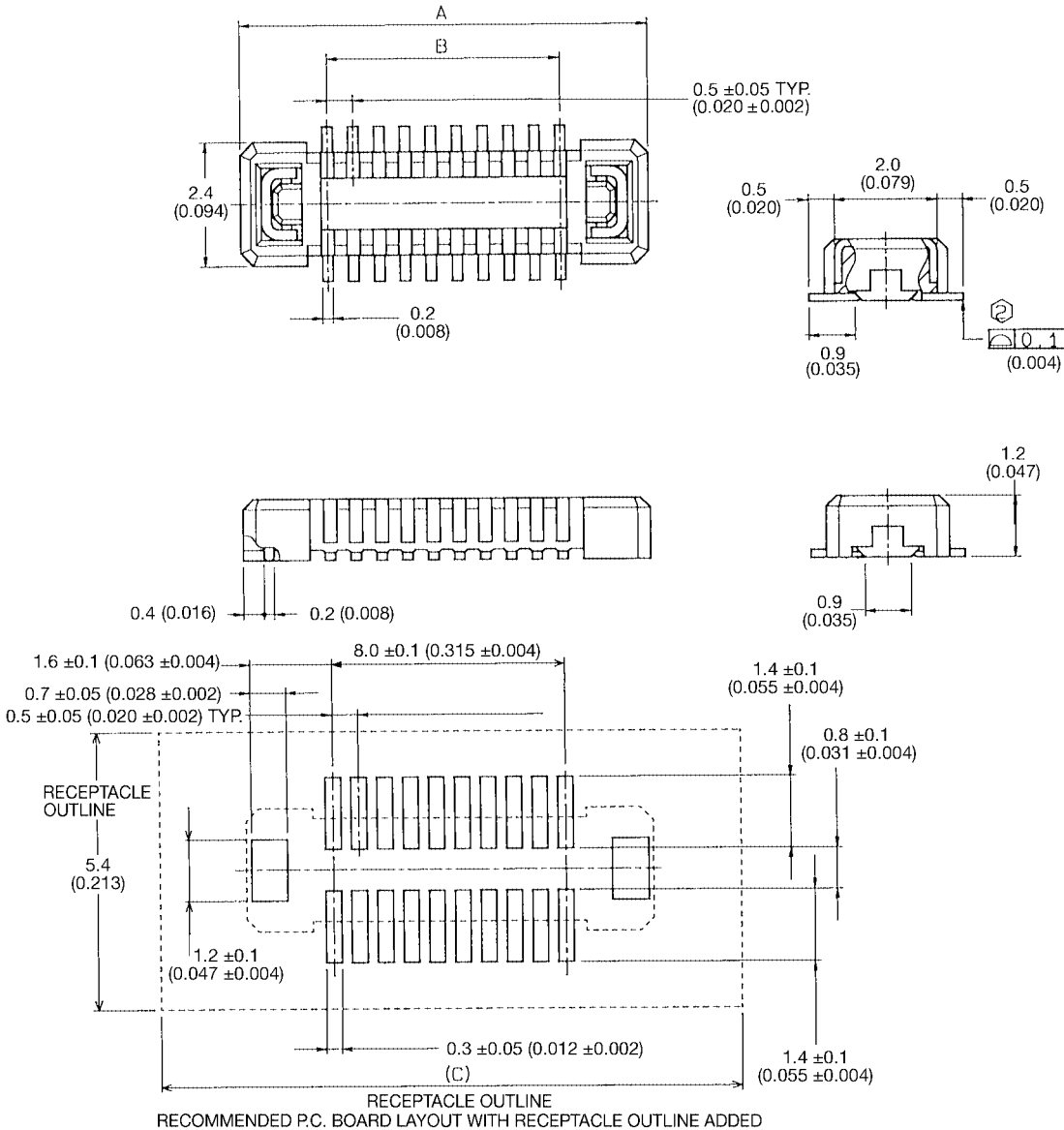
Series	Variation	Mated Height	Gold Plating	Strain Relief	Vacuum Cover	Part Number				Number of Positions							
										020	030	040	050	060	080	100	120
5645	Plug	1.5mm	0.1µm	O	O	14 5645	XXX	X	00 829	O	O		O	O			
	Receptacle		0.1µm	O	1	24 5645	XXX	0	00 829	O	O		O	O			

O = Available
1 = Not available

Fine Pitch SMT Board to Board Connectors

Series 5645

Plug for Mated Height with Receptacle of 1.5mm



No. of Pos.	Dimension		
	A	B	C
020	7.9 (0.311)	4.5 (0.177)	8.0 (0.315)
030	10.4 (0.409)	7.0 (0.276)	10.5 (0.413)
040	12.9 (0.508)	9.5 (0.374)	13.0 (0.512)
050	15.4 (0.606)	12.0 (0.472)	18.8 (0.740)
060	17.9 (0.705)	14.5 (0.571)	18.0 (0.709)
080	22.9 (0.902)	19.5 (0.768)	23.0 (0.906)
100	27.9 (1.098)	24.5 (0.965)	28.0 (1.102)
120	32.9 (1.295)	29.5 (1.161)	33.0 (1.299)
140	37.9 (1.492)	34.5 (1.358)	38.0 (1.496)

HOW TO ORDER

14

Prefix

5645

Series Number

XXX

Number of Positions

020
030
040
050
060
080
100
120
140

X00

Variation Code

0 = Without vacuum cover
1 = With vacuum cover

829

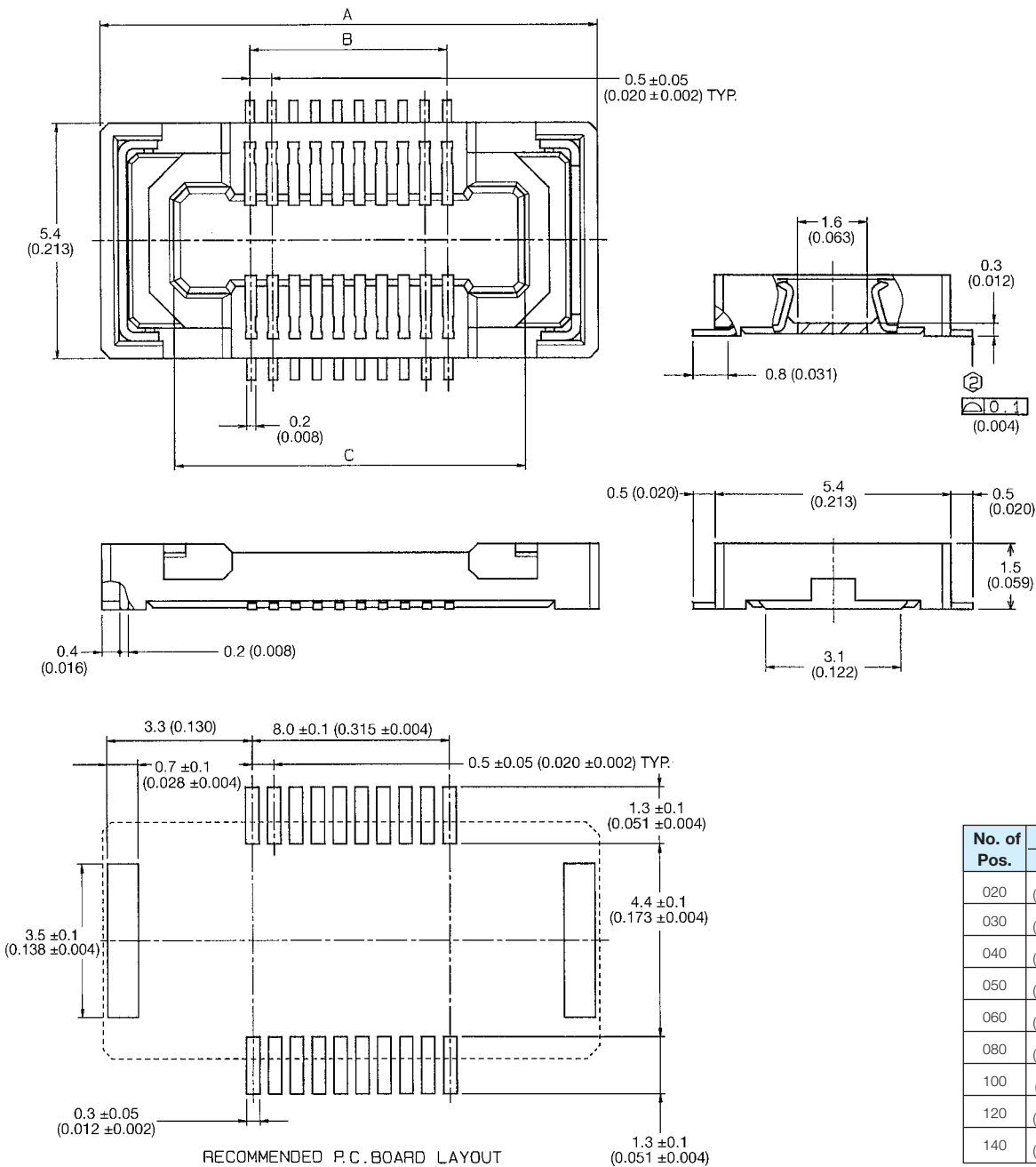
Finish Code

Parts are supplied in tape and reel packaging with 2000 pieces per reel.

Fine Pitch SMT Board to Board Connectors

Series 5645

Receptacle for Mated Height with Plug of 1.5mm



HOW TO ORDER

24	5645	XXX	000	829
Prefix	Series Number	Number of Positions	Variation Code	Finish Code
		020 030		
		040 050		
		060 080		
		100 120		
		140		

Parts are supplied in tape and reel packaging with 2000 pieces per reel.

Fine Pitch SMT Board to Board Connectors

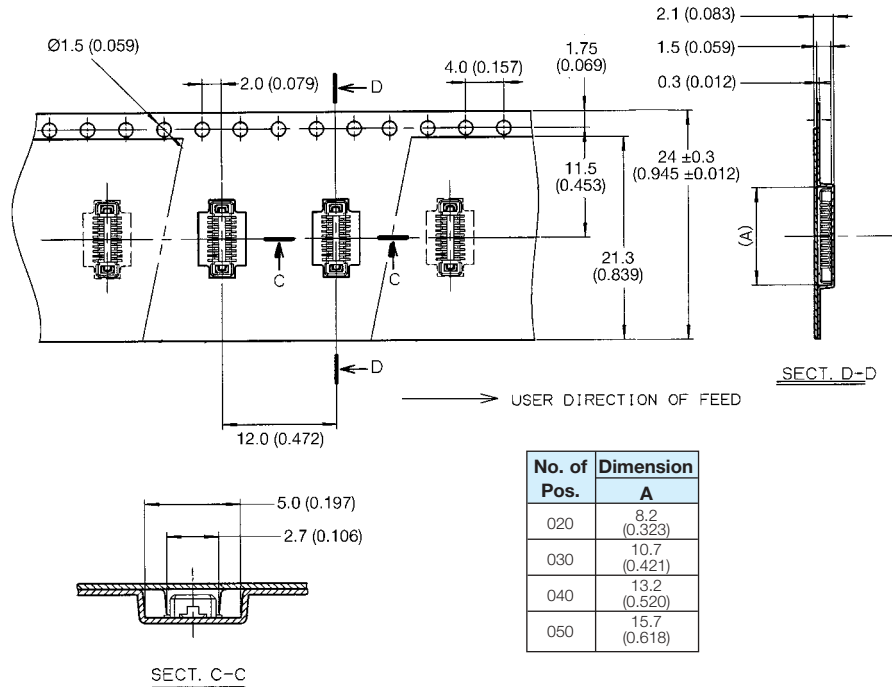
Series 5645

Tape and Reel Package for Mated Height 1.5mm

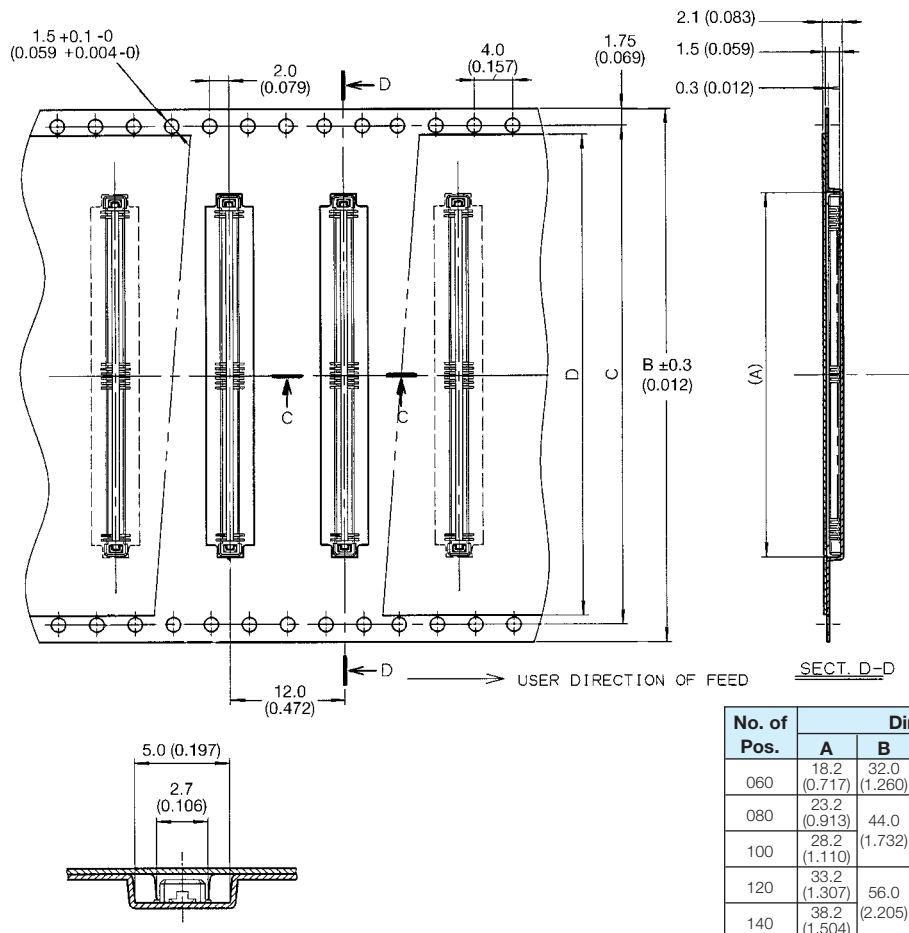


PLUG

20 - 40 Contacts



60 - 140 Contacts



Parts are supplied in tape and reel packaging with 2000 pieces per reel.

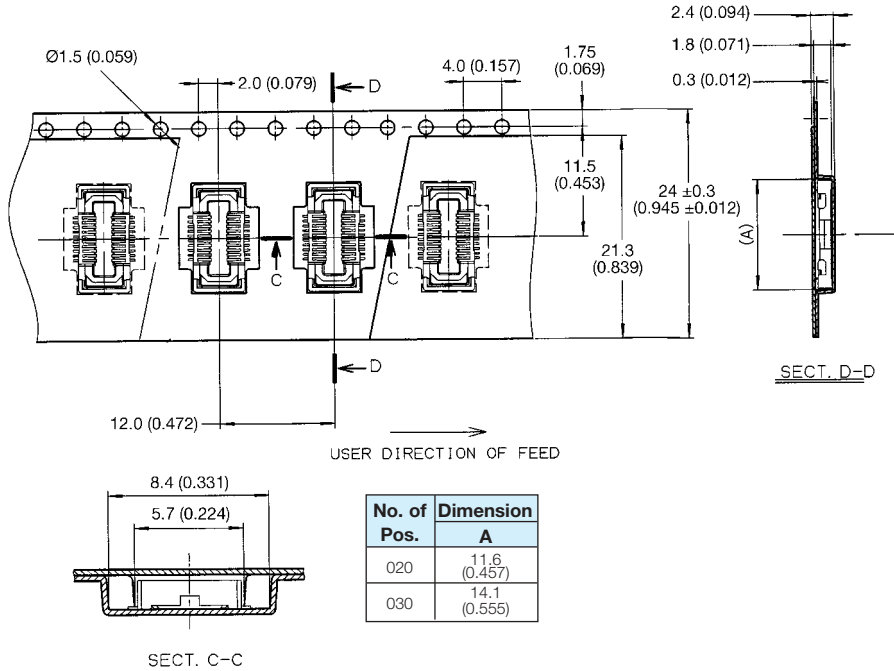
Fine Pitch SMT Board to Board Connectors

Series 5645

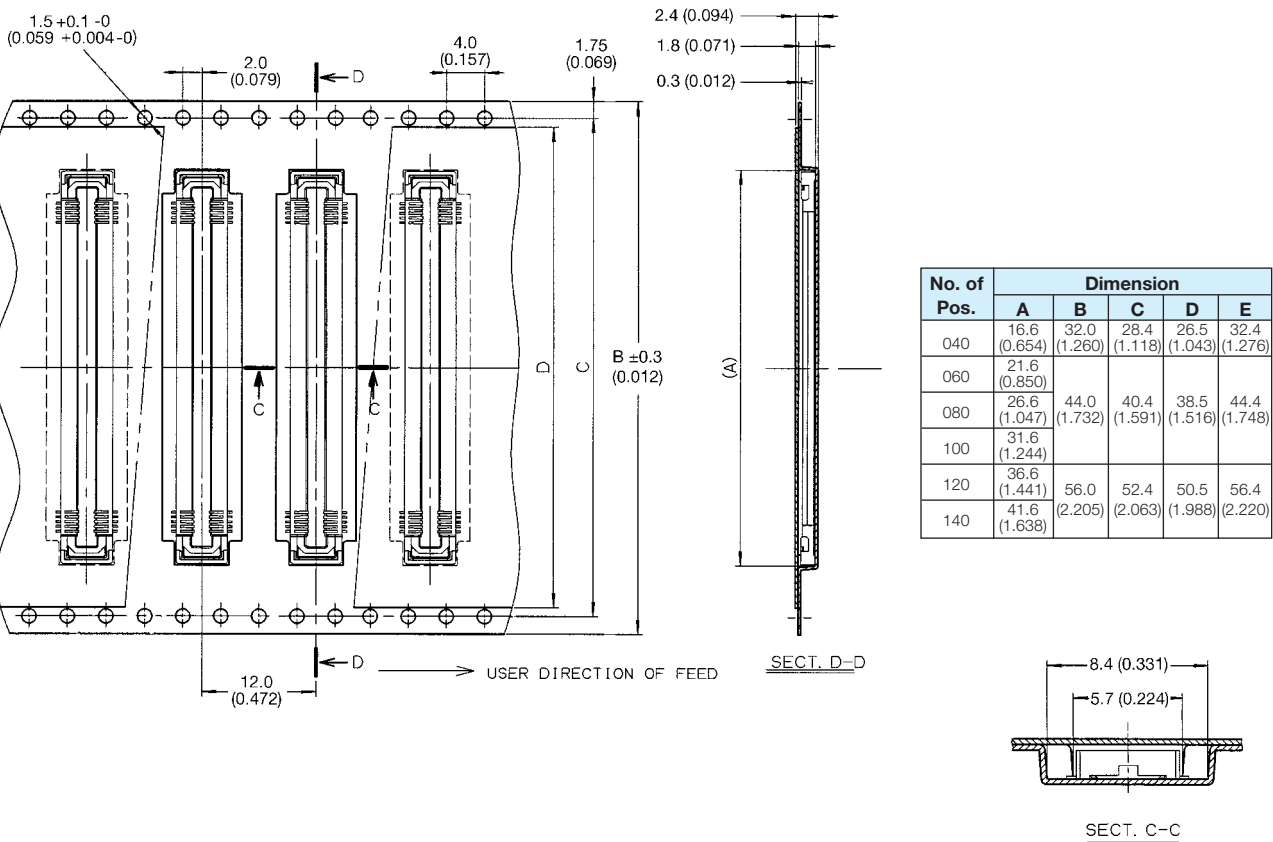
Tape and Reel Package for Mated Height 1.5mm

RECEPTACLE

20 - 30 Contacts



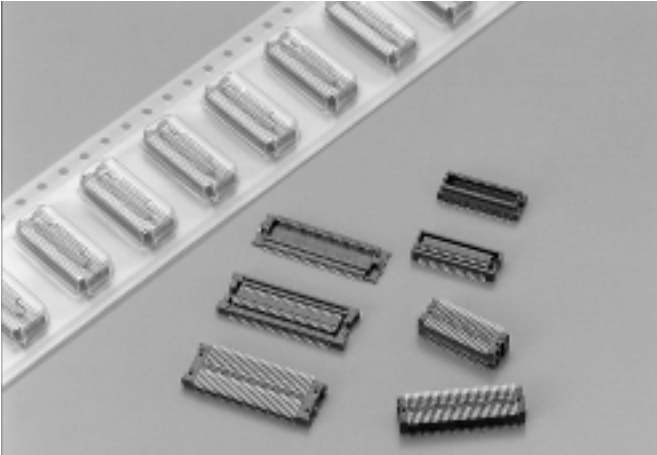
40 - 140 Contacts



Parts are supplied in tape and reel packaging with 2000 pieces per reel.

Fine Pitch SMT Board to Board Connectors

Series 5087



Series 5087 is the board to board, fine pitch connector which meets the requirement for high density circuitry in the market and designed especially for portable equipment. Mated height between boards can be 2.0mm or 2.5mm.

FEATURES

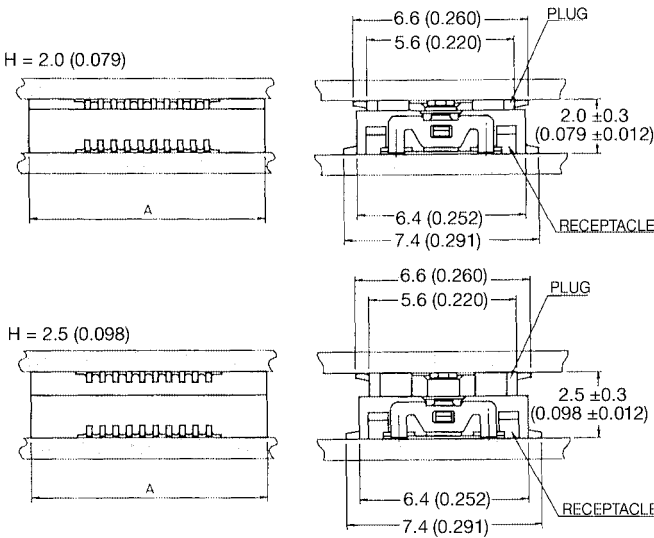
5087 series is offered with strain relief, with or without vacuum tape.

Designed to have the strong resistance against torque forces on mating area to achieve the high reliability in the natural fall shock environment.

Parts are supplied in tape and reel with 1000 pieces per reel. Contact sales office for details of other available pin counts.

SPECIFICATIONS

Series	5087
Mated Height	2.0, 2.5mm
Pitch	0.5mm
Current	0.4A Max
Voltage	50V Max
D.W. Voltage	500V rms/min
Mating Cycles	30



No. of Pos.	Dimension A
010	6.4 (0.252)
030	11.4 (0.449)
050	16.4 (0.646)
060	18.9 (0.744)

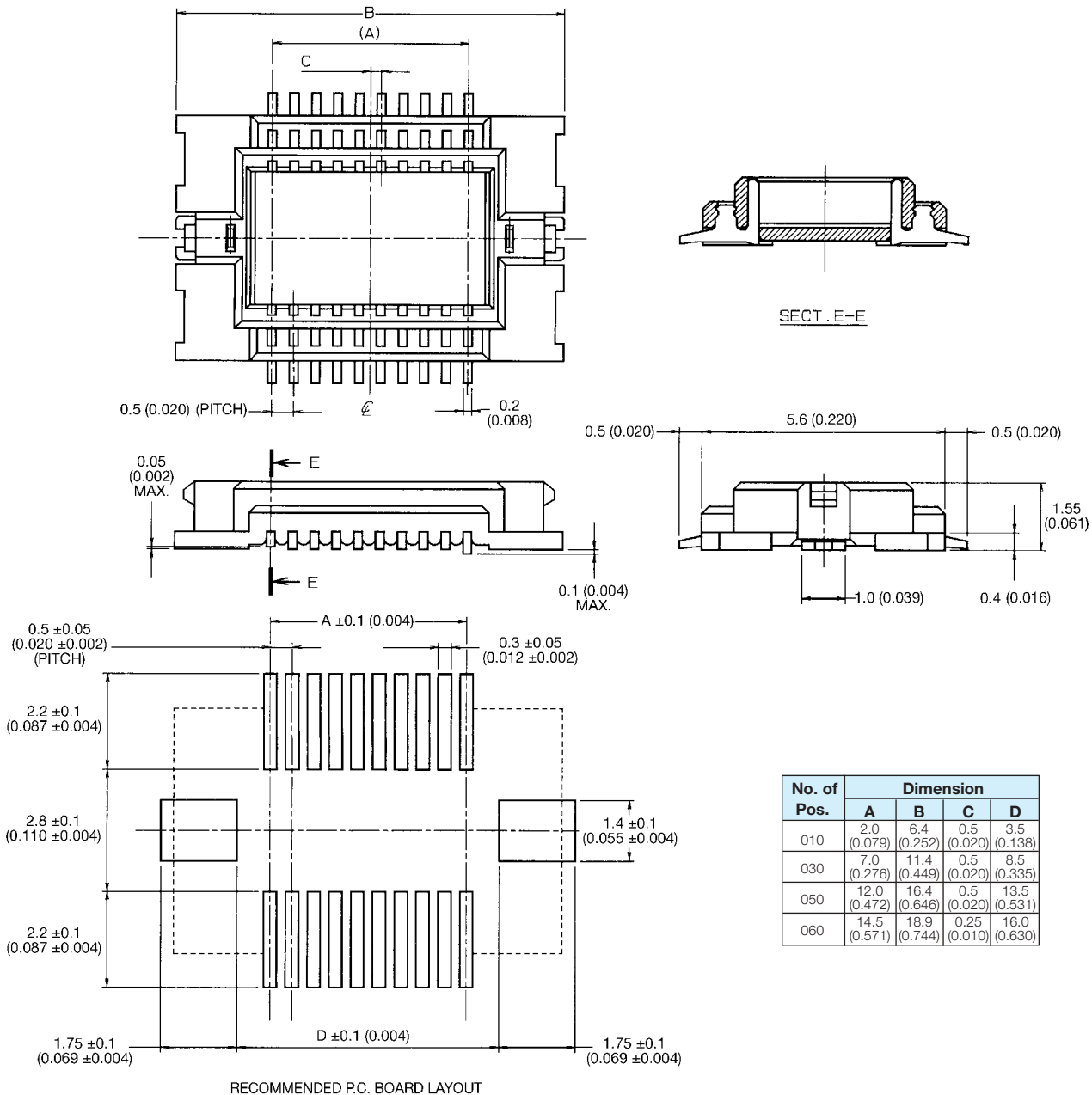
Series	Variation	Mated Height	Gold Plating	Strain Relief	Vacuum Cover	Part Number		Number of Positions							
								010	020	030	040	050	060	080	140
5087	Plug	2.0mm	0.1µm	O	O	14 5087	XXX 9 20 829	O		O		O	O		
				O	1	14 5087	XXX 0 20 829	O				O	O		
		2.5mm	0.1µm	O	O	14 5087	XXX 9 25 829			O		O	O		
				O	1	14 5087	XXX 0 25 829			O		O	O		
	Receptacle		0.1µm	O	O	24 5087	XXX 9 07 829	O		O		O	O		
				O	1	24 5087	XXX 0 07 829	O		O		O	O		

O = Available
1 = Not available

Fine Pitch SMT Board to Board Connectors

Series 5087

Plug for Mated Height with Receptacle of 2.0mm



No. of Pos.	Dimension			
	A	B	C	D
010	2.0 (0.079)	6.4 (0.252)	0.5 (0.020)	3.5 (0.138)
030	7.0 (0.276)	11.4 (0.449)	0.5 (0.020)	8.5 (0.335)
050	12.0 (0.472)	16.4 (0.646)	0.5 (0.020)	13.5 (0.531)
060	14.5 (0.571)	18.9 (0.744)	0.25 (0.010)	16.0 (0.630)

HOW TO ORDER

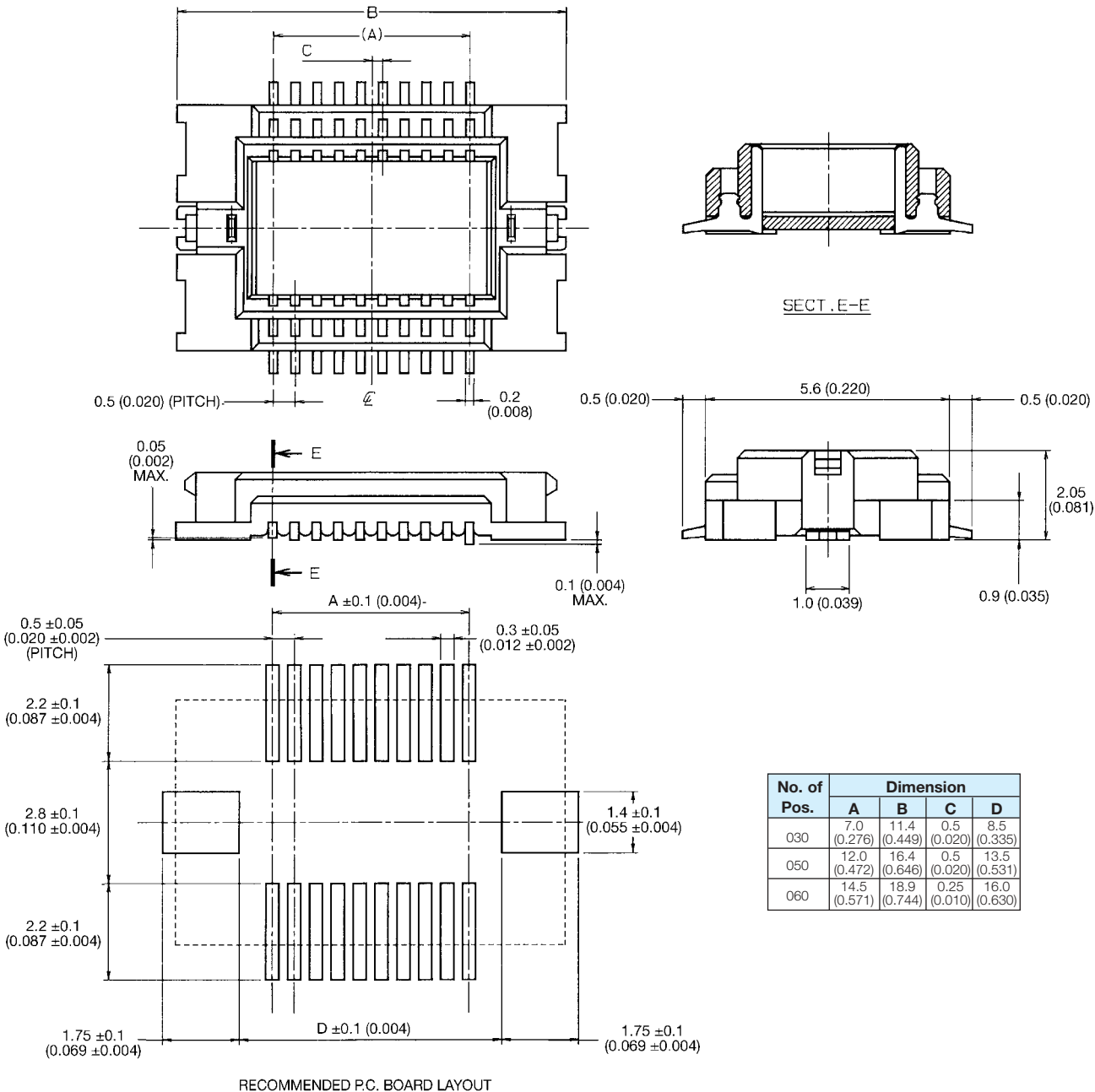
14	5087	XXX	X20	829
Prefix	Series Number	Number of Positions	Variation Code	Finish Code
		010 030 050 060	9 = With strain relief, with vacuum cover 0 = With strain relief, without vacuum cover	

Parts are supplied in tape and reel packaging with 1000 pieces per reel.

Fine Pitch SMT Board to Board Connectors

Series 5087

Plug for Mated Height with Receptacle of 2.5mm



HOW TO ORDER

14	5087	XXX	X25	829
Prefix	Series Number	Number of Positions 030 050 060	Variation Code 9 = With strain relief, with vacuum cover 0 = With strain relief, without vacuum cover	Finish Code

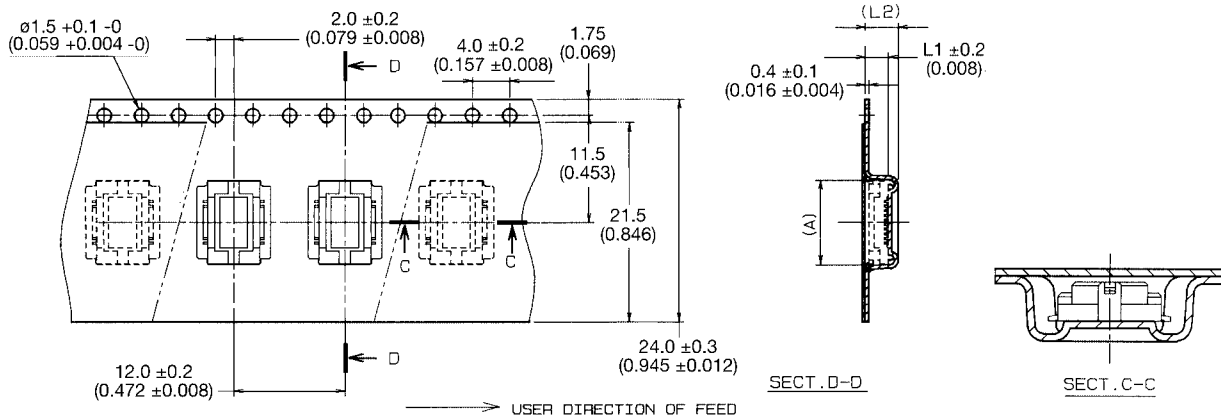
Parts are supplied in tape and reel packaging with 1000 pieces per reel.

Fine Pitch SMT Board to Board Connectors

Series 5087 Plug Tape and Reel Package H=2.0 - 2.5mm



20 - 50 Contacts



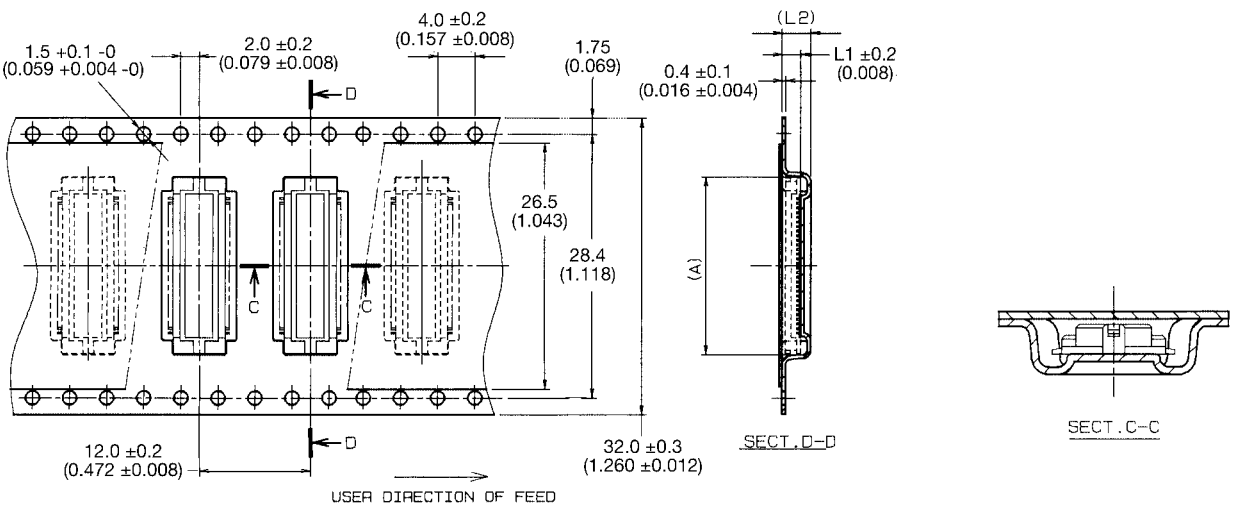
H=2.0 (0.079)

Dimension				
P/N	No. of Pos.	A	L1	L2
14 5087 010 X20 829	010	6.6 (0.260)	2.0 (0.079)	3.1 (0.122)
↕ 030 ↕	030	11.6 (0.457)	2.0 (0.079)	3.1 (0.122)
14 5087 050 X20 829	050	16.6 (0.654)	2.0 (0.079)	3.1 (0.122)

H=2.5 (0.098)

Dimension				
P/N	No. of Pos.	A	L1	L2
14 5087 030 X25 829	030	11.6 (0.457)	2.5 (0.100)	3.6 (0.142)
14 5087 050 X25 829	050	16.6 (0.654)	2.5 (0.100)	3.6 (0.142)

60 Contacts



H=2.0 (0.079)

Dimension				
P/N	No. of Pos.	A	L1	L2
14 5087 060 X20 829	060	19.1 (0.752)	2.0 (0.079)	3.1 (0.122)

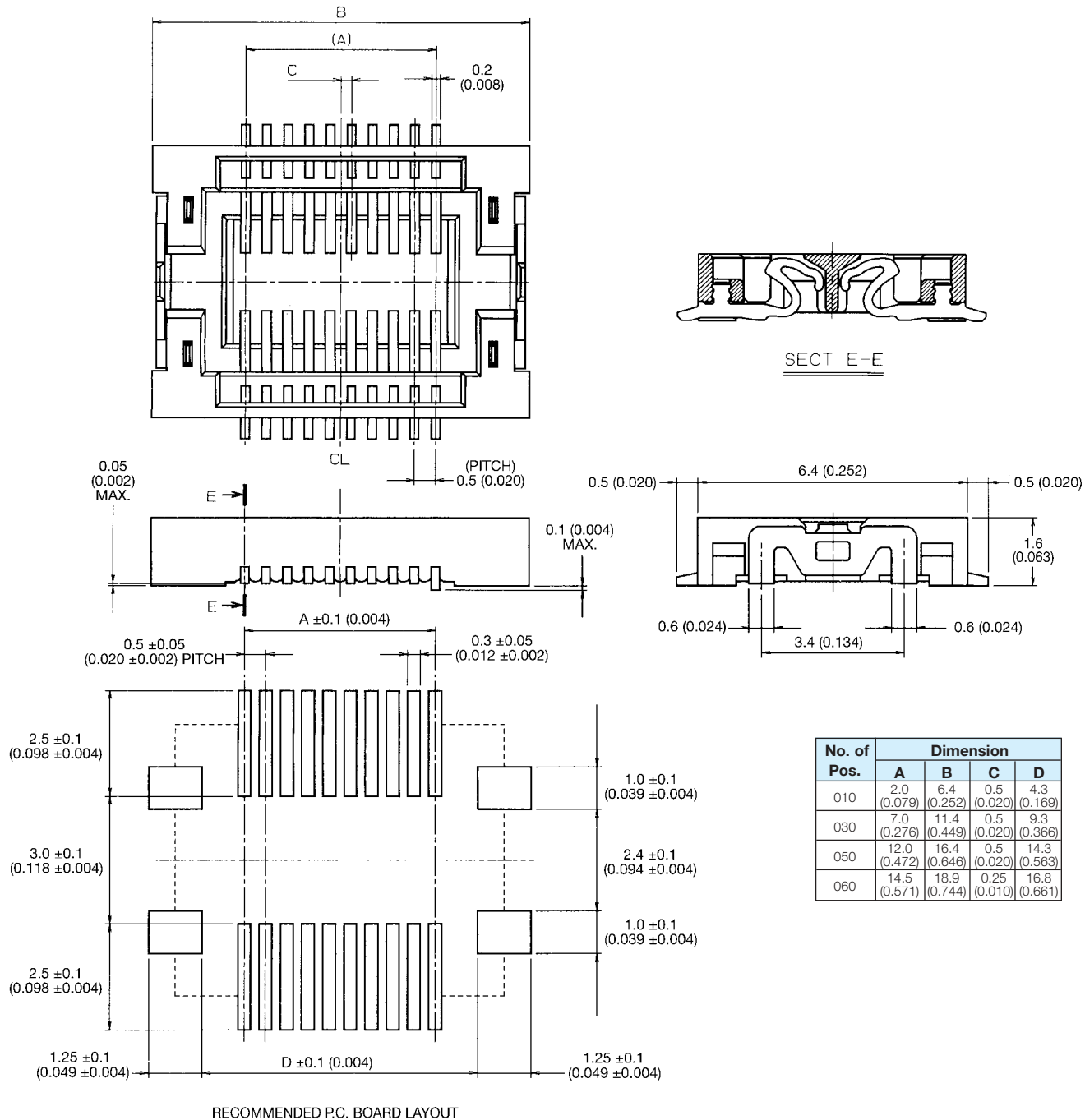
H=2.5 (0.098)

Dimension				
P/N	No. of Pos.	A	L1	L2
14 5087 060 X25 829	060	19.1 (0.752)	2.5 (0.098)	3.6 (0.142)

Fine Pitch SMT Board to Board Connectors

Series 5087

Receptacle for Mated Height with Plug of 2.0 or 2.5mm



RECOMMENDED P.C. BOARD LAYOUT

HOW TO ORDER

24

Prefix

5087

Series Number

XXX

Number of Positions

010
030
050
060

X07

Variation Code

9 = With strain relief,
with vacuum cover
0 = With strain relief,
without vacuum cover

829

Finish Code

Parts are supplied in tape and reel packaging
with 1000 pieces per reel.

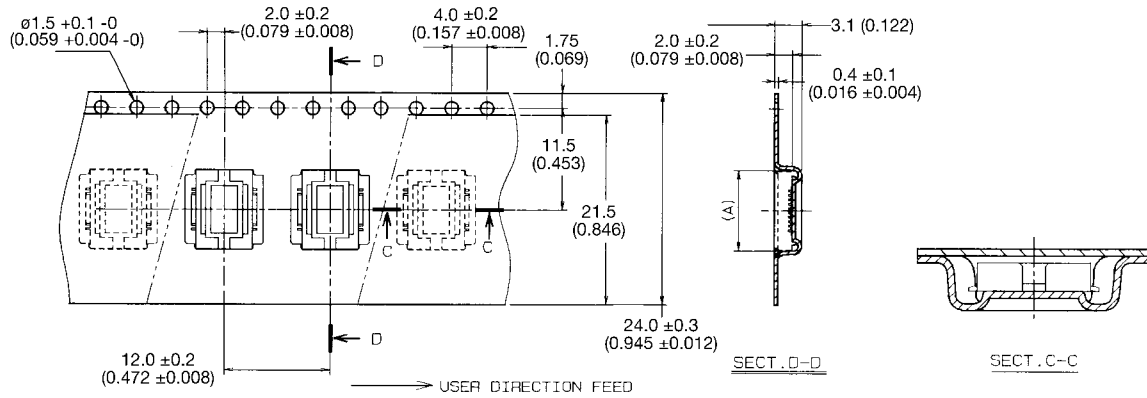
Fine Pitch SMT

Board to Board Connectors

Series 5087 Receptacle Tape and Reel Package

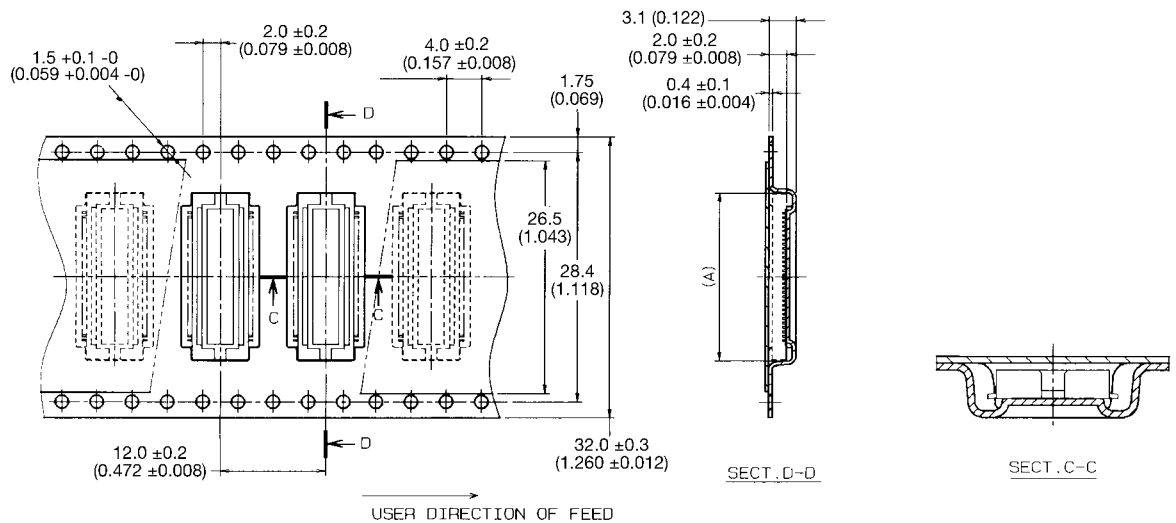
H=2.0 - 2.5mm

10 - 50 Contacts



Dimension		
P/N	No. of Pos.	A
24 5087 010 XXX 829	010	6.6 (0.260)
↑ 030 ↓	030	11.6 (0.457)
24 5087 050 XXX 829	050	16.6 (0.654)

60 Contacts



Dimension		
P/N	No. of Pos.	A
24 5087 060 XXX 829	060	19.1 (0.752)

Fine Pitch SMT Board to Board Connectors Series 5046



Series 5046 is the board to board, fine pitch connector which meets the requirement for high density circuitry in the market and designed especially for portable equipment. Mated height between boards can be from 3.0mm to 4.5mm.

FEATURES

Series 5046 is offered with or without strain relief.

Designed to have the strong resistance against torque forces on mating area to achieve the high reliability in the natural fall shock environment.

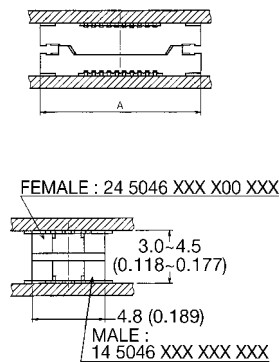
Adoption of bellows type contact with excellent contact reliability.

High durability to achieve 50 mating cycles.

Parts are supplied in tape and reel with 1000 pieces per reel.

SPECIFICATIONS

Series	5046
Mated Height	3.0, 3.5, 4.0, 4.5mm
Pitch	0.5mm
Current	0.4A Max
Voltage	50V Max
D.W. Voltage	500V rms/min.
Mating Cycles	50



No. of Pos.	Dimension A
020	10.5 (0.413)
030	13.0 (0.512)
040	15.5 (0.610)
050	18.0 (0.709)
060	20.5 (0.807)
070	23.0 (0.906)
080	25.5 (1.004)
090	28.0 (1.102)
100	30.5 (1.201)
110	33.0 (1.299)
120	35.5 (1.398)

Series	Variation	Mated Height	Gold Plating	Strain Relief	Vacuum Cover	Part Number					Number of Positions												
											020	030	040	050	060	070	080	090	100	110	120		
5046	Plug	3.0mm	0.1µm	O	O	14 5046	XXX	6	30	829	O	O	O	O	O	O	O	O	O	O	O	O	
					1	14 5046	XXX	1	30	829	O	O	O	O	O	O	O	O	O	O	O	O	
				1	O	14 5046	XXX	5	30	829	O	O	O	O	O	O	O	O	O	O	O	O	O
					1	14 5046	XXX	0	30	829	O	O	O	O	O	O	O	O	O	O	O	O	O
		3.5mm	0.1µm	O	O	14 5046	XXX	6	35	829	O	O	O	O	O	O	O	O	O	O	O	O	
					1	14 5046	XXX	1	35	829	O	O	O	O	O	O	O	O	O	O	O	O	
				1	O	14 5046	XXX	5	35	829	O	O	O	O	O	O	O	O	O	O	O	O	O
					1	14 5046	XXX	0	35	829	O	O	O	O	O	O	O	O	O	O	O	O	O
		4.0mm	0.1µm	O	O	14 5046	XXX	6	40	829	O	O	O	O	O	O	O	O	O	O	O	O	O
					1	14 5046	XXX	1	40	829	O	O	O	O	O	O	O	O	O	O	O	O	
				1	O	14 5046	XXX	5	40	829	O	O	O	O	O	O	O	O	O	O	O	O	O
					1	14 5046	XXX	0	40	829	O	O	O	O	O	O	O	O	O	O	O	O	O
		4.5mm	0.1µm	O	O	14 5046	XXX	6	45	829	O	O	O	O	O	O	O	O	O	O	O	O	O
					1	14 5046	XXX	1	45	829	O	O	O	O	O	O	O	O	O	O	O	O	
				1	O	14 5046	XXX	5	45	829	O	O	O	O	O	O	O	O	O	O	O	O	O
					1	14 5046	XXX	0	45	829	O	O	O	O	O	O	O	O	O	O	O	O	O
	Receptacle		0.1µm	O	O	24 5046	XXX	6	00	829	O	O	O	O	O	O	O	O	O	O	O	O	
					1	24 5046	XXX	1	00	829	O	O	O	O	O	O	O	O	O	O	O	O	
				1	O	24 5046	XXX	5	00	829	O	O	O	O	O	O	O	O	O	O	O	O	O
					1	24 5046	XXX	2	00	829	O	O	O	O	O	O	O	O	O	O	O	O	O

Types without strain relief offer greater space saving on the pcb

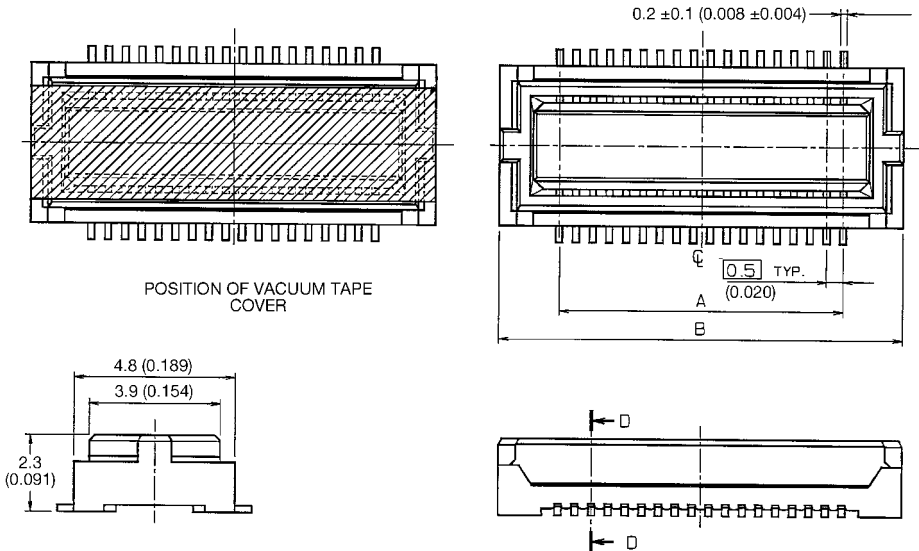
O = Available
1 = Not available

Fine Pitch SMT Board to Board Connectors

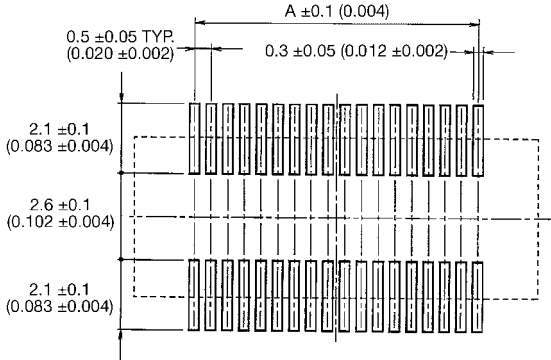
Series 5046

Plug for Mated Height with Receptacle of 3.0mm

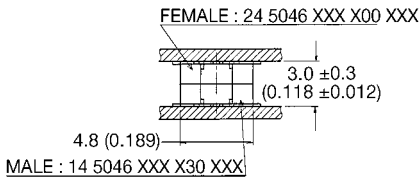
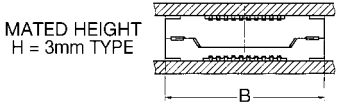
Without Strain Relief



No. of Pos.	Dimension	
	A	B
020	4.5 (0.177)	8.1 (0.319)
030	7.0 (0.276)	10.6 (0.417)
040	9.5 (0.374)	13.1 (0.516)
050	12.0 (0.472)	15.6 (0.614)
060	14.5 (0.571)	18.1 (0.713)
070	17.0 (0.669)	20.6 (0.811)
080	19.5 (0.768)	23.1 (0.909)
090	22.0 (0.866)	25.6 (1.008)
100	24.0 (0.945)	28.1 (1.106)
110	27.0 (1.063)	30.5 (1.201)
120	29.5 (1.161)	33.1 (1.303)



RECOMMENDED P.C. BOARD LAYOUT



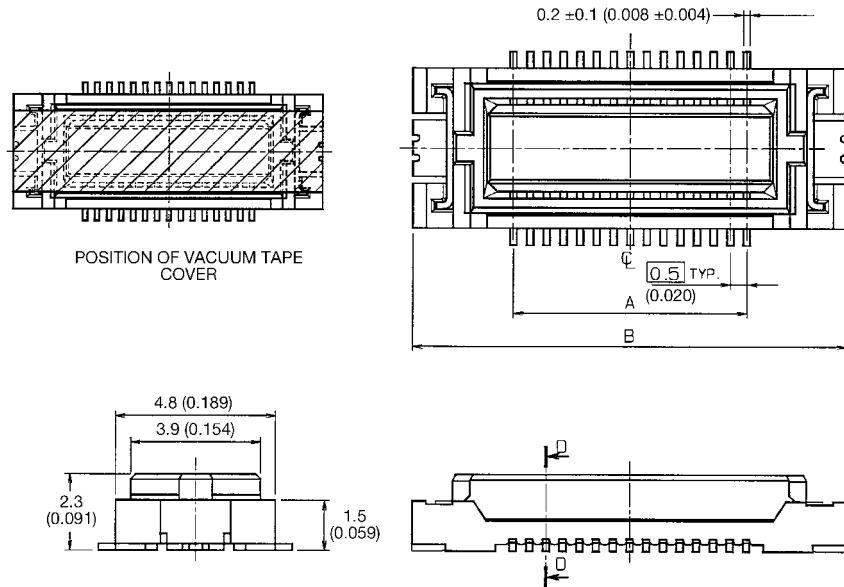
Fine Pitch SMT Board to Board Connectors

Series 5046

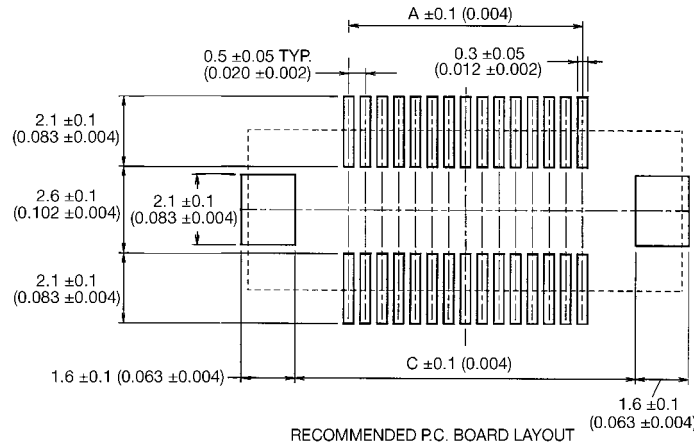
Plug for Mated Height with Receptacle of 3.0mm



With Strain Relief



No. of Pos.	Dimension		
	A	B	C
020	4.5 (0.177)	10.5 (0.413)	7.7 (0.303)
030	7.0 (0.276)	13.0 (0.512)	10.2 (0.402)
040	9.5 (0.374)	15.5 (0.610)	12.7 (0.500)
050	12.0 (0.472)	18.0 (0.709)	15.2 (0.598)
060	14.5 (0.571)	20.5 (0.807)	17.7 (0.697)
070	17.0 (0.669)	23.0 (0.906)	20.2 (0.795)
080	19.5 (0.768)	25.5 (1.004)	22.7 (0.894)
090	22.0 (0.866)	28.0 (1.102)	25.2 (0.992)
100	24.5 (0.965)	30.5 (1.201)	27.7 (1.091)
110	27.0 (1.063)	33.0 (1.299)	30.2 (1.189)
120	29.5 (1.161)	35.5 (1.398)	32.7 (1.287)



HOW TO ORDER

14	5046	XXX	X30	829
Prefix 14 = Male	Series Number	Number of Positions	Variation Code 0 = Without strain relief 1 = With strain relief 5 = Without strain relief, with vacuum cover 6 = With strain relief, with vacuum cover	Finish Code
		020 030 040 050 060 070 080 090 100 110 120		

Parts are supplied in tape and reel packaging with 1000 pieces per reel.

Mated Height	P/N	
3.0mm	Female	24 5046 XXX X00 829
	Male	14 5046 XXX X30 829

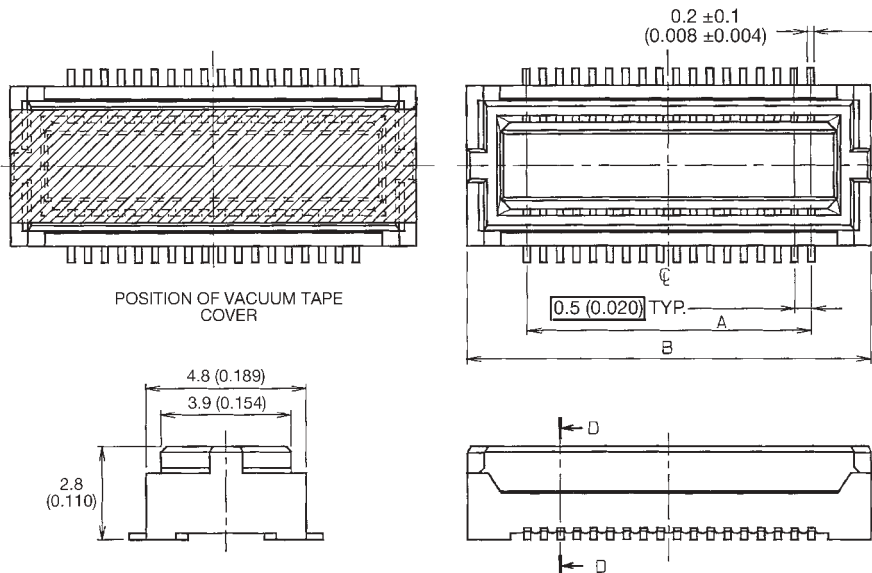
Fine Pitch SMT Board to Board Connectors

Series 5046

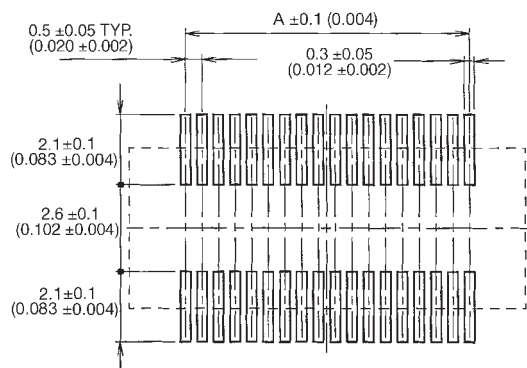
Plug for Mated Height with Receptacle of 3.5mm



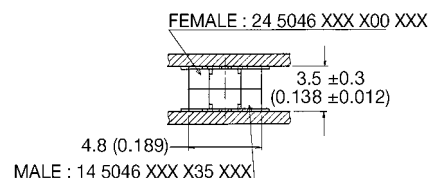
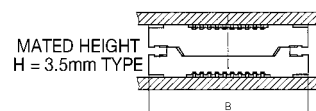
Without Strain Relief



No. of Pos.	Dimension	
	A	B
020	4.5 (0.177)	8.1 (0.319)
030	7.0 (0.276)	10.6 (0.417)
040	9.5 (0.374)	13.1 (0.516)
050	12.0 (0.472)	15.6 (0.614)
060	14.5 (0.571)	18.1 (0.713)
070	17.0 (0.669)	20.6 (0.811)
080	19.5 (0.768)	23.1 (0.909)
090	22.0 (0.866)	25.6 (1.008)
100	24.0 (0.945)	28.1 (1.106)
110	27.0 (1.063)	30.5 (1.201)
120	29.5 (1.161)	33.1 (1.303)



RECOMMENDED P.C. BOARD LAYOUT



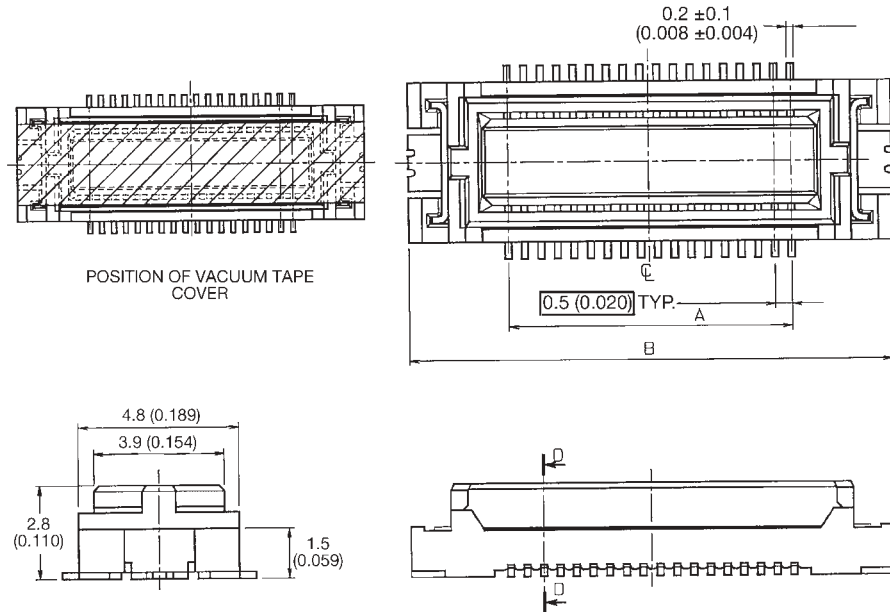
Fine Pitch SMT Board to Board Connectors

Series 5046

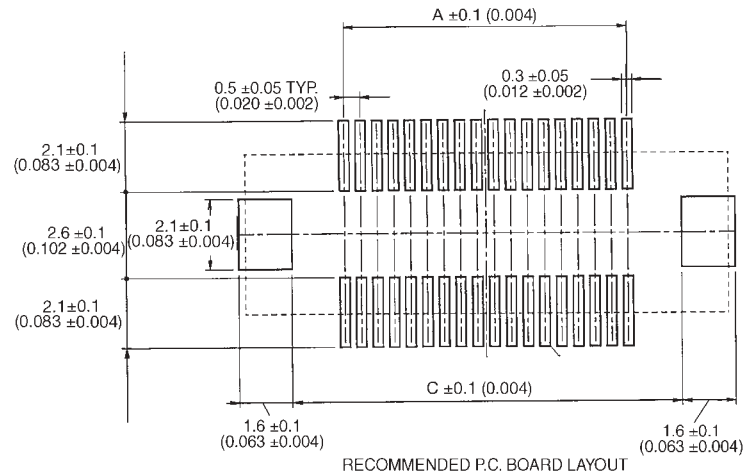
Plug for Mated Height with Receptacle of 3.5mm



With Strain Relief



No. of Pos.	Dimension		
	A	B	C
020	4.5 (0.177)	10.5 (0.413)	7.7 (0.303)
030	7.0 (0.276)	13.0 (0.512)	10.2 (0.402)
040	9.5 (0.374)	15.5 (0.610)	12.7 (0.500)
050	12.0 (0.472)	18.0 (0.709)	15.2 (0.598)
060	14.5 (0.571)	20.5 (0.807)	17.7 (0.697)
070	17.0 (0.669)	23.0 (0.906)	20.2 (0.795)
080	19.5 (0.768)	25.5 (1.004)	22.7 (0.894)
090	22.0 (0.866)	28.0 (1.102)	25.2 (0.992)
100	24.5 (0.945)	30.5 (1.201)	27.7 (1.091)
110	27.0 (1.063)	33.0 (1.299)	30.2 (1.189)
120	29.5 (1.161)	35.5 (1.398)	32.7 (1.287)



HOW TO ORDER

14
Prefix
14 = Male

5046
Series Number

XXX
Number of Positions

X35
Variation Code
0 = Without strain relief
1 = With strain relief
5 = Without strain relief,
with vacuum cover
6 = With strain relief,
with vacuum cover

829
Finish Code

Parts are supplied in tape and reel packaging
with 1000 pieces per reel.

Mated Height	P/N	
3.5mm	Female	24 5046 XXX X00 829
	Male	14 5046 XXX X35 829

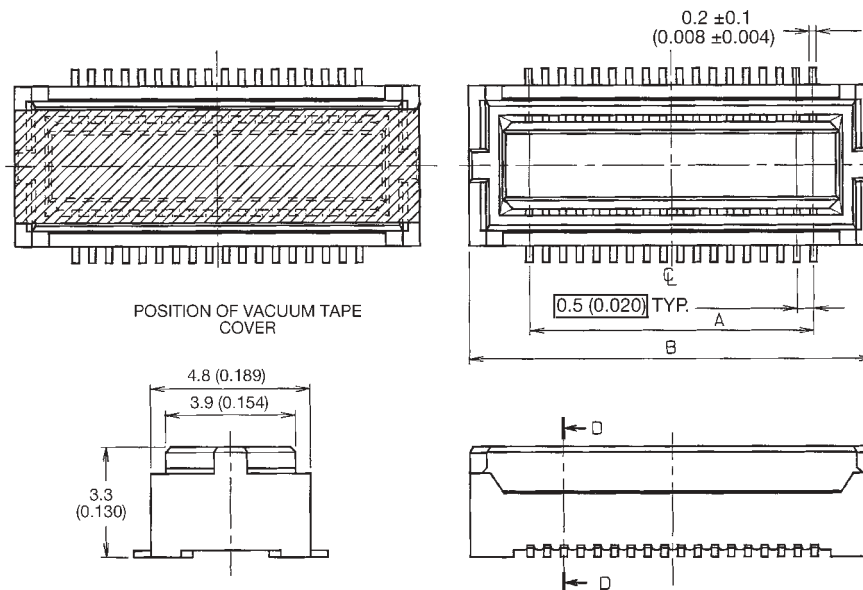
Fine Pitch SMT Board to Board Connectors

Series 5046

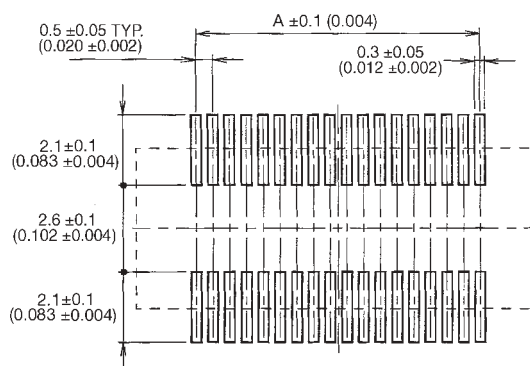
Plug for Mated Height with Receptacle of 4.0mm



Without Strain Relief

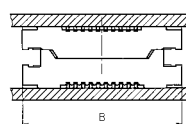


No. of Pos.	Dimension	
	A	B
020	4.5 (0.177)	8.1 (0.319)
030	7.0 (0.276)	10.6 (0.417)
040	9.5 (0.374)	13.1 (0.516)
050	12.0 (0.472)	15.6 (0.614)
060	14.5 (0.571)	18.1 (0.713)
070	17.0 (0.669)	20.6 (0.811)
080	19.5 (0.768)	23.1 (0.909)
090	22.0 (0.866)	25.6 (1.008)
100	24.0 (0.945)	28.1 (1.106)
110	27.0 (1.063)	30.5 (1.201)
120	29.5 (1.161)	33.1 (1.303)

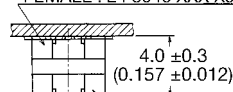


RECOMMENDED P.C. BOARD LAYOUT

MATED HEIGHT
H = 4mm TYPE



FEMALE : 24 5046 XXX X00 XXX



MALE : 14 5046 XXX X40 XXX

4.8 (0.189)

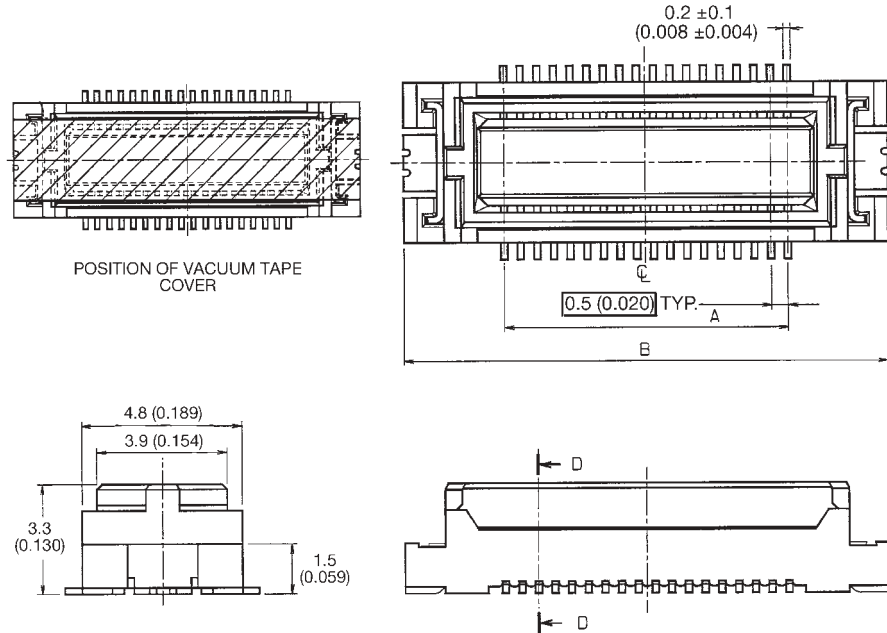
Fine Pitch SMT Board to Board Connectors



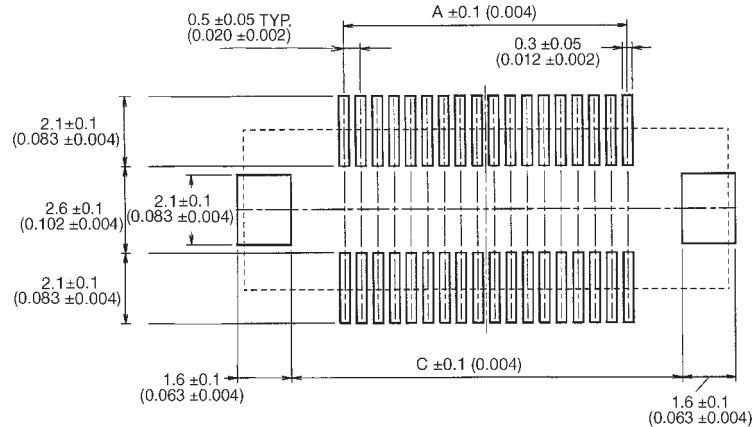
Series 5046

Plug for Mated Height with Receptacle of 4.0mm

With Strain Relief



No. of Pos.	Dimension		
	A	B	C
020	4.5 (0.177)	10.5 (0.413)	7.7 (0.303)
030	7.0 (0.276)	13.0 (0.512)	10.2 (0.402)
040	9.5 (0.374)	15.5 (0.610)	12.7 (0.500)
050	12.0 (0.472)	18.0 (0.709)	15.2 (0.598)
060	14.5 (0.571)	20.5 (0.807)	17.7 (0.697)
070	17.0 (0.669)	23.0 (0.906)	20.2 (0.795)
080	19.5 (0.768)	25.5 (1.004)	22.7 (0.894)
090	22.0 (0.866)	28.0 (1.102)	25.2 (0.992)
100	24.5 (0.965)	30.5 (1.201)	27.7 (1.091)
110	27.0 (1.063)	33.0 (1.299)	30.2 (1.189)
120	29.5 (1.161)	35.5 (1.398)	32.7 (1.287)



RECOMMENDED P.C. BOARD LAYOUT

HOW TO ORDER

14

Prefix
14 = Male

5046

Series Number

XXX

Number of Positions

020
030
040
050
060
070
080
090
100
110
120

X40

Variation Code
0 = Without strain relief
1 = With strain relief
5 = Without strain relief, with vacuum cover
6 = With strain relief, with vacuum cover

829

Finish Code

Parts are supplied in tape and reel packaging with 1000 pieces per reel.

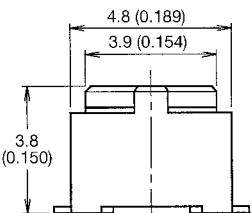
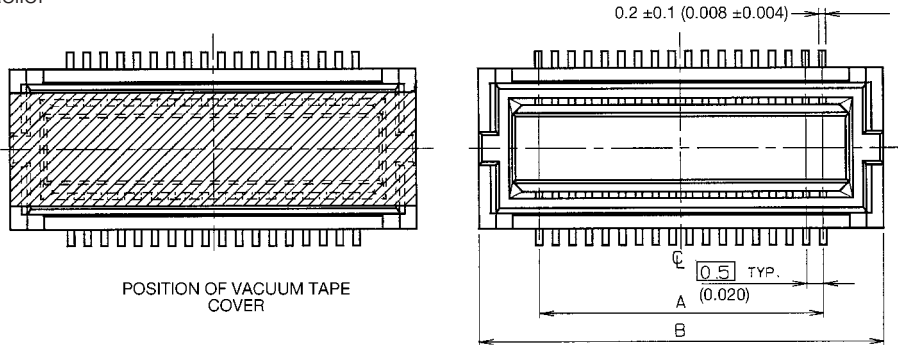
Mated Height	P/N	
4.0mm	Female	24 5046 XXX X00 829
	Male	14 5046 XXX X40 829

Fine Pitch SMT Board to Board Connectors

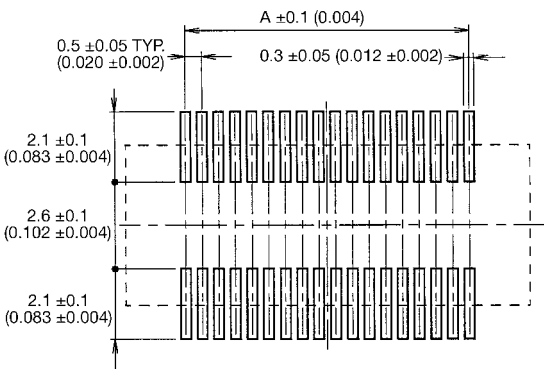
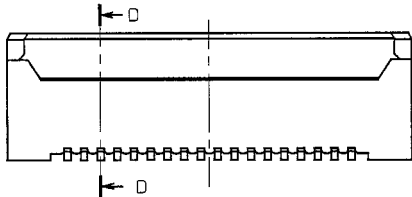
Series 5046

Plug for Mated Height with Receptacle of 4.5mm

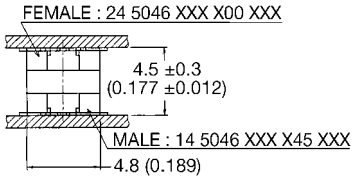
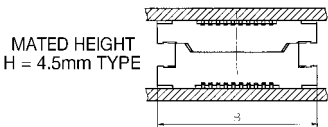
Without Strain Relief



No. of Pos.	Dimension	
	A	B
020	4.5 (0.177)	8.1 (0.319)
030	7.0 (0.276)	10.6 (0.417)
040	9.5 (0.374)	13.1 (0.516)
050	12.0 (0.472)	15.6 (0.614)
060	14.5 (0.571)	18.1 (0.713)
070	17.0 (0.669)	20.6 (0.811)
080	19.5 (0.768)	23.1 (0.909)
090	22.0 (0.866)	25.6 (1.008)
100	24.0 (0.945)	28.1 (1.106)
110	27.0 (1.063)	30.6 (1.205)
120	29.5 (1.161)	33.1 (1.303)



RECOMMENDED P.C. BOARD LAYOUT

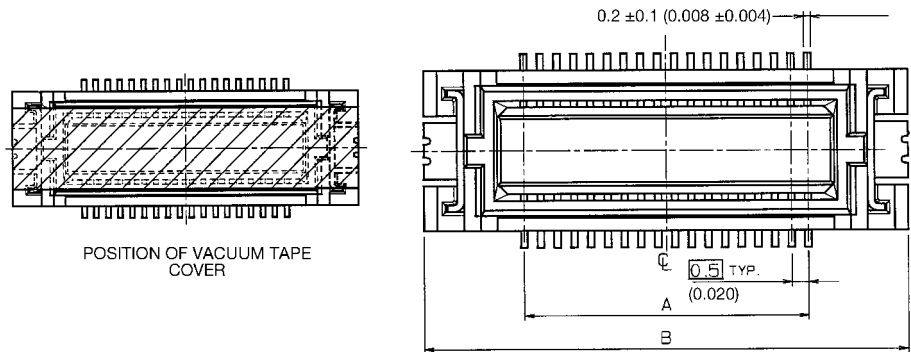


Fine Pitch SMT Board to Board Connectors

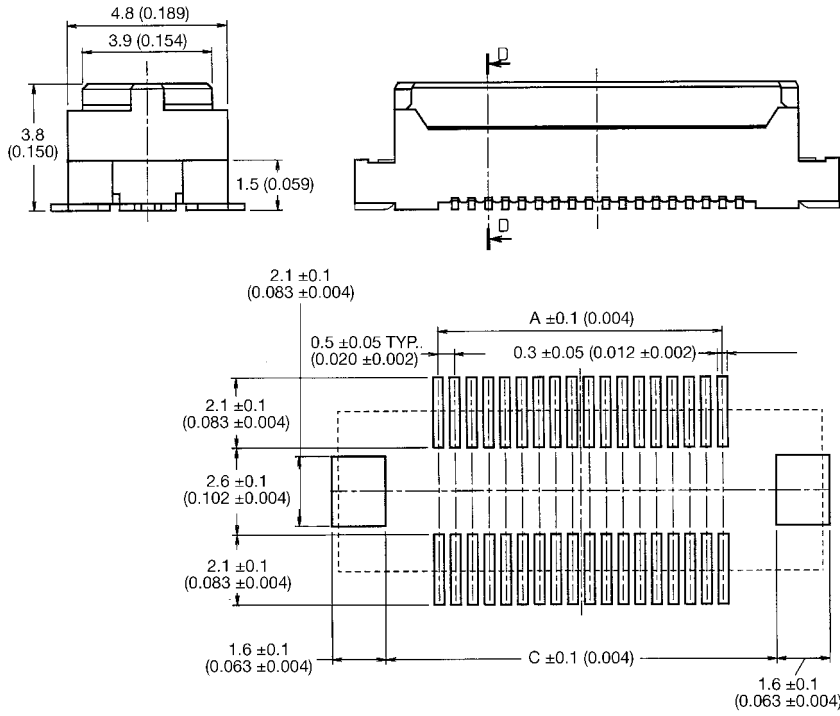
Series 5046

Plug for Mated Height with Receptacle of 4.5mm

With Strain Relief



No. of Pos.	Dimension		
	A	B	C
020	4.5 (0.177)	10.5 (0.413)	7.7 (0.303)
030	7.0 (0.276)	13.0 (0.512)	10.2 (0.402)
040	9.5 (0.374)	15.5 (0.610)	12.7 (0.500)
050	12.0 (0.472)	18.0 (0.709)	15.2 (0.598)
060	14.5 (0.571)	20.5 (0.807)	17.7 (0.697)
070	17.0 (0.669)	23.0 (0.906)	20.2 (0.795)
080	19.5 (0.768)	25.5 (1.004)	22.7 (0.894)
090	22.0 (0.866)	28.0 (1.102)	25.2 (0.992)
100	24.5 (0.965)	30.5 (1.201)	27.7 (1.091)
110	27.0 (1.063)	33.0 (1.299)	30.2 (1.189)
120	29.5 (1.161)	35.5 (1.398)	32.7 (1.287)



RECOMMENDED P.C. BOARD LAYOUT

HOW TO ORDER

14

Prefix
14 = Male

5046

Series Number

XXX

Number of Positions

020
030
040
050
060
070
080
090
100
110
120

X45

Variation Code
0 = Without strain relief
1 = With strain relief
5 = Without strain relief,
with vacuum cover
6 = With strain relief,
with vacuum cover

829

Finish Code

Parts are supplied in tape and reel packaging
with 1000 pieces per reel.

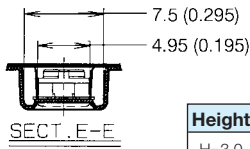
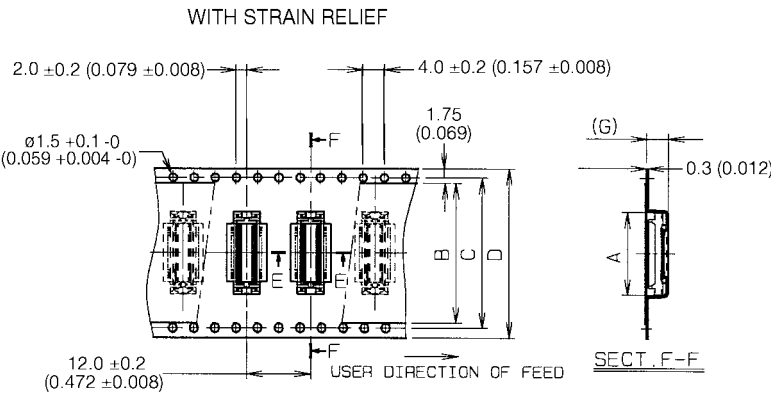
Mated Height	P/N	
4.5mm	Female	24 5046 XXX X00 829
	Male	14 5046 XXX X45 829

Fine Pitch SMT

Board to Board Connectors

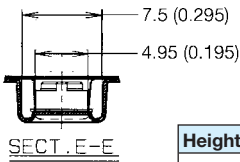
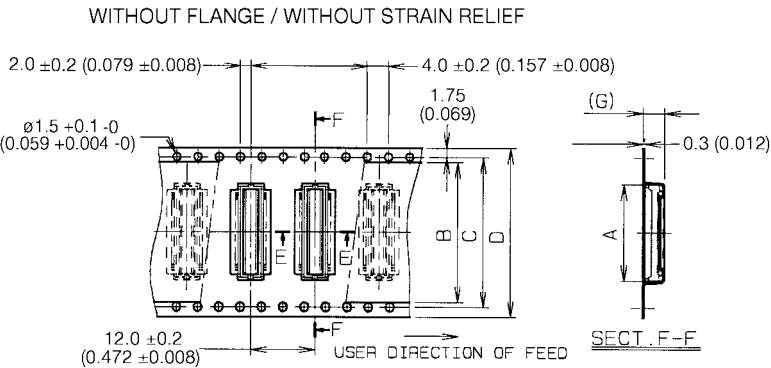
Series 5046 Plug Tape and Reel Package

H=3.0, 3.5, 4.0, 4.5mm



Height	G
H=3.0	4.1 (0.161)
H=3.5	4.1 (0.161)
H=4.0	4.6 (0.181)
H=4.5	4.6 (0.181)

	No. of Pos.	A	B	C	D
32mm Tape	020	8.1 (0.319)			
	030	10.6 (0.417)			
	040	13.1 (0.516)	26.5 (1.043)	28.4 (1.118)	32.0 (1.260)
	050	15.6 (0.614)			
	060	18.1 (0.713)			
44mm Tape	070	20.6 (0.811)			
	080	23.1 (0.909)	38.5 (1.516)	40.4 (1.591)	44.0 (1.732)
	090	25.6 (1.008)			
	100	28.1 (1.106)			
56mm Tape	110	30.6 (1.205)	50.5 (1.988)	52.4 (2.063)	56.0 (2.205)
	120	33.1 (1.303)			



Height	G
H=3.0	4.1 (0.161)
H=3.5	4.1 (0.161)
H=4.0	4.6 (0.181)
H=4.5	4.6 (0.181)

	No. of Pos.	A	B	C	D
32mm Tape	020	8.1 (0.319)			
	030	10.6 (0.417)			
	040	13.1 (0.516)	26.5 (1.043)	28.4 (1.118)	32.0 (1.260)
	050	15.6 (0.614)			
	060	18.1 (0.713)			
44mm Tape	070	20.6 (0.811)			
	080	23.1 (0.909)	38.5 (1.516)	40.4 (1.591)	44.0 (1.732)
	090	25.6 (1.008)			
	100	28.1 (1.106)			
56mm Tape	110	30.6 (1.205)	50.5 (1.988)	52.4 (2.063)	56.0 (2.205)
	120	33.1 (1.303)			

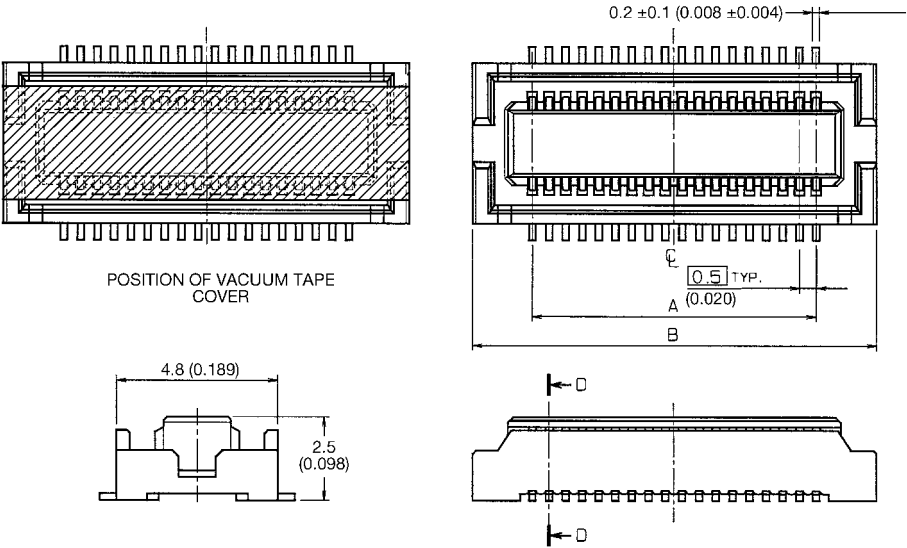
Fine Pitch SMT Board to Board Connectors



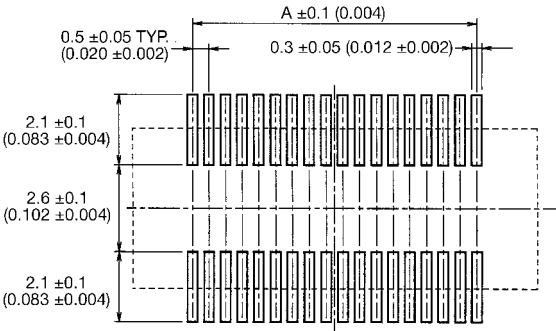
Series 5046

Receptacle for Mated Height with Plug of 3.0, 3.5, 4.0 or 4.5mm

Without Strain Relief



No. of Pos.	Dimension	
	A	B
020	4.5 (0.177)	8.1 (0.319)
030	7.0 (0.276)	10.6 (0.417)
040	9.5 (0.374)	13.1 (0.516)
050	12.0 (0.472)	15.6 (0.614)
060	14.5 (0.571)	18.1 (0.713)
070	17.0 (0.669)	20.6 (0.811)
080	19.5 (0.768)	23.1 (0.909)
090	22.0 (0.866)	25.6 (1.008)
100	24.5 (0.965)	28.1 (1.106)
110	27.0 (1.063)	30.6 (1.205)
120	29.5 (1.161)	33.1 (1.303)



RECOMMENDED P.C. BOARD LAYOUT

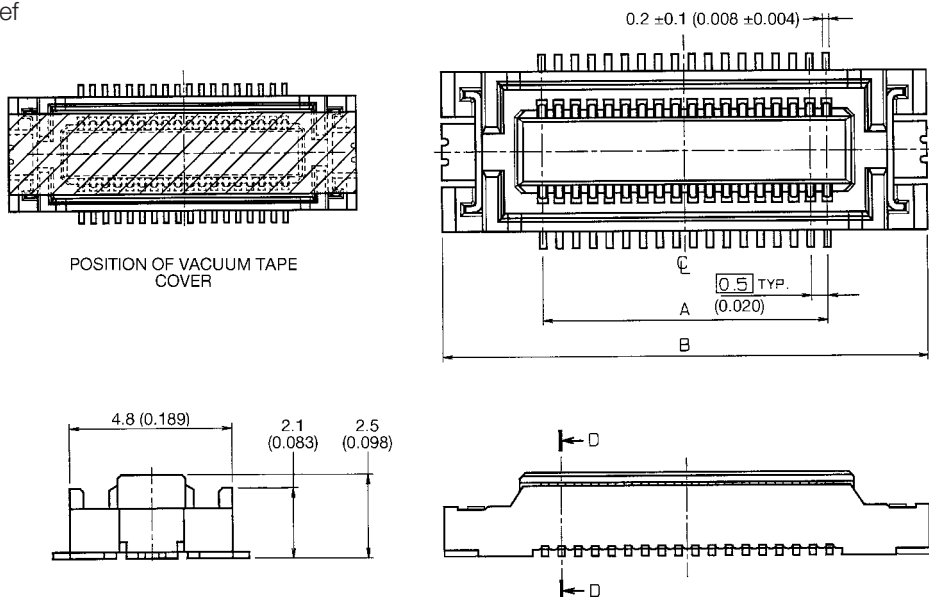
Fine Pitch SMT Board to Board Connectors



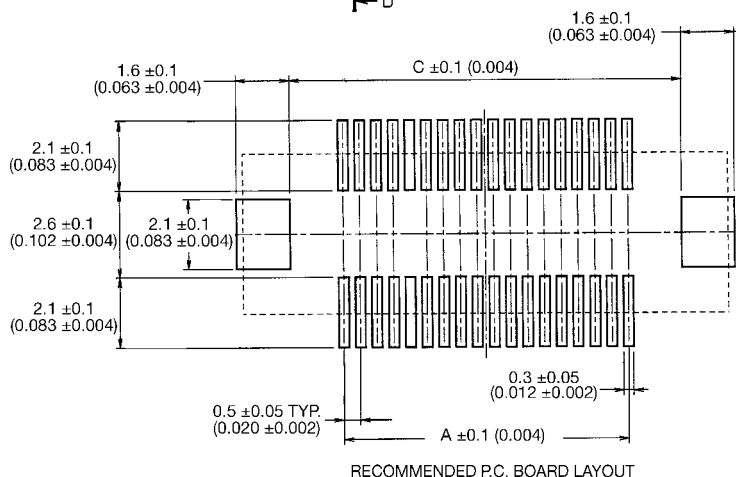
Series 5046

Receptacle for Mated Height with Plug of 3.0, 3.5, 4.0 or 4.5mm

With Strain Relief



No. of Pos.	Dimension		
	A	B	C
020	4.5 (0.177)	10.5 (0.413)	7.7 (0.303)
030	7.0 (0.276)	13.0 (0.512)	10.2 (0.402)
040	9.5 (0.374)	15.5 (0.610)	12.7 (0.500)
050	12.0 (0.472)	18.0 (0.709)	15.2 (0.598)
060	14.5 (0.571)	20.5 (0.807)	17.7 (0.697)
070	17.0 (0.669)	23.0 (0.906)	20.2 (0.795)
080	19.5 (0.768)	25.5 (1.004)	22.7 (0.894)
090	22.0 (0.866)	28.0 (1.102)	25.2 (0.992)
100	24.5 (0.965)	30.5 (1.201)	27.7 (1.091)
110	27.0 (1.063)	33.0 (1.299)	30.2 (1.189)
120	29.5 (1.161)	35.5 (1.398)	32.7 (1.287)



RECOMMENDED P.C. BOARD LAYOUT

HOW TO ORDER

24

Prefix
24 = Female

5046

Series Number

XXX

Number of Positions

020
030
040
050
060
070
080
090
100
110
120

X00

Variation Code

0 = Without strain relief
1 = With strain relief
5 = Without strain relief,
with vacuum cover
6 = With strain relief,
with vacuum cover

829

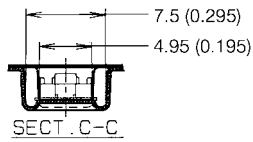
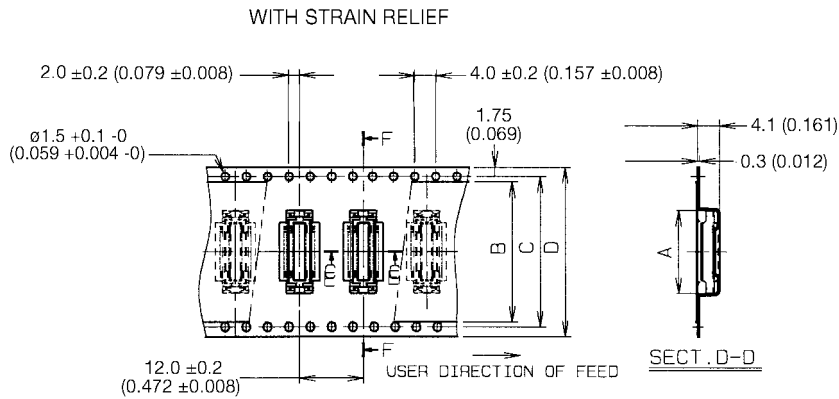
Finish Code

Parts are supplied in tape and reel packaging
with 1000 pieces per reel.

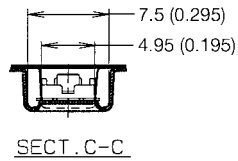
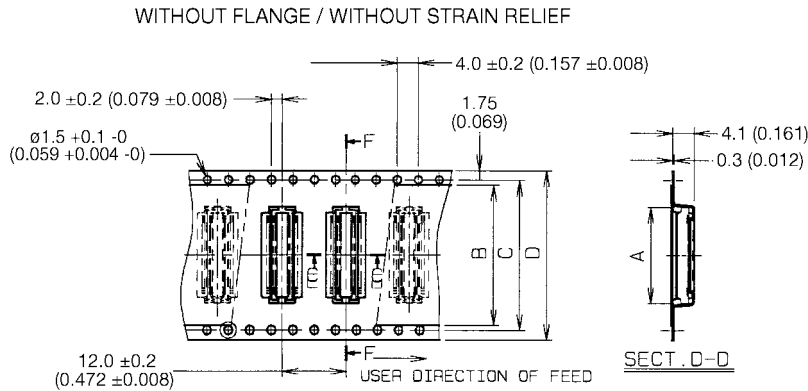
Mated Height	P/N	
4.5mm	Female	24 5046 XXX X00 829
	Male	14 5046 XXX X45 829
4.0mm	Female	24 5046 XXX X00 829
	Male	14 5046 XXX X40 829
3.5mm	Female	24 5046 XXX X00 829
	Male	14 5046 XXX X35 829
3.0mm	Female	24 5046 XXX X00 829
	Male	14 5046 XXX X30 829

Fine Pitch SMT Board to Board Connectors

Series 5046 Receptacle Tape and Reel Package



	No. of Pos.	A	B	C	D
32mm Tape	020	10.65 (0.419)			
	030	13.15 (0.518)			
	040	15.65 (0.616)	26.5 (1.043)	28.4 (1.118)	32.0 (1.260)
	050	18.15 (0.715)			
	060	20.65 (0.813)			
44mm Tape	070	23.15 (0.911)			
	080	25.65 (1.010)	38.5 (1.516)	40.4 (1.591)	44.0 (1.732)
	090	28.15 (1.108)			
	100	30.65 (1.207)			
56mm Tape	110	33.15 (1.305)	50.5 (1.988)	52.4 (2.063)	56.0 (2.205)
	120	35.65 (1.404)			



	No. of Pos.	A	B	C	D
32mm Tape	020	10.65 (0.419)			
	030	13.15 (0.518)			
	040	15.65 (0.616)	26.5 (1.043)	28.4 (1.118)	32.0 (1.260)
	050	18.15 (0.715)			
	060	20.65 (0.813)			
44mm Tape	070	23.15 (0.911)			
	080	25.65 (1.010)	38.5 (1.516)	40.4 (1.591)	44.0 (1.732)
	090	28.15 (1.108)			
	100	30.65 (1.207)			
56mm Tape	110	33.15 (1.305)	50.5 (1.988)	52.4 (2.063)	56.0 (2.205)
	120	35.65 (1.403)			

Fine Pitch SMT Board to Board Connectors

Series 5047



Series 5047 is the board to board, fine pitch connector which meets the requirement for high density circuitry in the market and designed especially for portable equipment. Mated height between boards can be 5.0mm or 7.0mm.

FEATURES

Designed to have the strong resistance against torque forces on mating area to achieve the high reliability in the natural fall shock environment.

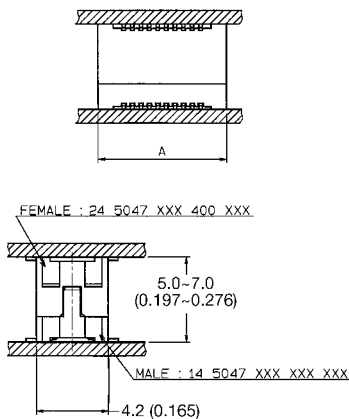
Adoption of bellows type contact with excellent contact reliability.

High durability to achieve 50 times of mating and unmating cycles.

Parts are supplied in tape and reel with 800 pieces per reel.

SPECIFICATIONS

Series	5047
Mated Height	5.0, 7.0mm
Pitch	0.5mm
Current	0.4A Max
Voltage	50V Max
D.W. Voltage	500V rms/min
Mating Cycles	50



No. of Pos.	Dimension A
020	7.5 (0.295)
030	10.0 (0.394)
040	12.5 (0.492)
050	15.0 (0.591)
060	17.5 (0.689)
070	20.0 (0.787)
080	22.5 (0.886)
90	25.0 (0.984)
100	27.5 (1.083)

Series	Variation	Mated Height	Gold Plating	Strain Relief	Vacuum Cover	Part Number					Number of Positions									
											020	030	040	050	060	070	080	090	100	
5047	Plug	5.0mm	0.1µm	1	O	14 5047	XXX	9	50	856	O	O	O	O	O	O	O	O	O	
					1	14 5047	XXX	4	50	856	O	O	O	O	O	O	O	O	O	
			0.2µm	1	O	14 5047	XXX	9	50	861	O	O	O	O	O	O	O	O	O	
					1	14 5047	XXX	4	50	861	O	O	O	O	O	O	O	O	O	
		7.0mm	0.1µm	1	O	14 5047	XXX	9	70	856	O	O	O	O	O	O	O	O	O	
					1	14 5047	XXX	4	70	856	O	O	O	O	O	O	O	O	O	
			0.2µm	1	O	14 5047	XXX	9	70	861	O	O	O	O	O	O	O	O	O	
					1	14 5047	XXX	4	70	861	O	O	O	O	O	O	O	O	O	
	Receptacle		0.1µm	1	1	24 5047	XXX	4	00	856	O	O	O	O	O	O	O	O	O	
			0.2µm	1	1	24 5047	XXX	4	00	861	O	O	O	O	O	O	O	O	O	

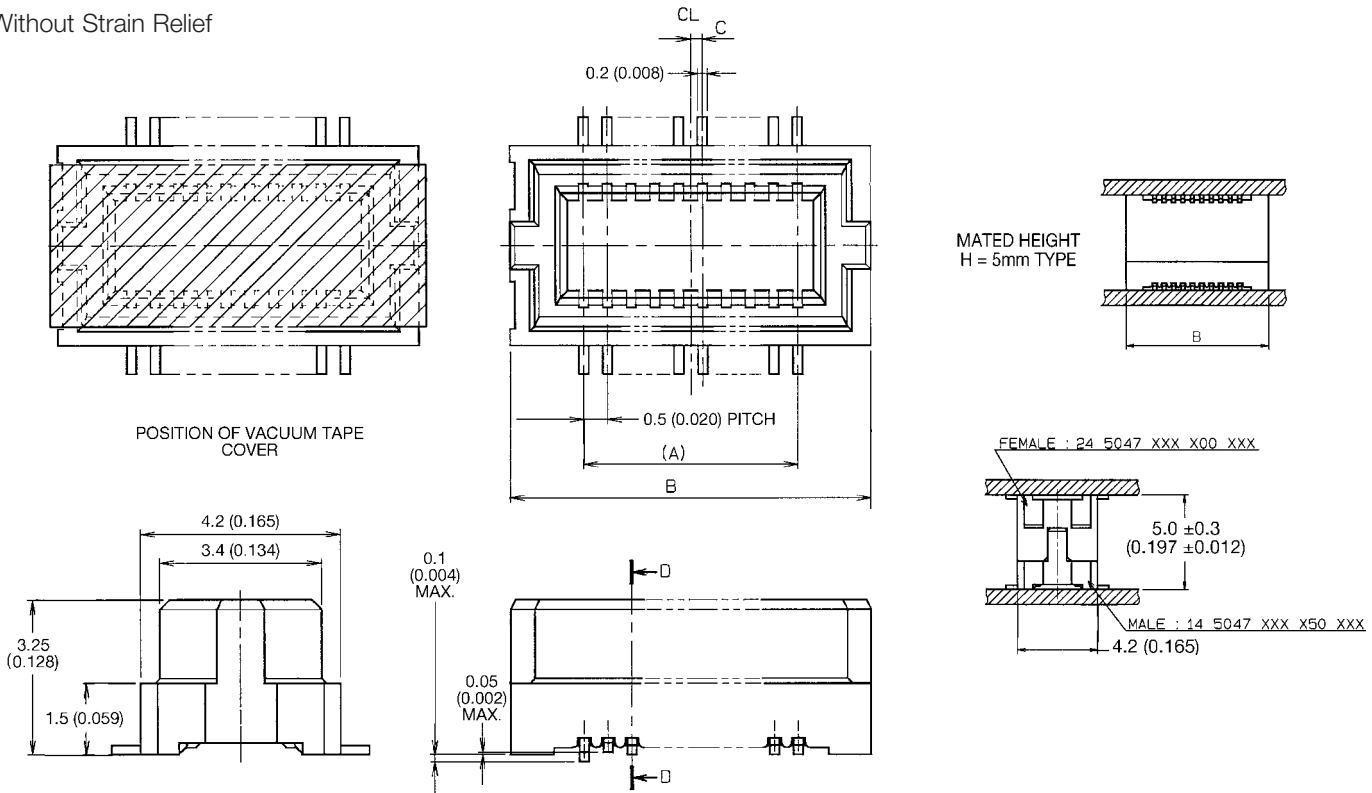
O = Available
1 = Not available

Fine Pitch SMT Board to Board Connectors

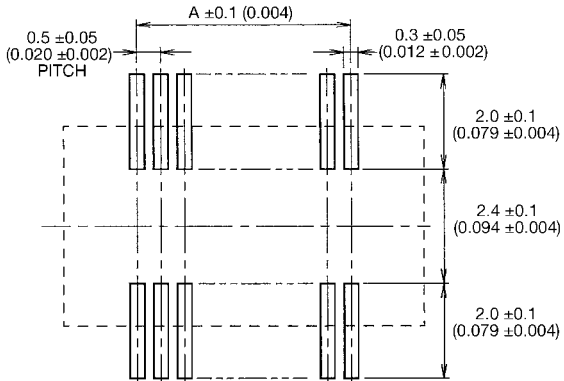
Series 5047

Plug for Mated Height with Receptacle of 5.0mm

Without Strain Relief



No. of Pos.	Dimension		
	A	B	C
020	4.5 (0.177)	7.5 (0.295)	0.25 (0.010)
030	7.0 (0.276)	10.0 (0.394)	0.5 (0.020)
040	9.5 (0.374)	12.5 (0.492)	0.25 (0.010)
050	12.0 (0.472)	15.0 (0.591)	0.5 (0.020)
060	14.5 (0.571)	17.5 (0.689)	0.25 (0.010)
070	17.0 (0.669)	20.0 (0.787)	0.5 (0.020)
080	19.5 (0.768)	22.5 (0.886)	0.25 (0.010)
090	22.0 (0.866)	25.0 (0.984)	0.5 (0.020)
100	24.5 (0.965)	27.5 (1.083)	0.25 (0.010)



RECOMMENDED P.C. BOARD LAYOUT

HOW TO ORDER

14

Prefix

14 = Male

5047

Series Number

XXX

Number of Positions

020
030
040
050
060
070
080
090
100

X50

Variation Code

9 = With vacuum cover
4 = Without vacuum cover

XXX

Finish Code

856 = A_μ 0.1μm/min.
861 = A_μ 0.2μm/min.

Parts are supplied in tape and reel packaging with 800 pieces per reel.

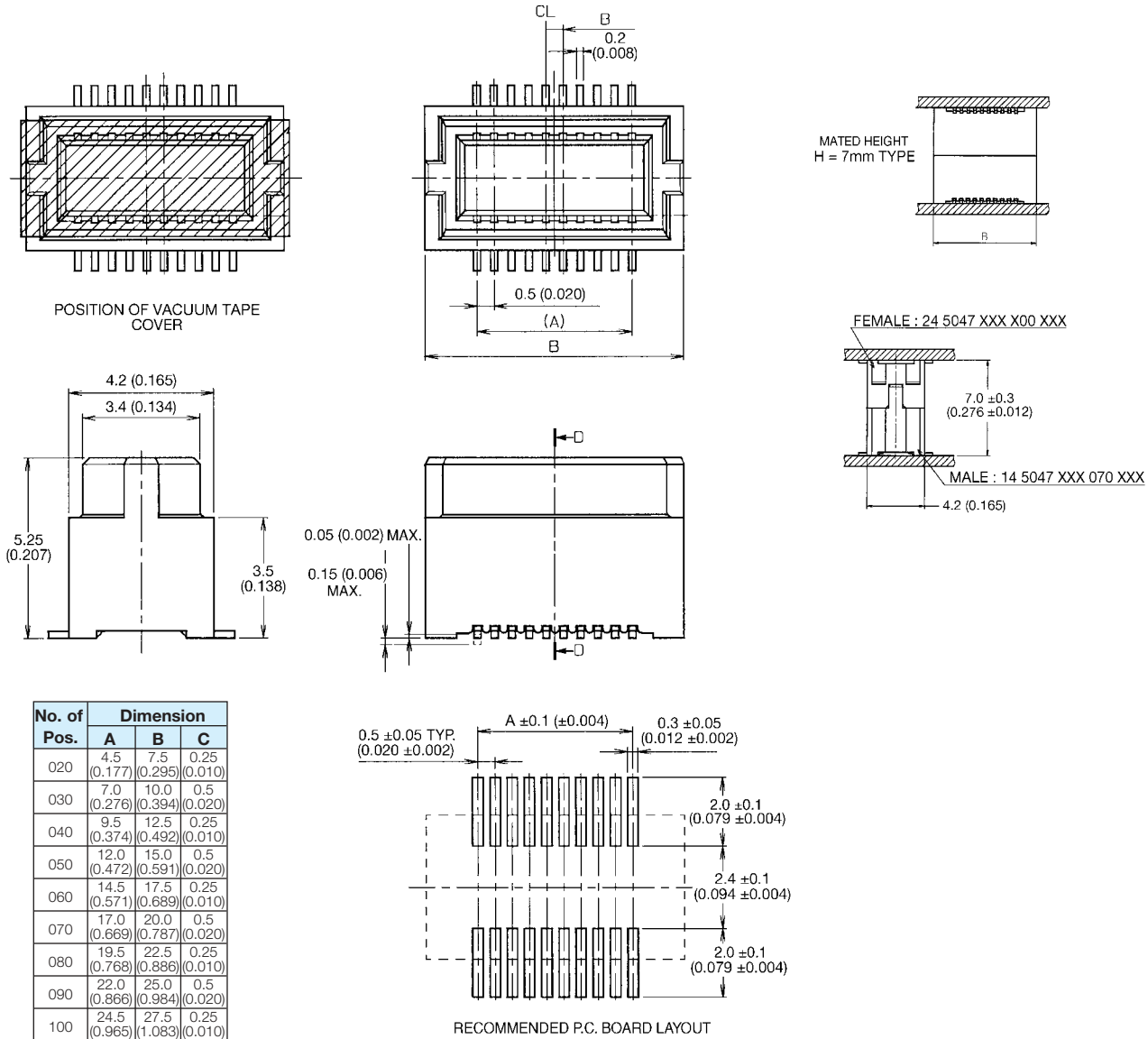
Mated Height	P/N	
5.0mm	Female	24 5047 XXX X00 XXX
	Male	14 5047 XXX X50 XXX

Fine Pitch SMT Board to Board Connectors

Series 5047

Plug for Mated Height with Receptacle of 7.0mm

Without Strain Relief



HOW TO ORDER

14
Prefix
14 = Male

5047
Series Number

XXX
Number of Positions

020
030
040
050
060
070
080
090
100

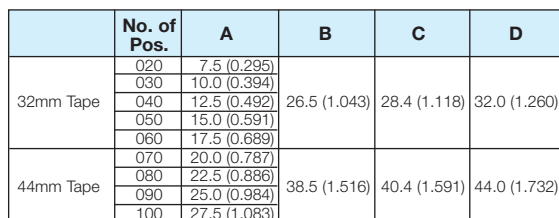
X70
Variation Code

9 = With vacuum cover
4 = Without vacuum cover

XXX
Finish Code

856 = $\Delta\mu$ 0.1 μ m/min.
861 = $\Delta\mu$ 0.2 μ m/min.

Parts are supplied in tape and reel packaging with 800 pieces per reel.



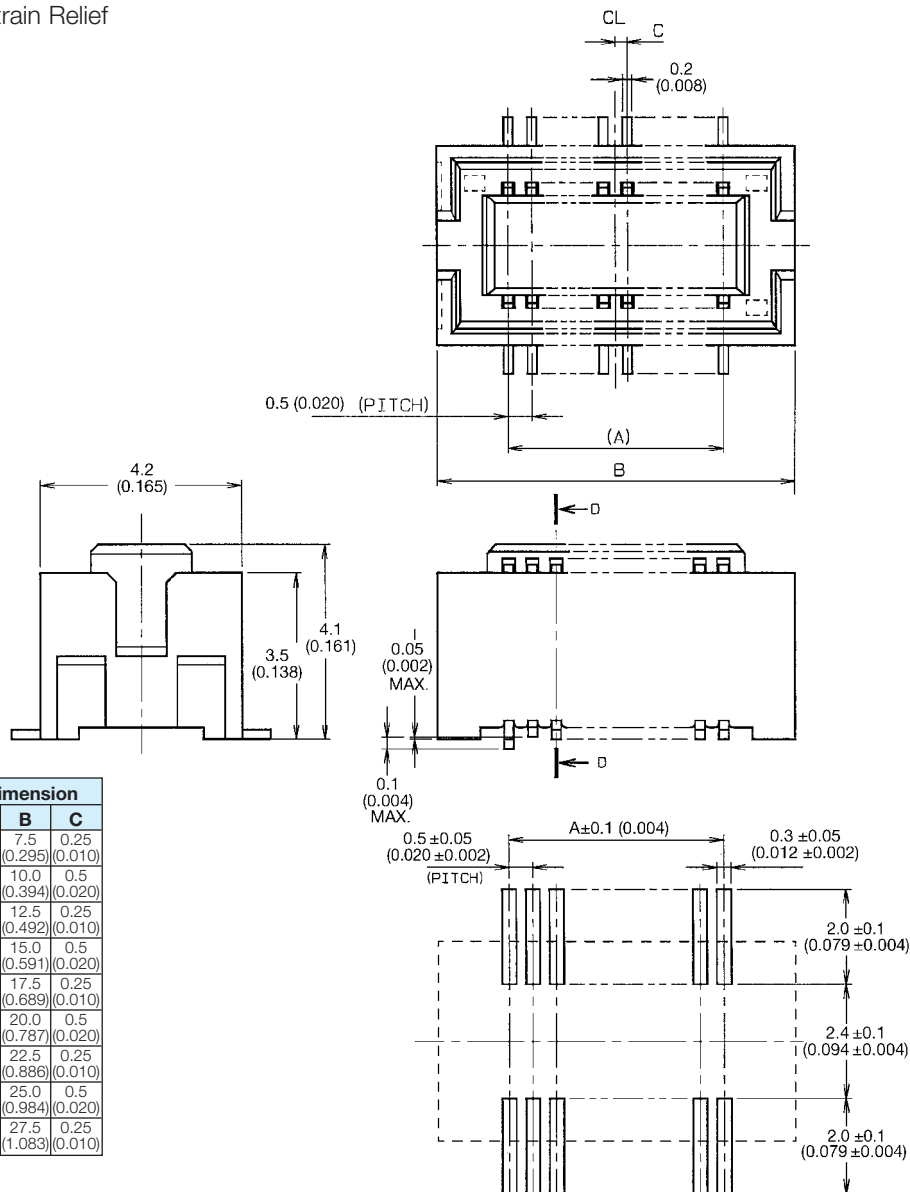
Fine Pitch SMT Board to Board Connectors



Series 5047

Receptacle for Mated Height with Plug of 5.0 or 7.0mm

Without Strain Relief



No. of Pos.	Dimension		
	A	B	C
020	4.5 (0.177)	7.5 (0.295)	0.25 (0.010)
030	7.0 (0.276)	10.0 (0.394)	0.5 (0.020)
040	9.5 (0.374)	12.5 (0.492)	0.25 (0.010)
050	12.0 (0.472)	15.0 (0.591)	0.5 (0.020)
060	14.5 (0.571)	17.5 (0.689)	0.25 (0.010)
070	17.0 (0.669)	20.0 (0.787)	0.5 (0.020)
080	19.5 (0.768)	22.5 (0.886)	0.25 (0.010)
090	22.0 (0.866)	25.0 (0.984)	0.5 (0.020)
100	24.5 (0.965)	27.5 (1.083)	0.25 (0.010)

RECOMMENDED P.C. BOARD LAYOUT

HOW TO ORDER

24

Prefix
24 = Female

5047

Series Number

XXX

Number of Positions

020
030
040
050
060
070
080
090
100

X00

Variation Code
4 = Without vacuum cover

XXX

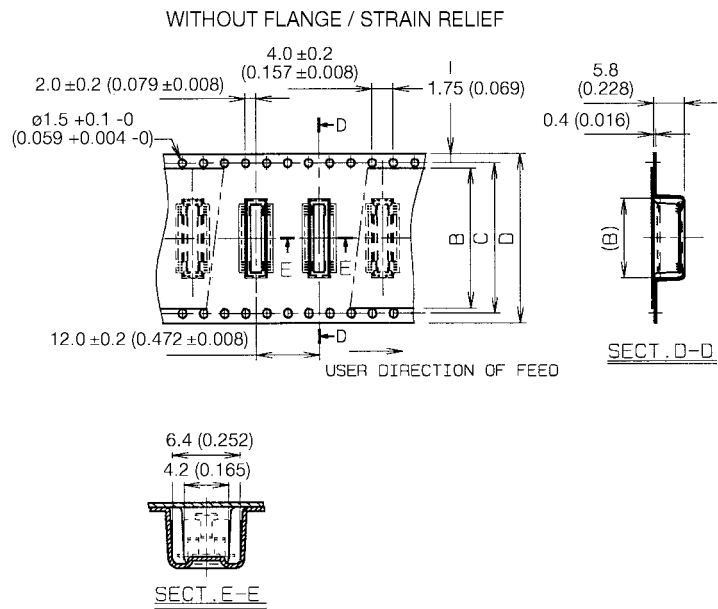
Finish Code
856 = $\text{A}\mu$ 0.1 $\mu\text{m}/\text{min}$.
861 = $\text{A}\mu$ 0.2 $\mu\text{m}/\text{min}$.

Parts are supplied in tape and reel packaging with 800 pieces per reel.

Mated Height	P/N	
5.0mm	Female	24 5047 XXX X00 829
	Male	14 5047 XXX X50 829
7.0mm	Female	24 5047 XXX X00 829
	Male	14 5047 XXX X70 829

Fine Pitch SMT Board to Board Connectors

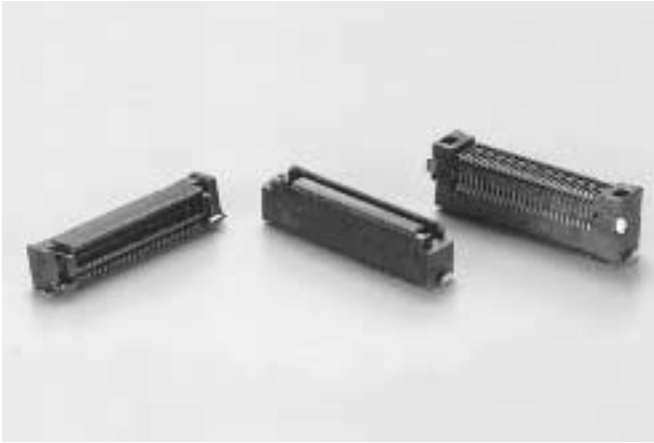
Series 5047 Receptacle Tape and Reel Package



	No. of Pos.	A	B	C	D
32mm Tape	020	7.5 (0.295)	26.5 (1.043)	28.4 (1.118)	32.0 (1.260)
	030	10.0 (0.394)			
	040	12.5 (0.492)			
	050	15.0 (0.591)			
	060	17.5 (0.689)			
44mm Tape	070	20.0 (0.787)	38.5 (1.516)	40.4 (1.591)	44.0 (1.732)
	080	22.5 (0.886)			
	090	25.0 (0.984)			
	100	27.5 (1.083)			

Fine Pitch SMT Board to Board Connectors

Series 5600 0.8mm Pitch Board to Board



Series 5600 is a two-piece board to board connector with 0.8mm pitch, designed for high density applications like CD-ROM I/O. It connects the PCBs at right angles to each other with a right-angle (horizontal) plug and straight (vertical) receptacle.

FEATURES

Flexible contact design for torque forces.

Mating guide-in for proper connections.

Polarized housing and locking function for environments of shock or vibration.

Designed for pick and place mounting.

Parts are supplied in tape and reel with 1000 pieces per reel.

SPECIFICATIONS

No. of Contacts	50
Pitch	0.8mm
Current	0.5A Max
Voltage	200V Max
D.W. Voltage	500V rms/min
Contact Material	Phosphor Bronze
Insulator Material	LCP
Mating Cycles	50

Technical drawing of the P.C. board layout for the 68000 microprocessor, showing dimensions in inches and millimeters.

Top View Dimensions:

- Overall width: 2.0 (0.079)
- Overall length: $C \pm 0.2$ (0.008)
- Pin pitch: 0.8 ± 0.05 (0.031 ± 0.002)
- Pin offset: $A \pm 0.1$ (0.004)
- Pin diameter: 0.25 ± 0.1 (0.010 ± 0.004)
- Pin spacing: $B \pm 0.1$ (0.004)
- Pin offset: $D \pm 0.3$ (0.012)
- Pin diameter: 0.8 (0.031)

Side View Dimensions:

- Pin height: 1.7 ± 0.2 (0.067 ± 0.008)
- Pin offset: 5.75 ± 0.15 (0.226 ± 0.006)
- Pin offset: 6.15 ± 0.3 (0.242 ± 0.012)
- Pin offset: 5.5 ± 0.3 (0.217 ± 0.012)
- Pin offset: 3.7 (0.146)
- Pin offset: 0.78 ± 0.03 (0.031 ± 0.001)
- Pin offset: 2.3 ± 0.3 (0.091 ± 0.012)
- Pin offset: 0.8 (0.031)

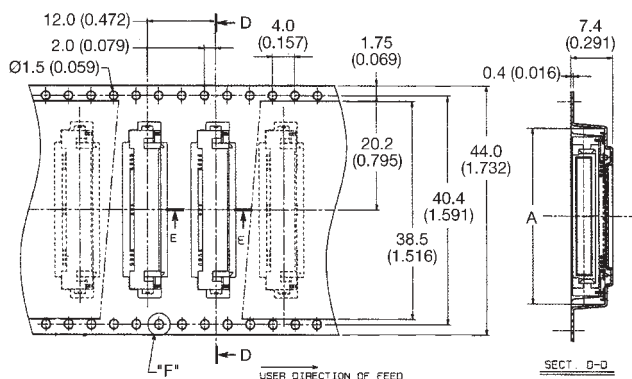
Bottom View Dimensions:

- Pin offset: 2.5 ± 0.05 (0.098 ± 0.002)
- Pin offset: 3.0 (0.118)
- Pin offset: 2.5 (0.098)
- Pin offset: $B \pm 0.1$ (0.004)
- Pin offset: 1.9 ± 0.1 (0.075 ± 0.004)
- Pin offset: 2.6 ± 0.1 (0.102 ± 0.004)
- Pin offset: 1.9 ± 0.1 (0.075 ± 0.004)
- Pin offset: 5.9 ± 0.1 (0.232 ± 0.004)
- Pin offset: 0.5 ± 0.05 (0.020 ± 0.002)
- Pin offset: 0.8 ± 0.05 (0.031 ± 0.002)
- Pin offset: $A \pm 0.1$ (0.004)
- Pin offset: 2.8 ± 0.1 (0.110 ± 0.004)
- Pin offset: 0.7 ± 0.03 (0.028 ± 0.001)
- Pin offset: 0.9 ± 0.03 (0.035 ± 0.001)

Cross-Section View (SECT. E-E (S-a/1)):

- Pin height: 7.9 (0.311)
- Pin offset: 5.7 (0.224)
- Pin offset: 4.1 (0.161)

RECOMMENDED P.C. BOARD LAYOUT



14 5600 050 000 883

MALE PLUG: 10 5600 050 000 883

CONTACT MARGIN

6.2 (0.244)

$t - 0.2 \pm 0.05$ (0.008 ± 0.002)

3.2 (0.126)

0.7 (0.028)

9.5 (0.374)

1.4 (0.055)

0.6 (0.024)

0.5 (0.020)

3.65 (0.144)

1.0 (0.039)

0.58 ± 0.03 (0.023 ± 0.001)

0.8 (0.031)

2.4 ± 0.2 (0.094 ± 0.008)

5.3 ± 0.3 (2.09 ± 0.012)

0.6 (0.024)

2 POSITIONS

FEMALE RECE: 20 5600 050 X00 883

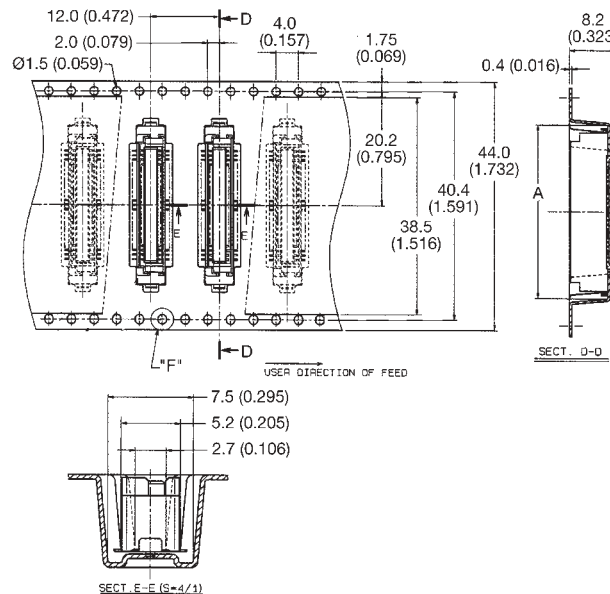
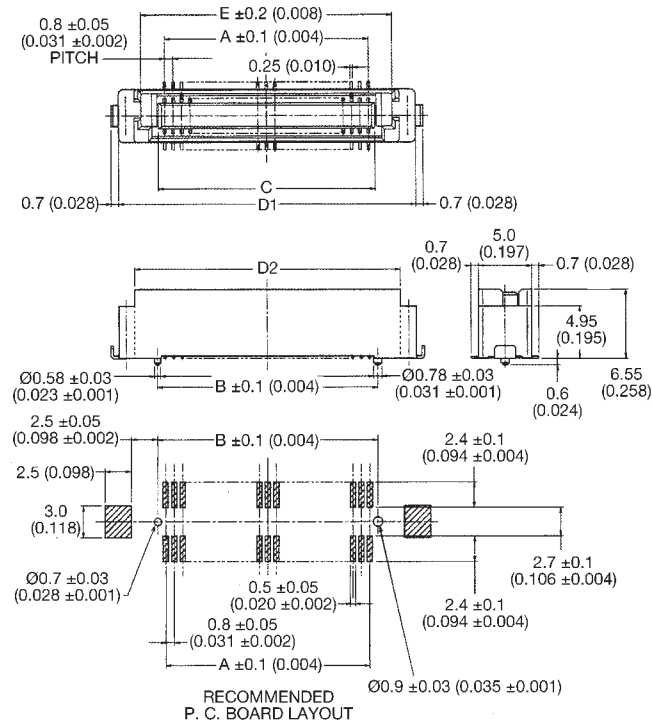
38

Fine Pitch SMT Board to Board Connectors

Series 5600 0.8mm Pitch Board to Board



RECEPTACLE



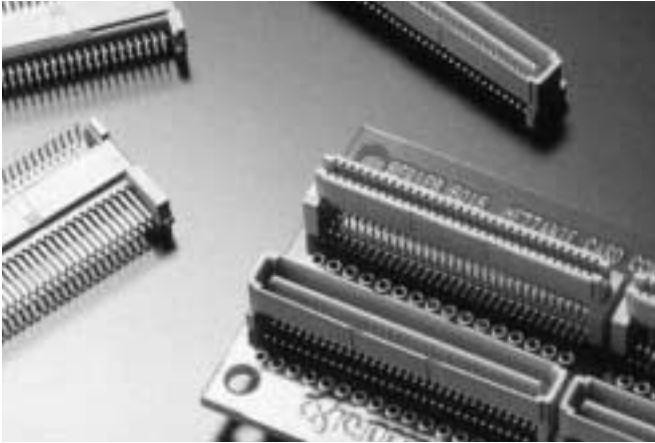
HOW TO ORDER

24 5600 050 100 883

Parts are supplied in tape and reel packaging with 1000 pieces per reel.

Fine Pitch SMT Board to Board Connectors

Series 5015



Series 5015 is the board to board connector system that supports the IEEE P-1386 standard for mezzanine card installation in industrial computer applications including VME, Futurebus, and other host boards. At 1.0mm pitch, the 64-position connector can be used with standard PCI and S-Bus mezzanine cards in 64 circuit combinations with mated heights of 8-15mm.

The IEEE P-1386 standard was developed to facilitate the use of modular boards (called mezzanine cards) to add functionality to VME bus systems, typically used in real time systems and industrial computers. PCI was selected as the new auxiliary bus structure because of its higher bandwidth, speed, and flexibility for handling I/O functions. In addition, the chips, components, and software for implementing the PCI standard were already in wide use by the personal computer marketplace.

FEATURES

Conforms to IEEE P-1386 Common Mezzanine Card Standard.

Flexible combination of plug with receptacle achieving a wide variety of mated heights ranging from 8.0mm to 15.0mm.

Parts can be supplied with or without boss.

Designed for pick and place mounting.

Parts are supplied in tape and reel.

SPECIFICATIONS

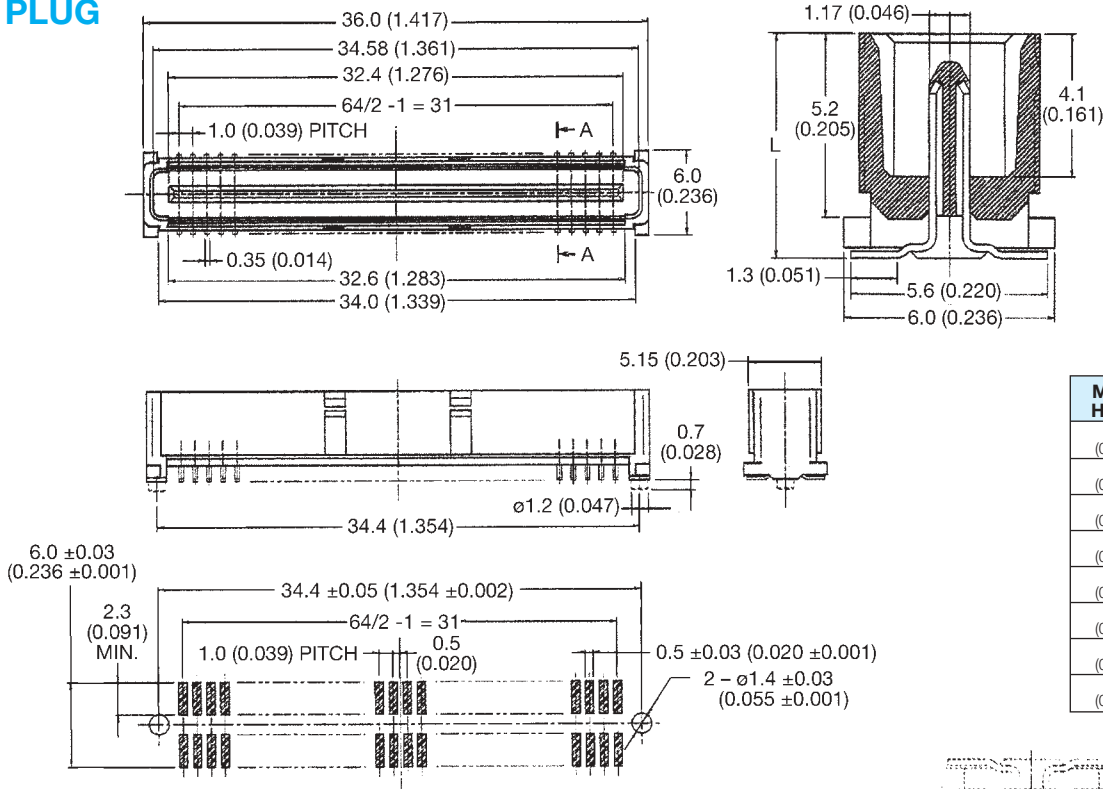
Series	5015
Mated Height	8.0 to 15.0mm
Pitch	1.0mm
Current	1A Max
Voltage	250V Max
D.W. Voltage	250V rms/min
Mating Cycles	100

Fine Pitch SMT

Board to Board Connectors

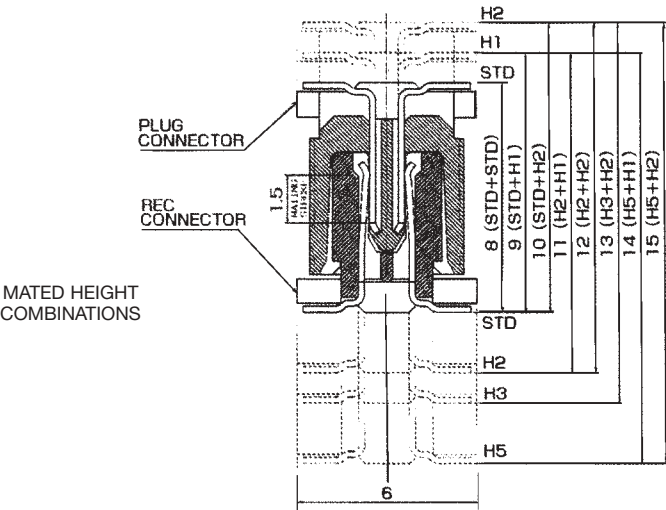
Series 5015 Mezzanine Card Connector 1.0mm Pitch

PLUG



Variation	L
STD	6.25 (0.246)
H1	7.25 (0.285)
H2	8.25 (0.325)

Mated Height	Plug	Receptacle
8.0 (0.315)	STD	STD
9.0 (0.354)	H1	STD
10.0 (0.394)	H2	STD
11.0 (0.433)	H1	H2
12.0 (0.472)	H2	H2
13.0 (0.512)	H2	H3
14.0 (0.551)	H1	H5
15.0 (0.591)	H2	H5



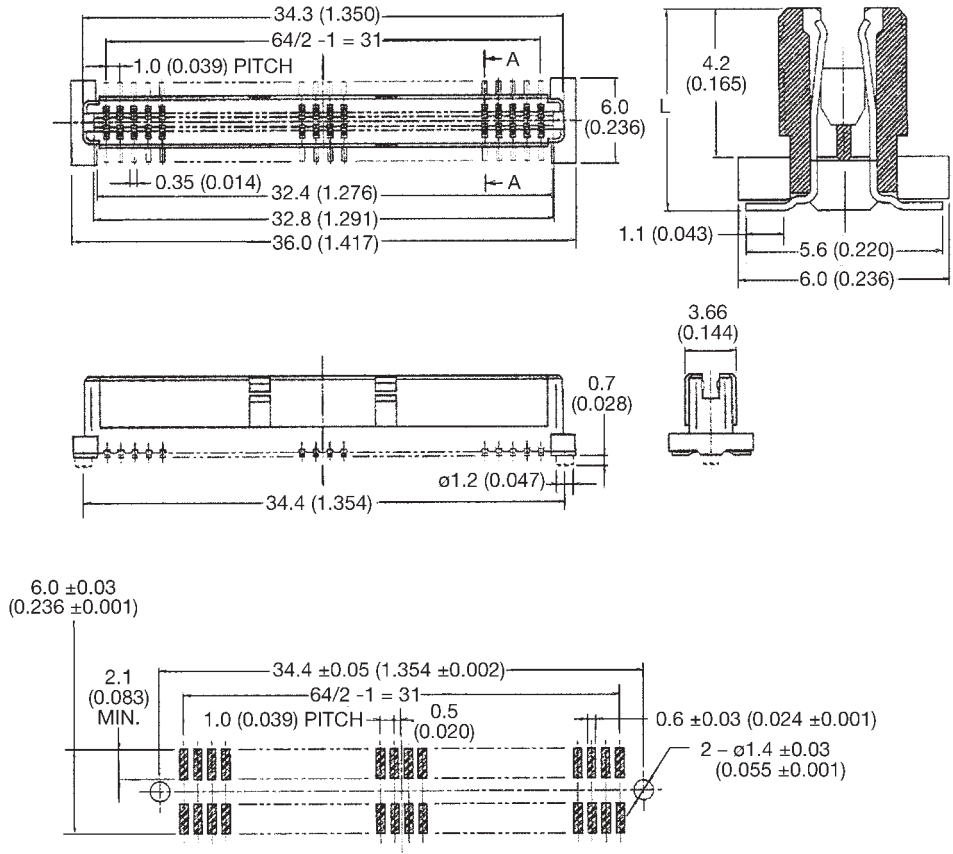
HOW TO ORDER

14	5015	064	X	XX	XXX
Prefix	Series Number	Number of Positions	Variation Code	Type Code	Finish Code
			0 = Without Boss 1 = With Boss	00 = Standard 01 = H1 02 = H2	863 = Ni Undercoated 1.2-4.0 μ m, Au 0.76 μ m (Contact) 861 = Ni Undercoated 1.2-4.0 μ m, Au 0.25 μ m (Contact)

Fine Pitch SMT Board to Board Connectors

Series 5015 Mezzanine Card Connector 1.0mm Pitch

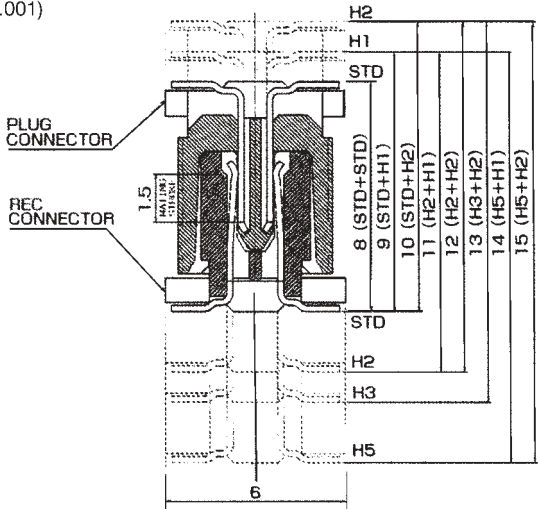
RECEPTACLE



Variation	L
STD	5.60 (0.220)
H2	7.60 (0.299)
H3	8.60 (0.339)
H5	10.60 (0.417)

Mated Height	Plug	Receptacle
8.0 (0.315)	STD	STD
9.0 (0.354)	H1	STD
10.0 (0.394)	H2	STD
11.0 (0.433)	H1	H2
12.0 (0.472)	H2	H2
13.0 (0.512)	H2	H3
14.0 (0.551)	H1	H5
15.0 (0.591)	H2	H5

MATED HEIGHT COMBINATIONS

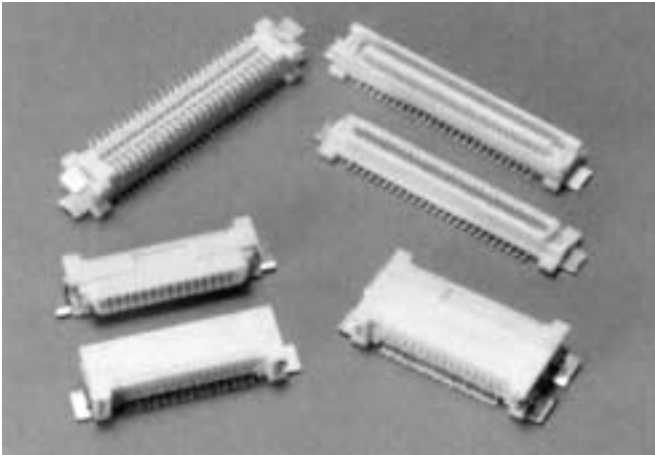


HOW TO ORDER

24	5015	064	X	XX	XXX
Prefix	Series Number	Number of Positions	Variation Code 0 = Without Boss 1 = With Boss	Type Code 00 = Standard 01 = H1 02 = H2 03 = H3 05 = H5	Finish Code 863 = Ni Undercoated 1.2-4.0µm, Au 0.76µm (Contact) 861 = Ni Undercoated 1.2-4.0µm, Au 0.25µm (Contact)

Fine Pitch SMT Board to Board Connectors

Series 5078



Series 5078 is the board to board, fine pitch and low-profile connector designed for the demand of high density circuitry in the market.

FEATURES

1.0mm pitch, 2 pieces board to board, SMT type connector. Right Angle (Plug & Receptacle) 30, 40, 50, 60, 80, 100 and 120 positions.

Straight (Plug & Receptacle) 30, 40, 50, 60, 80, 100 and 120 positions.

Lead Reflow Right Angle type is also available for such external I/O which requires a high board-retention force. The board to board mated height is 5.0mm.

SPECIFICATIONS

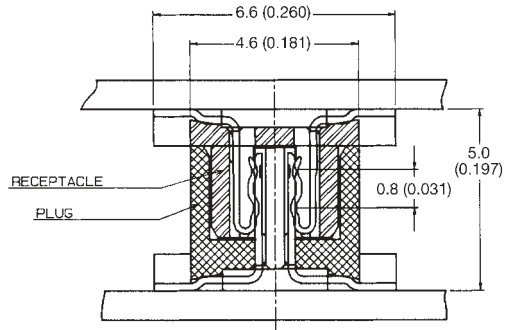
Series	5078
Number of Contacts	30, 40, 50, 60, 80, 100, 120 (Straight) 30, 40, 50, 60, 80, 100, 120 (Right Angle)
Contact Spacing	1.0mm
Current Rating	0.5A Max
Voltage Rating	100V Max
D.W. Voltage	500V rms/min
Insulator Material	PPS (UL94V-0)
Contact Material	Phosphor bronze, gold plating (contact area), solder plating (tail)
Metal Tab	Phosphor bronze, solder plating
Mating Cycles	100

Fine Pitch SMT Board to Board Connectors

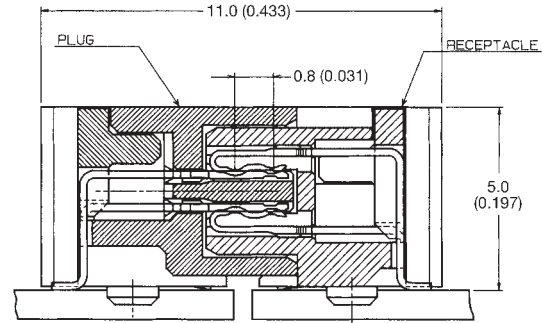
Series 5078 Applications



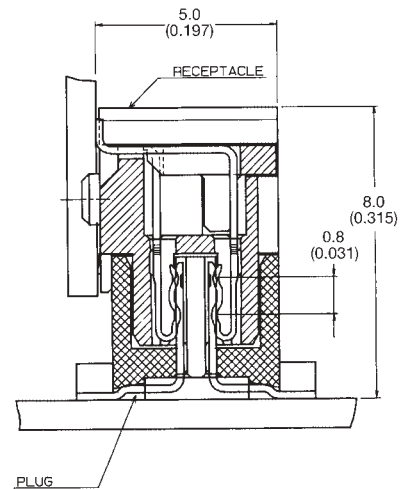
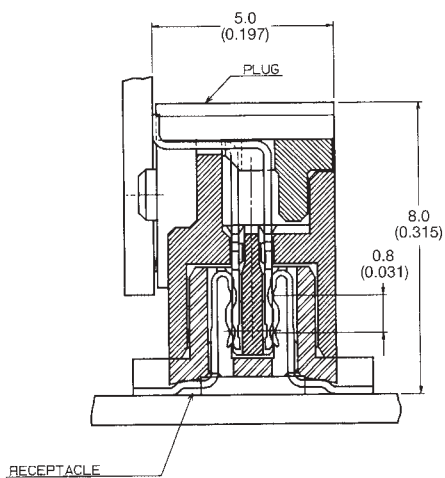
PARALLEL



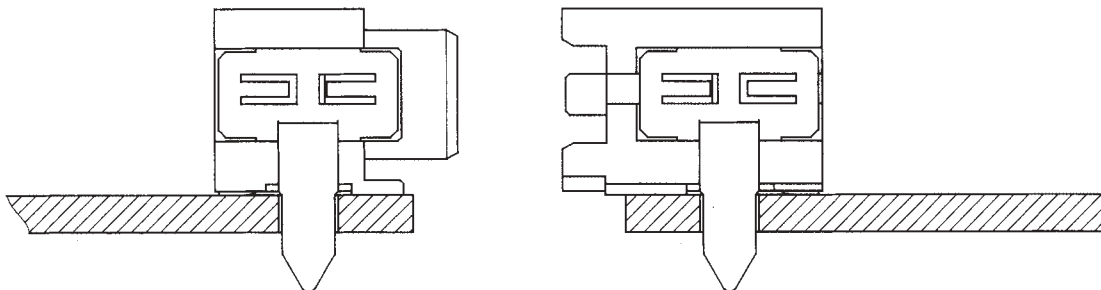
HORIZONTAL



VERTICAL



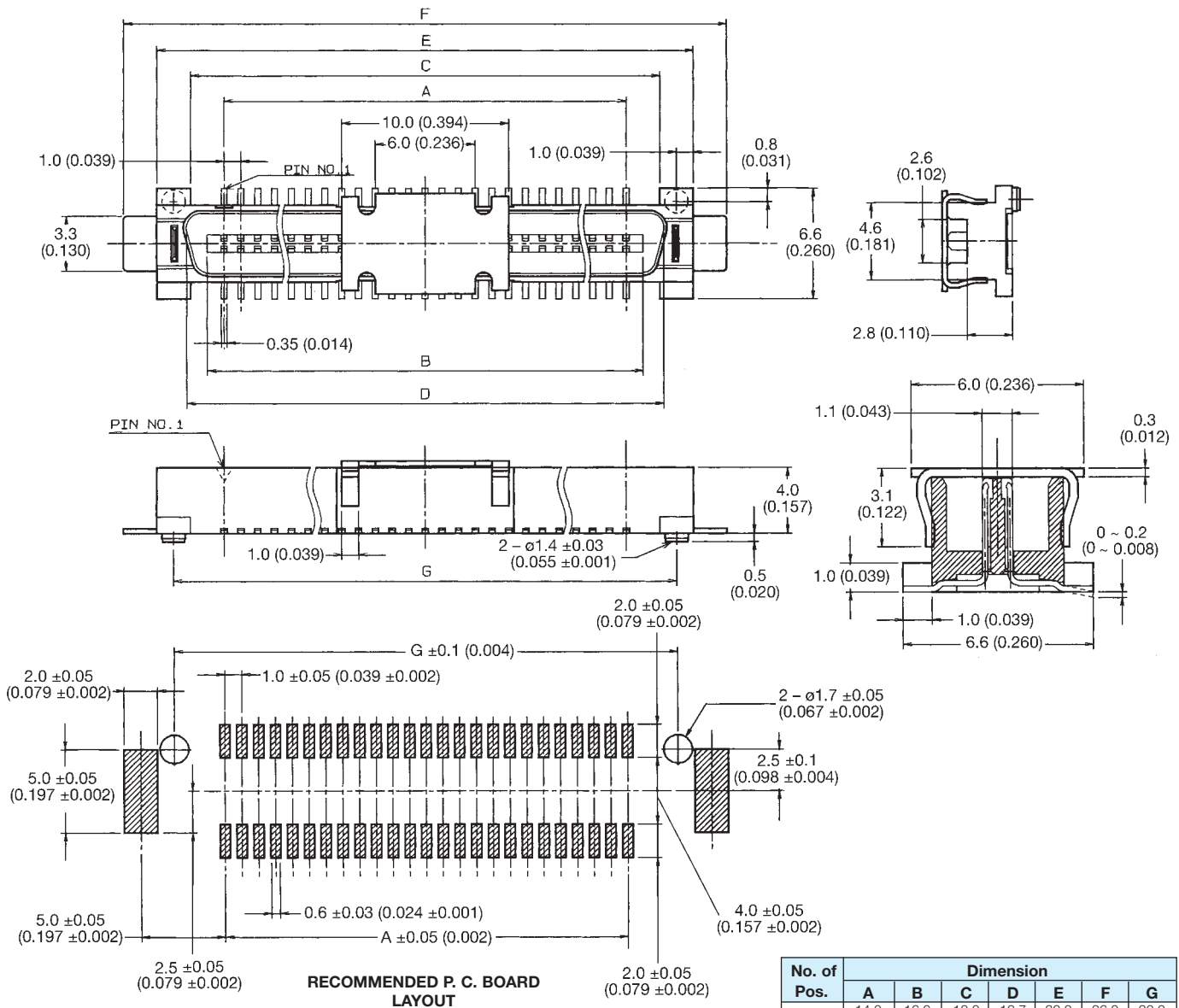
LEAD REFLOW TYPE



Fine Pitch SMT Board to Board Connectors

Series 5078

Plug Straight with Vacuum Pick Up Clip (30 - 60 Contacts)



HOW TO ORDER

14

Prefix

5078

Series Number

XXX

Number of Positions

030
040
050
060

100

Variation Code

861

Finish Code

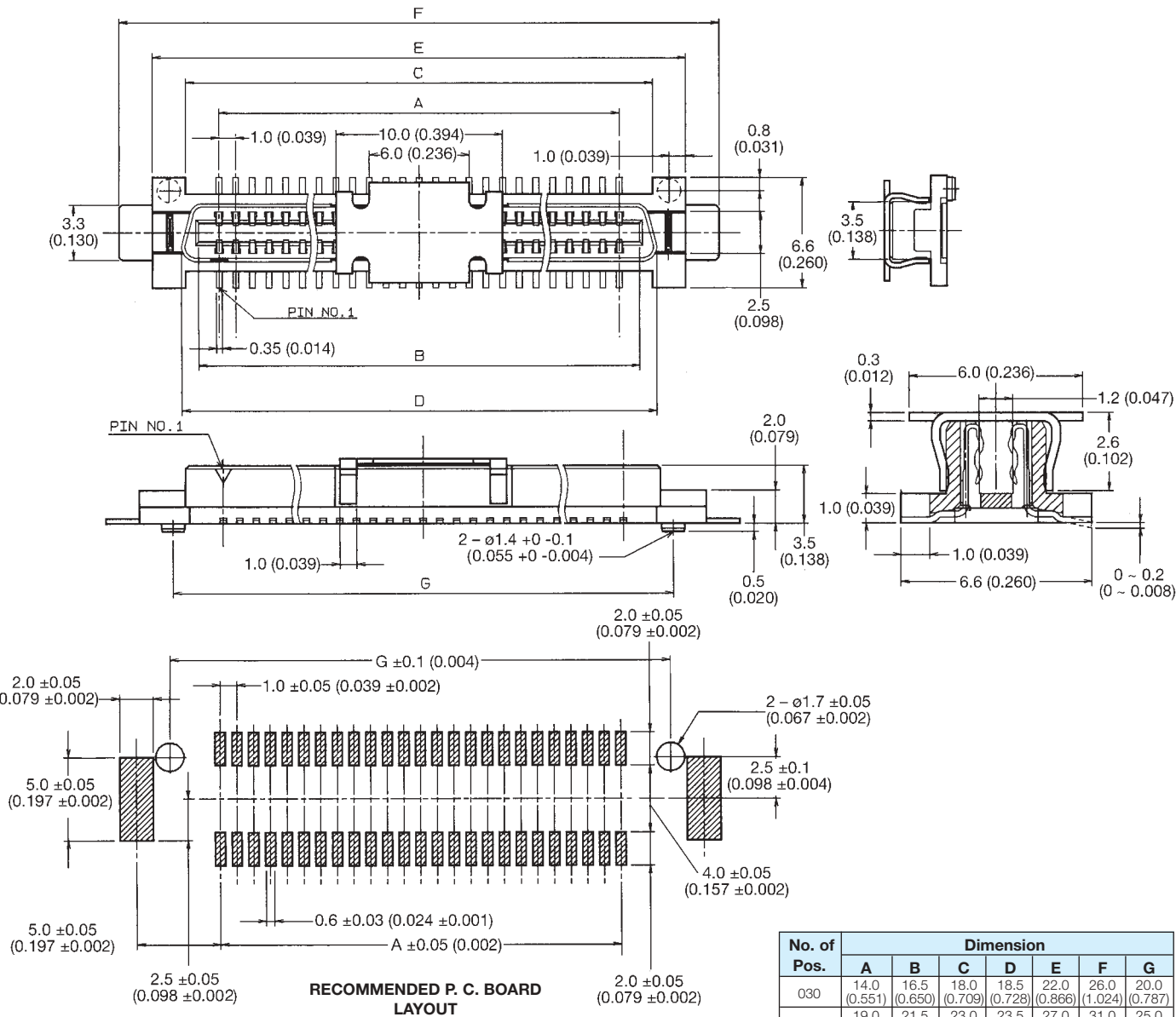
861 = Ni Undercoated
1.2µm - 4.0µm
Au overplated
0.25µm/min.

Parts are supplied in tape and reel packaging
with 1000 pieces per reel.

Fine Pitch SMT Board to Board Connectors

Series 5078

Receptacle Straight with Vacuum Pick Up Clip (30 - 60 Contacts)



HOW TO ORDER

24

Prefix

5078

Series Number

XXX

Number of Positions

030
040
050
060

100

Variation Code

861

Finish Code

861 = Ni underplated
1.2µm - 4.0µm
Au overplated
0.25µm

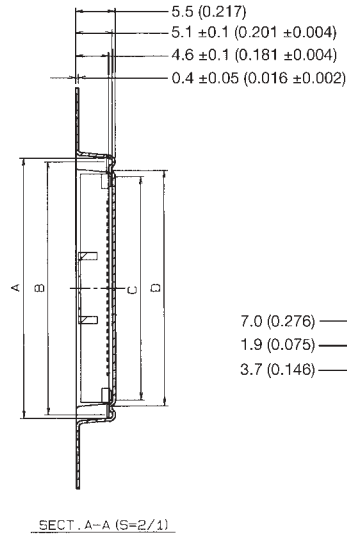
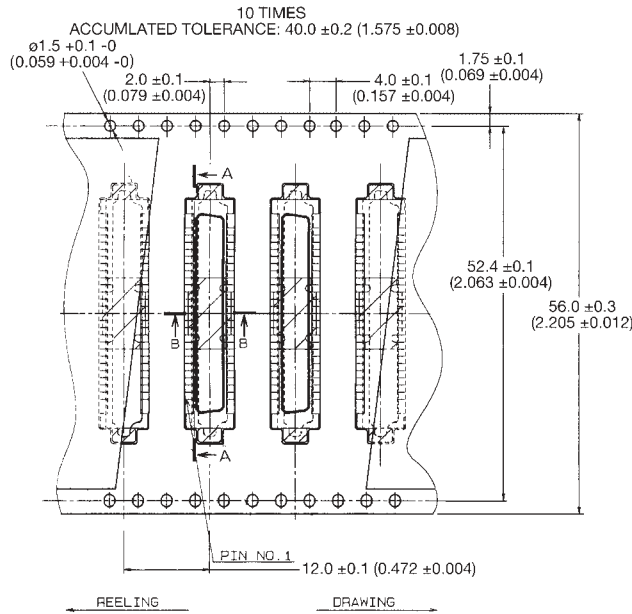
Parts are supplied in tape and reel packaging with 1000 pieces per reel.

Fine Pitch SMT Board to Board Connectors

Series 5078

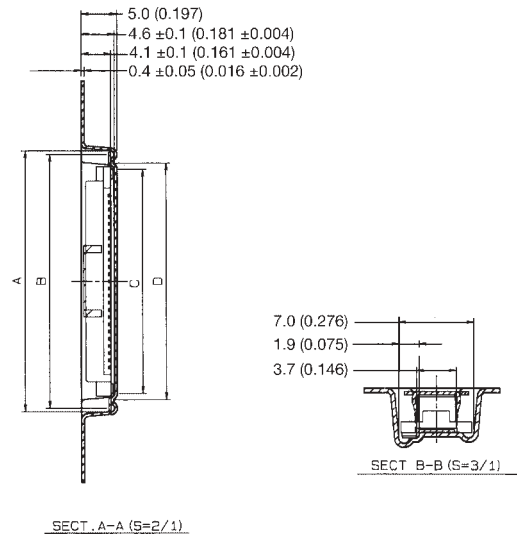
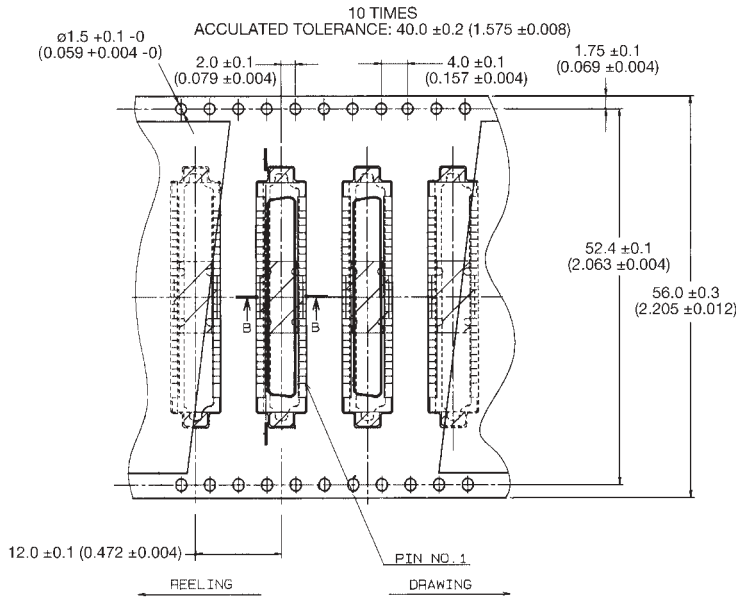
Plug and Receptacle Straight Embossed (30 - 60 Contacts)

PLUG



Dimension						
P/N	No. of Pos.	A	B	C	D	Qty. Per Reel
14 5078 030 100 861	030	26.4 (1.039)	25.4 (1.000)	21.3 (0.839)	23.0 (0.906)	1000 pcs.
040	040	31.4 (1.236)	30.4 (1.197)	26.3 (1.035)	28.0 (1.102)	1000 pcs.
050	050	36.4 (1.433)	35.4 (1.394)	31.3 (1.232)	33.0 (1.299)	1000 pcs.
14 5078 060 100 861	060	41.4 (1.630)	40.4 (1.591)	36.3 (1.429)	38.0 (1.496)	1000 pcs.

RECEPTACLE

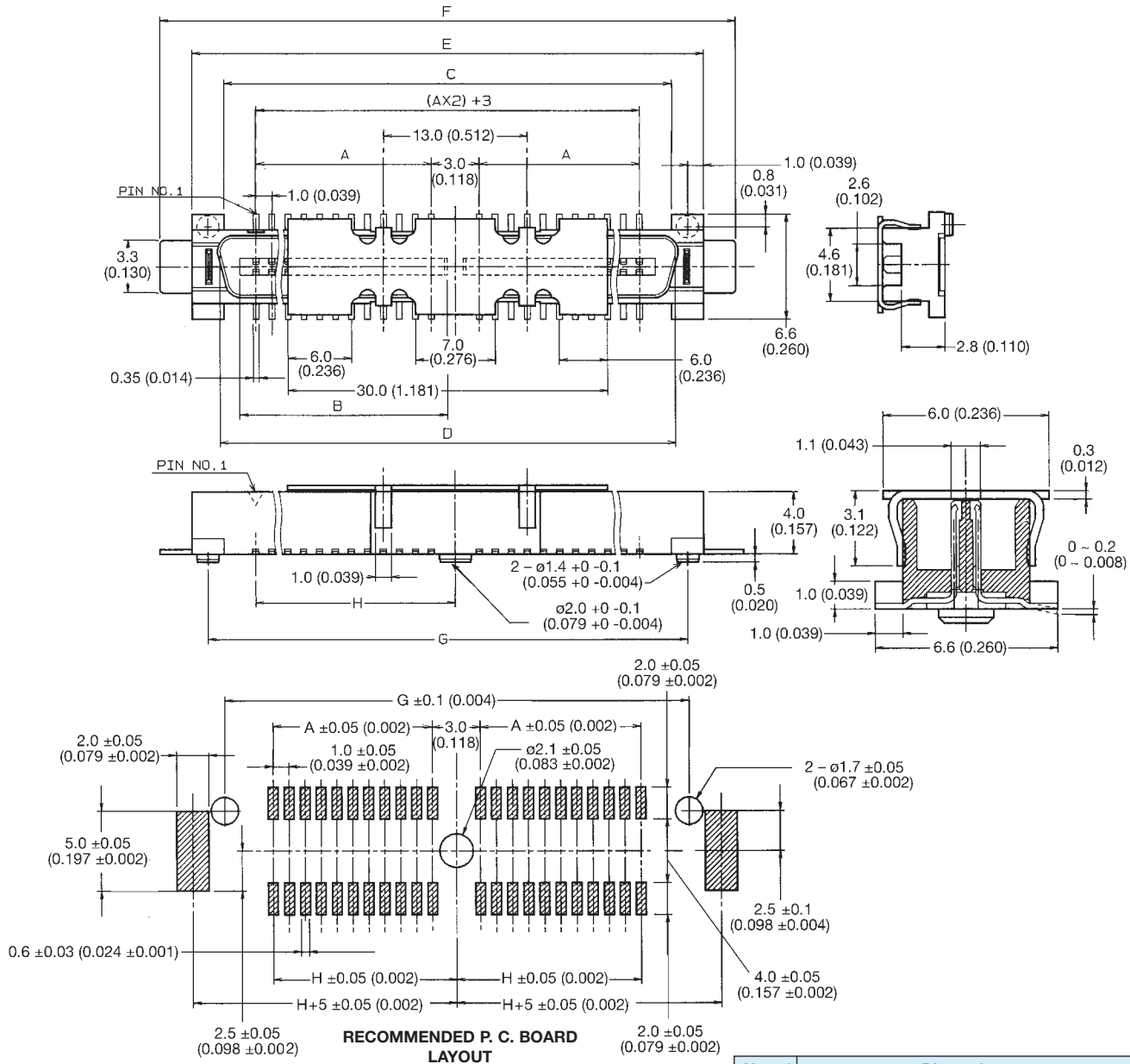


Dimension						
P/N	No. of Pos.	A	B	C	D	Qty. Per Reel
24 5078 030 100 861	030	26.4 (1.039)	25.4 (1.000)	21.3 (0.839)	23.0 (0.906)	1000 pcs.
040	040	31.4 (1.236)	30.4 (1.197)	26.3 (1.035)	28.0 (1.102)	1000 pcs.
050	050	36.4 (1.433)	35.4 (1.394)	31.3 (1.232)	33.0 (1.299)	1000 pcs.
24 5078 060 100 861	060	41.4 (1.630)	40.4 (1.591)	36.3 (1.429)	38.0 (1.496)	1000 pcs.

Fine Pitch SMT Board to Board Connectors

Series 5078

Plug Straight with Vacuum Pick Up Clip (80 - 120 Contacts)



No. of Pos.	Dimension							
	A	B	C	D	E	F	G	H
080	19.0 (0.748)	21.0 (0.827)	45.0 (1.772)	45.7 (1.799)	49.0 (1.929)	53.0 (2.087)	47.0 (1.850)	20.5 (0.807)
100	24.0 (0.945)	26.0 (1.024)	55.0 (2.165)	55.7 (2.193)	59.0 (2.323)	63.0 (2.480)	57.0 (2.244)	25.5 (1.004)
120	29.0 (1.142)	31.0 (1.220)	65.0 (2.559)	65.7 (2.587)	69.0 (2.717)	73.0 (2.874)	67.0 (2.638)	30.5 (1.201)

HOW TO ORDER

19

Prefix

5078

Series Number

XXX

Number of Positions

080
100
120

000

Variation Code

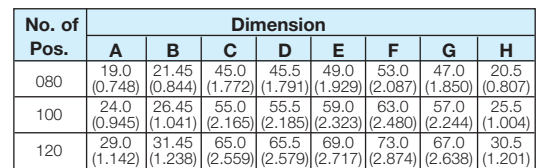
861

Finish Code

861 = Ni Undercoated
1.2 μ m - 4.0 μ m
Au overplated
0.25 μ m/min.

Parts are supplied in trays
with 40 pieces per tray.

Receptacle Straight with Vacuum Pick Up Clip (80 - 120 Contacts)



49

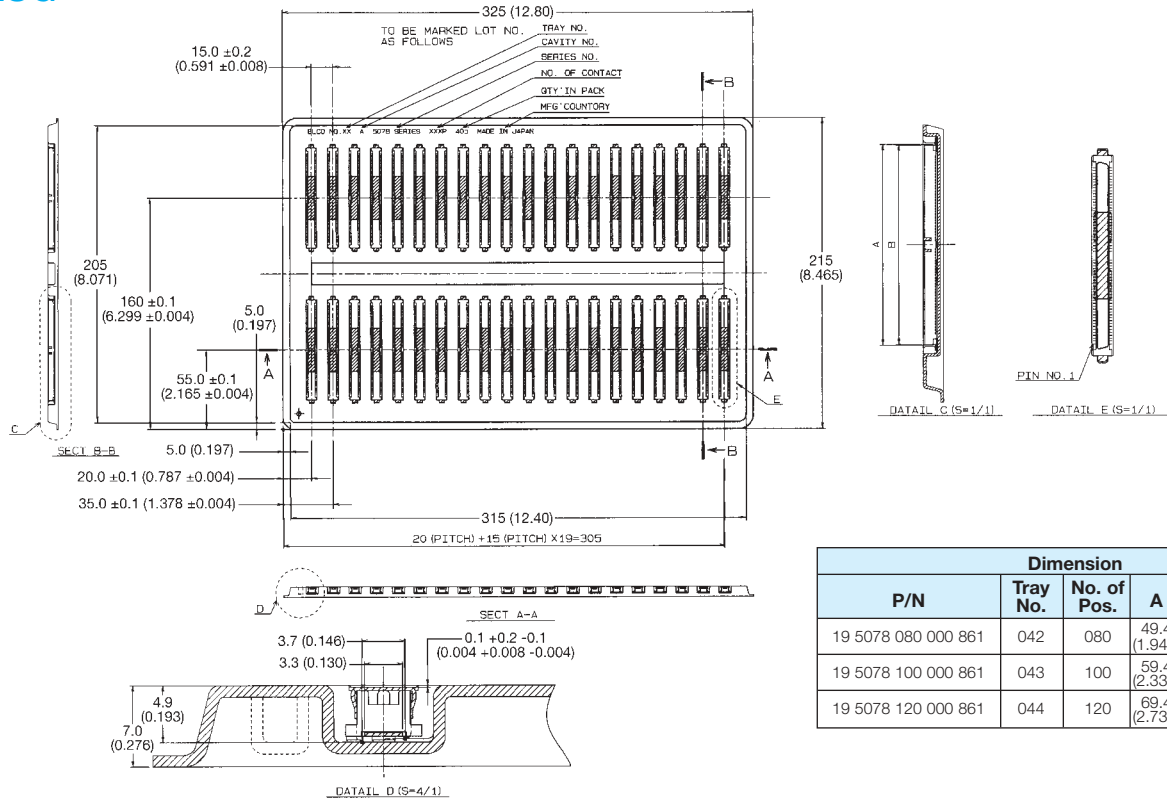
Fine Pitch SMT Board to Board Connectors



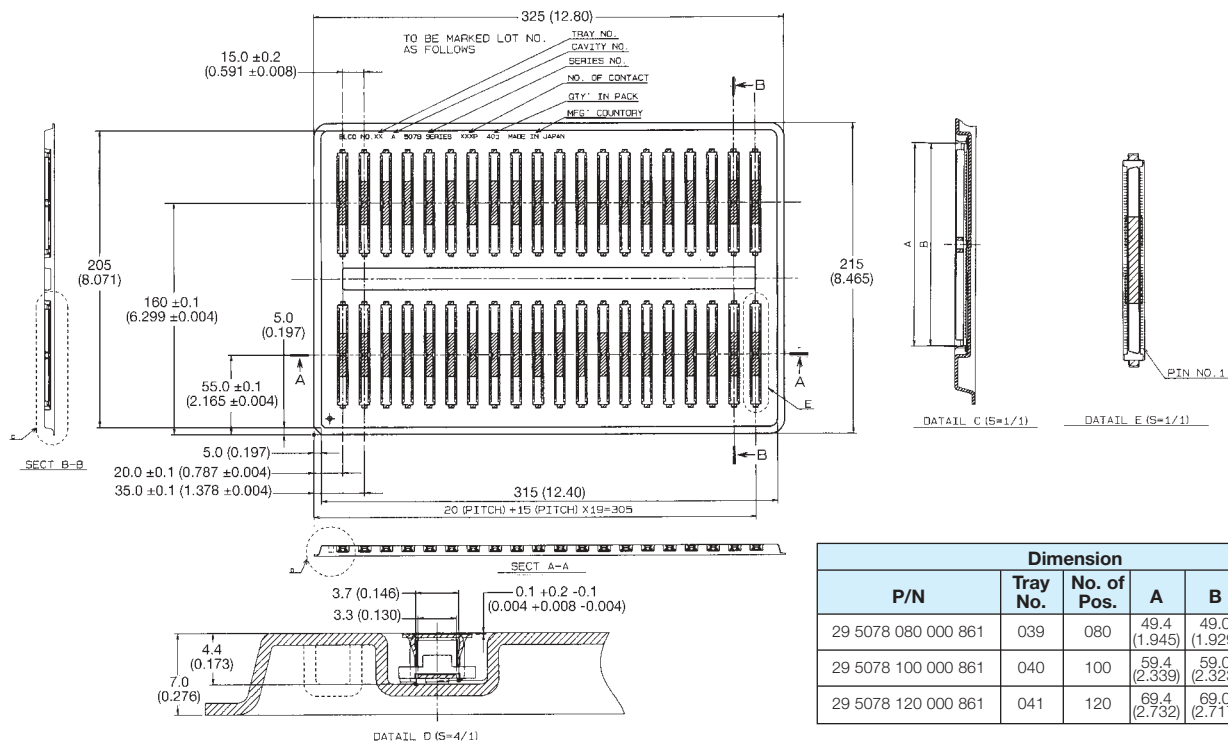
Series 5078

Plug and Receptacle Straight with Tray (80 - 120 Contacts)

PLUG



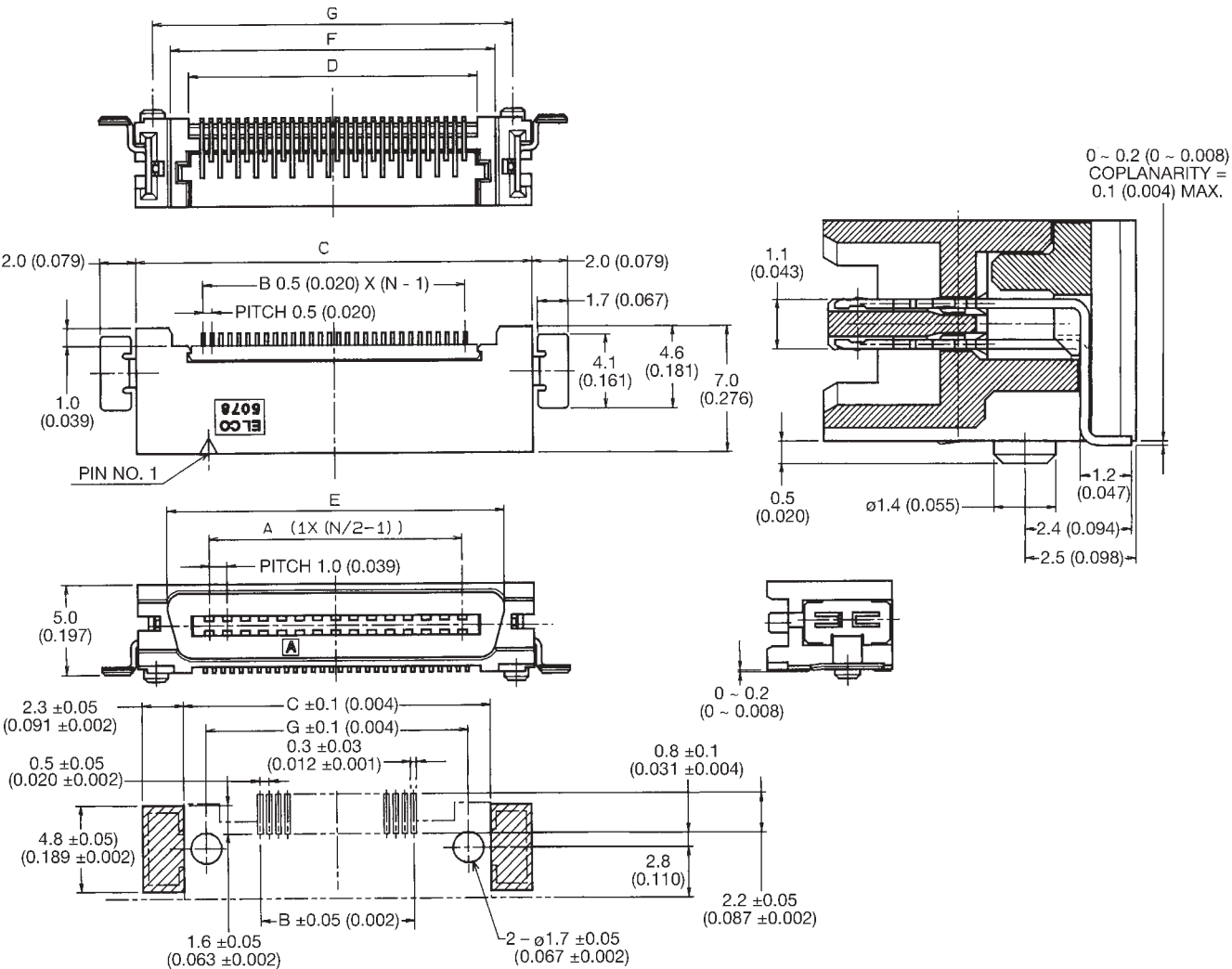
RECEPTACLE



Fine Pitch SMT Board to Board Connectors

Series 5078

Standard SMT Plug Right Angle (30 - 60 Contacts)



No. of Pos.	Dimension						
	A	B	C	D	E	F	G
030	14.0 (0.551)	14.5 (0.571)	22.0 (0.866)	16.0 (0.630)	18.7 (0.736)	18.0 (0.709)	20.0 (0.787)
040	19.0 (0.748)	19.5 (0.768)	27.0 (1.063)	21.0 (0.827)	23.7 (0.933)	23.0 (0.906)	25.0 (0.984)
050	24.0 (0.945)	24.5 (0.965)	32.0 (1.260)	26.0 (1.024)	28.7 (1.130)	28.0 (1.102)	30.0 (1.181)
060	29.0 (1.142)	29.5 (1.161)	37.0 (1.457)	31.0 (1.220)	33.7 (1.327)	33.0 (1.299)	35.0 (1.378)

HOW TO ORDER

14
 Prefix

5078
 Series Number

XXX
 Number of Positions
 030
 040
 050
 060

510
 Variation Code

861
 Finish Code
 861 = Ni Undercoated
 1.2µm - 4.0µm
 Au overplated
 0.25µm/min.

Parts are supplied in tape and reel packaging with 1000 pieces per reel.

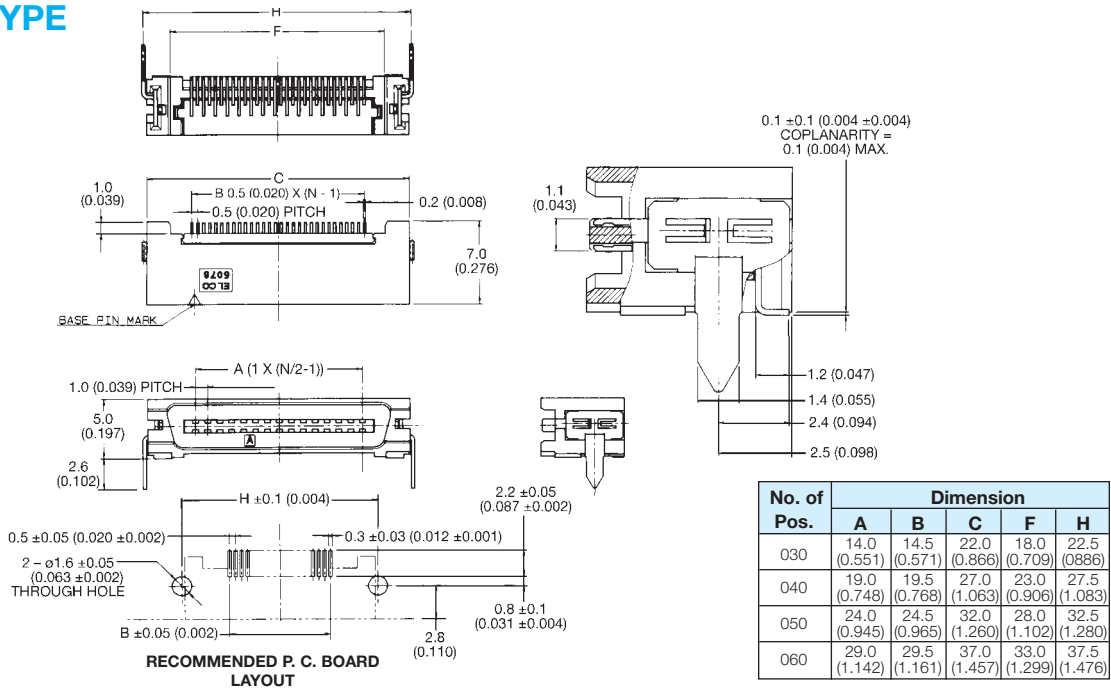
Fine Pitch SMT

Board to Board Connectors

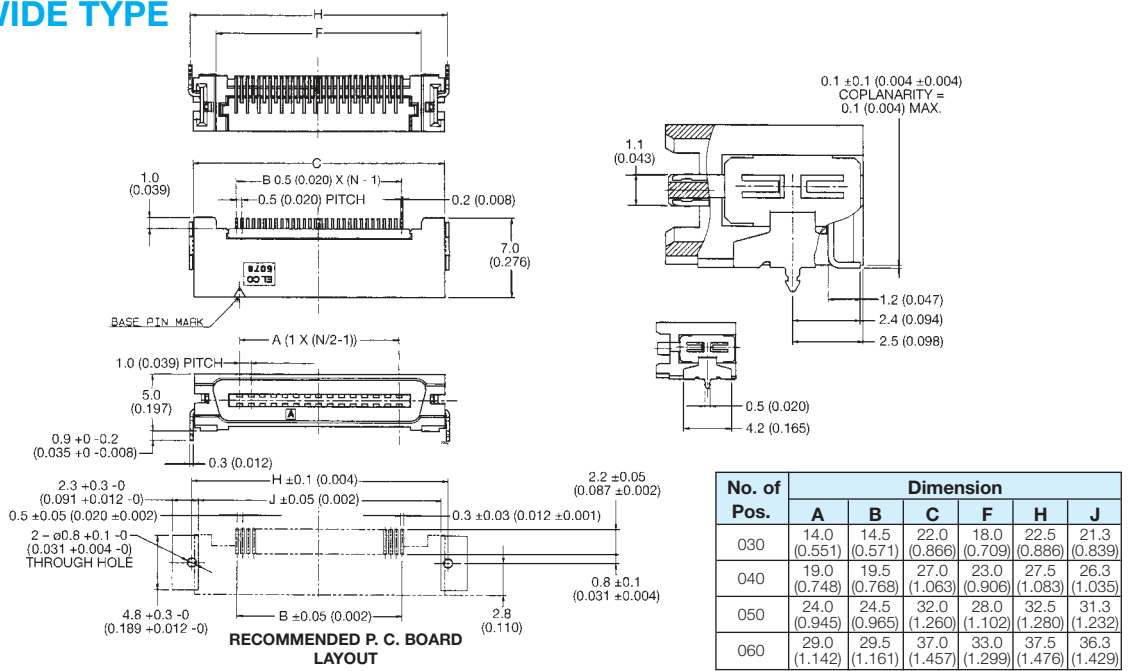
Series 5078

Lead Reflow Plug Right Angle (30 - 60 Contacts)

REFLOW PIN TYPE (511)



REFLOW PIN WIDE TYPE (515)



HOW TO ORDER

14	5078	XXX	51X	861
Prefix	Series Number	Number of Positions	Variation Code	Finish Code
		030	511 = Reflow pin type	861 = Ni Undercoated
		040	515 = Reflow pin wide type	1.2µm - 4.0µm
		050		Au overplated
		060		0.25µm/min.

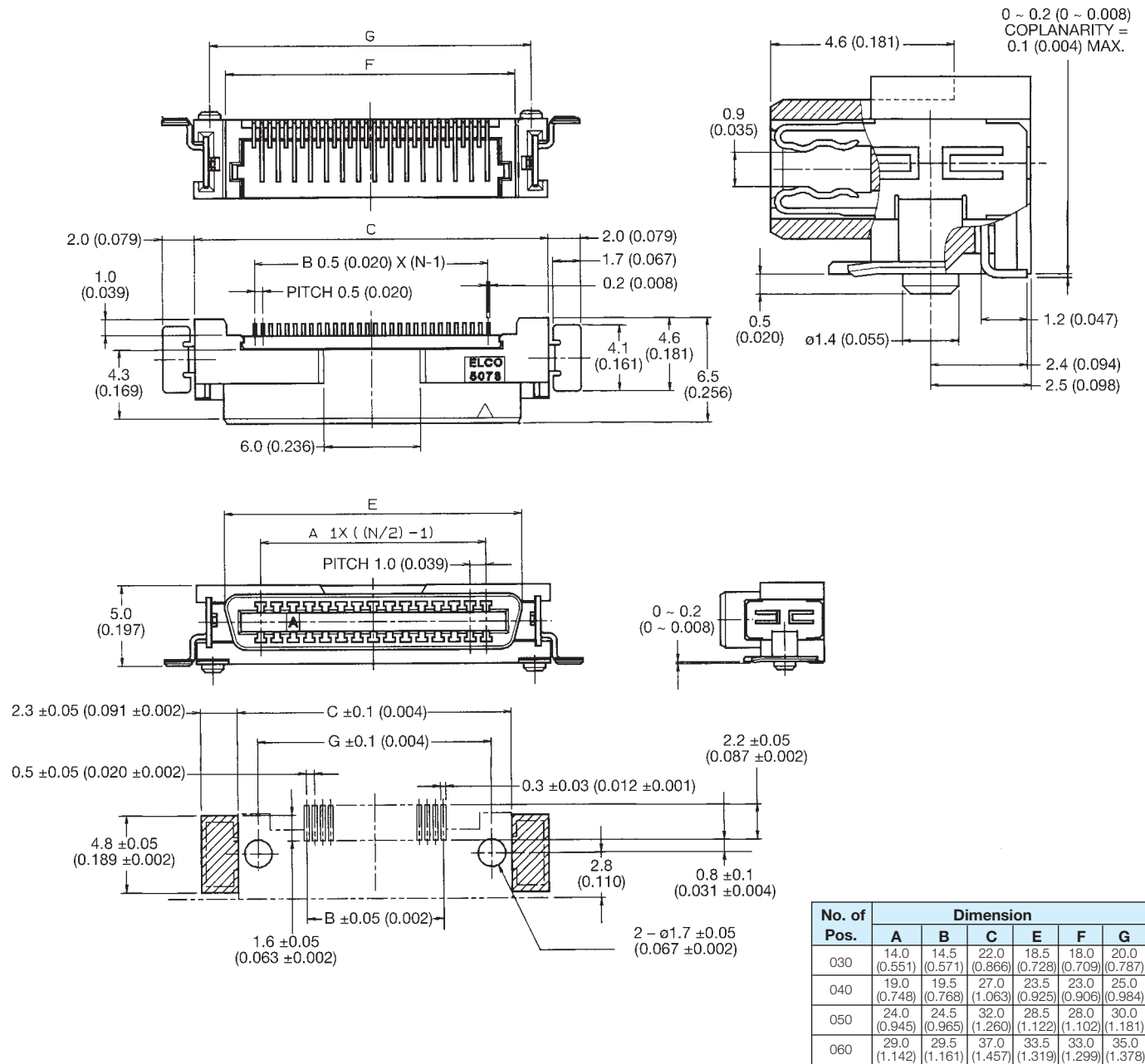
Parts are supplied in tape and reel packaging with 1000 pieces per reel.

Fine Pitch SMT Board to Board Connectors



Series 5078

Standard SMT Receptacle Right Angle (30 - 60 Contacts)



HOW TO ORDER

24

Prefix

5078

Series Number

XXX

Number of Positions

030
040
050
060

510

Variation Code

861

Finish Code

861 = Ni Undercoated
1.2µm - 4.0µm
Au overplated
0.25µm/min.

Parts are supplied in tape and reel packaging
with 1000 pieces per reel.

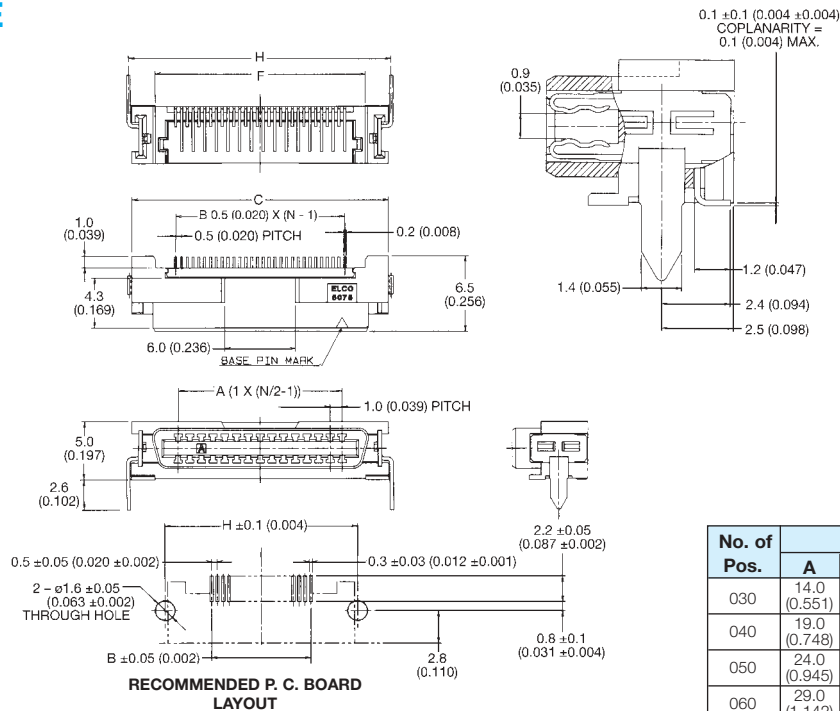
ELCO

Fine Pitch SMT Board to Board Connectors

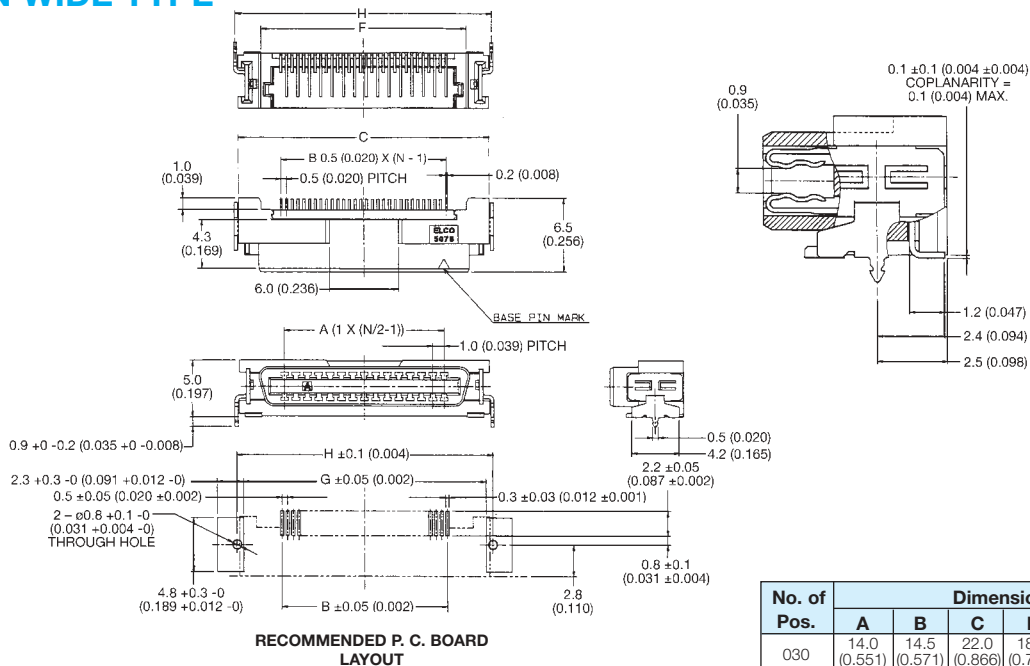
Series 5078

Lead Reflow Receptacle Right Angle (30 - 60 Contacts)

REFLOW PIN TYPE (511)



REFLOW PIN WIDE TYPE (515)



HOW TO ORDER

24

Prefix

5078

Series Number

XXX

Number of Positions

030

040

050

060

51X

Variation Code

511 = Reflow pin type

515 = Reflow pin wide type

861

Finish Code

861 = Ni Undercoated

1.2µm - 4.0µm

Au overplated

0.25µm/min.

Parts are supplied in tape and reel packaging with 1000 pieces per reel.

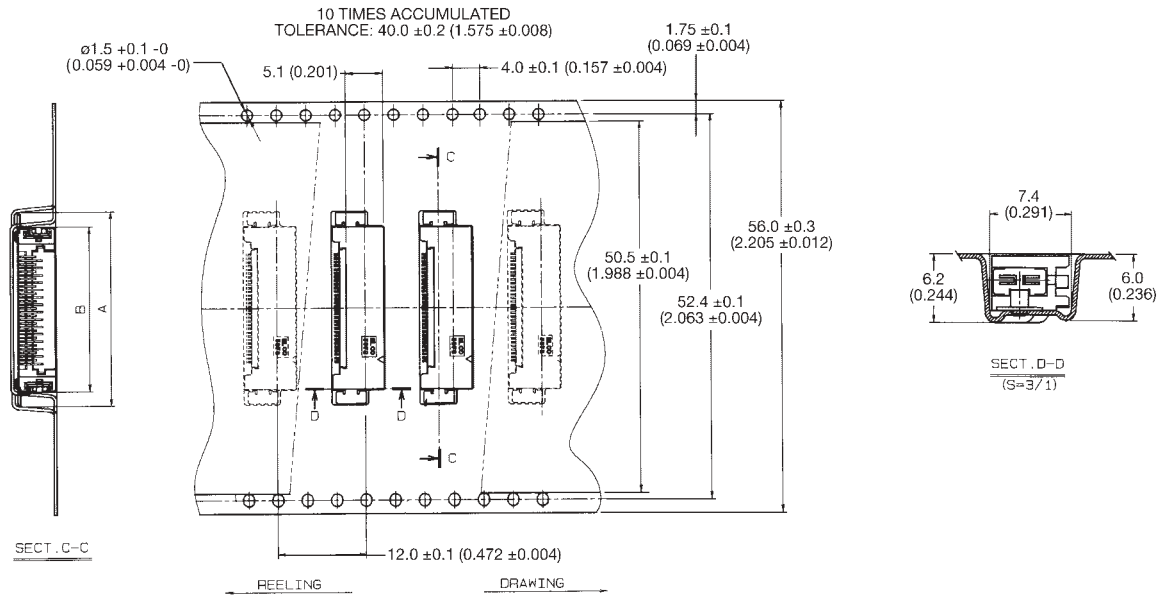
Fine Pitch SMT

Board to Board Connectors

Series 5078 Standard SMT Plug and Receptacle

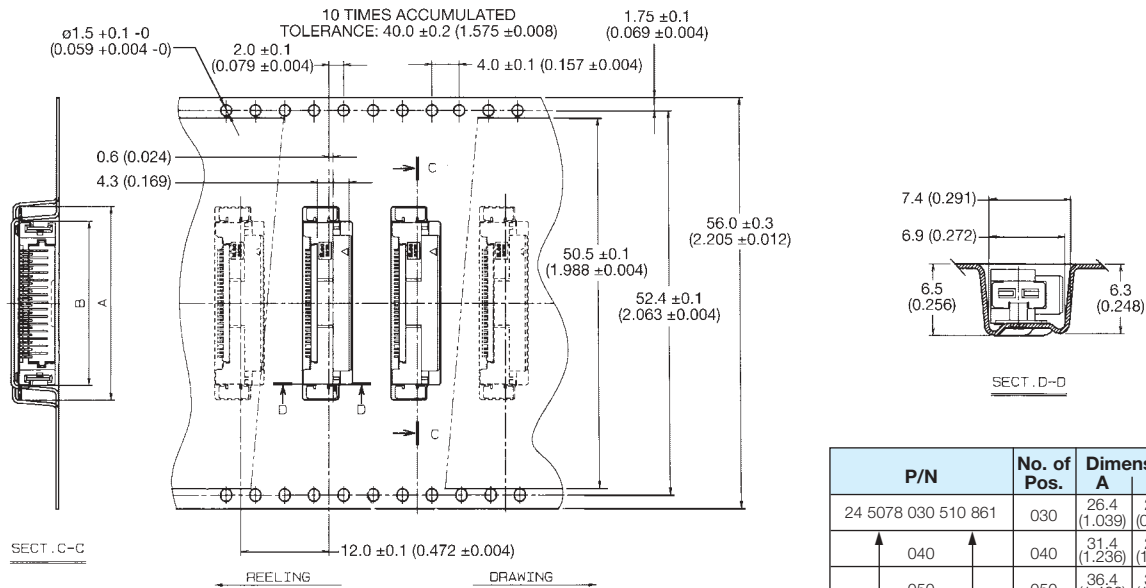
Right Angle Embossed (30 - 60 Contacts)

PLUG



P/N	No. of Pos.	Dimension A	Dimension B	Qty. Per Reel
14 5078 030 510 861	030	26.4 (1.039)	22.4 (0.882)	1000 pcs.
040	040	31.4 (1.236)	27.4 (1.079)	1000 pcs.
050	050	36.4 (1.433)	32.4 (1.276)	1000 pcs.
14 5078 060 510 861	060	41.4 (1.630)	37.4 (1.472)	1000 pcs.

RECEPTACLE



P/N	No. of Pos.	Dimension A	Dimension B	Qty. Per Reel
24 5078 030 510 861	030	26.4 (1.039)	22.4 (0.882)	1000 pcs.
040	040	31.4 (1.236)	27.4 (1.079)	1000 pcs.
050	050	36.4 (1.433)	32.4 (1.276)	1000 pcs.
24 5078 060 510 861	060	41.4 (1.630)	37.4 (1.472)	1000 pcs.

Parts are supplied in tape and reel packaging with 1000 pieces per reel.

P/N	No. of Pos.	Dimension B		Qty. Per Reel
14 5078 030 XXX 861	030	25.8 (1.016)	22.0 (0.866)	1000 pcs.
↑ 040 ↑	040	30.8 (1.213)	27.0 (1.063)	1000 pcs.
↓ 050 ↓	050	35.8 (1.409)	32.0 (1.260)	1000 pcs.
14 5078 060 XXX 861	060	40.8 (1.606)	37.0 (1.457)	1000 pcs.

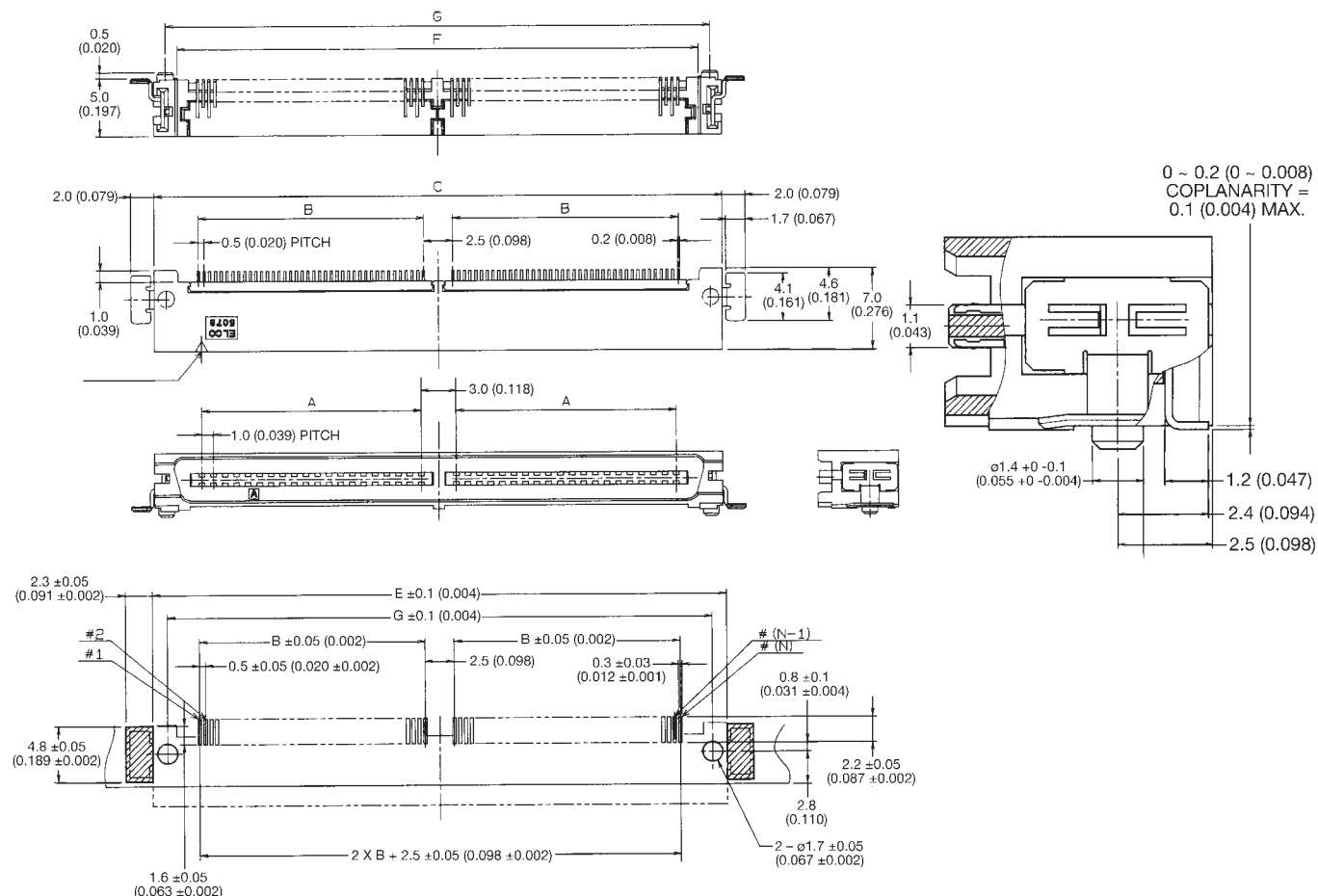
P/N	No. of Pos.	Dimension B		Qty. Per Reel
24 5078 030 XXX 861	030	25.8 (1.016)	22.0 (0.866)	1000 pcs.
↕ 040 ↕	040	30.8 (1.213)	27.0 (1.063)	1000 pcs.
↕ 050 ↕	050	35.8 (1.409)	32.0 (1.260)	1000 pcs.
24 5078 060 XXX 861	060	40.8 (1.606)	37.0 (1.457)	1000 pcs.

Fine Pitch SMT Board to Board Connectors



Series 5078

Standard SMT Plug Right Angle (80 - 120 Contacts)



P/N	No. of Pos.	Dimension						Qty. Per Tray
		A	B	C	E	F	G	
19 5078 080 500 861	080	19.0 (0.748)	19.5 (0.768)	49.0 (1.929)	49.0 (1.929)	45.0 (1.772)	47.0 (1.850)	40 pcs.
19 5078 100 500 861	100	24.0 (0.945)	24.5 (0.965)	59.0 (2.323)	59.0 (2.323)	55.0 (2.165)	57.0 (2.244)	40 pcs.
19 5078 120 500 861	120	29.0 (1.142)	29.5 (1.161)	69.0 (2.717)	69.0 (2.717)	65.0 (2.559)	67.0 (2.638)	40 pcs.

HOW TO ORDER

19

Prefix

5078

Series Number

XXX

Number of Positions

080
100
120

500

Variation Code

861

Finish Code

861 = Ni Undercoated
1.2 μ m - 4.0 μ m
Au overplated
0.25 μ m/min.

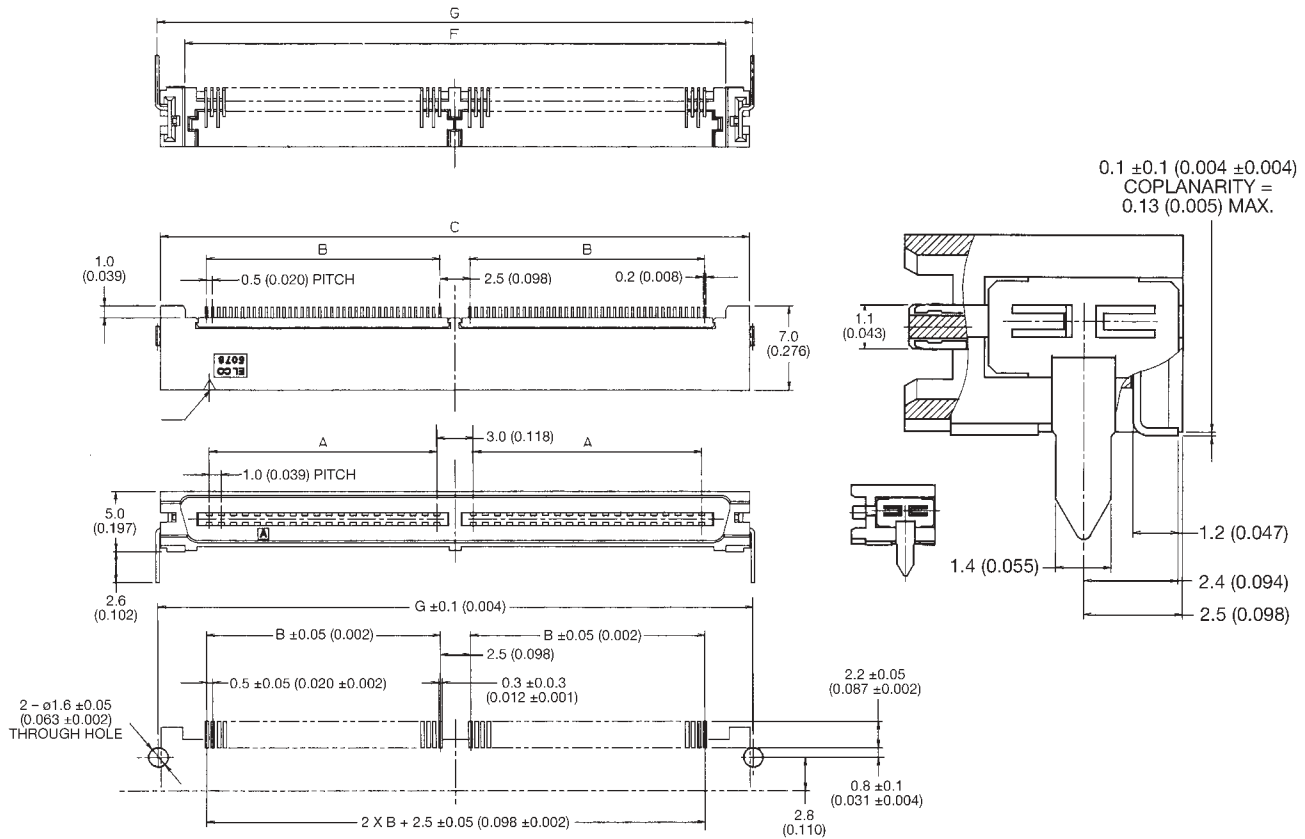
Parts are supplied in trays
with 40 pieces per tray.

Fine Pitch SMT Board to Board Connectors



Series 5078

Lead Reflow Plug Right Angle (80 - 120 Contacts)



P/N	No. of Pos.	Dimension					Qty. Per Tray
		A	B	C	F	G	
19 5078 080 501 861	080	19.0 (0.748)	19.5 (0.768)	49.0 (1.929)	45.0 (1.772)	49.5 (1.949)	40 pcs.
19 5078 100 501 861	100	24.0 (0.945)	24.5 (0.965)	59.0 (2.323)	55.0 (2.165)	59.5 (2.343)	40 pcs.
19 5078 120 501 861	120	29.0 (1.142)	29.5 (1.161)	69.0 (2.717)	65.0 (2.559)	69.5 (2.736)	40 pcs.

HOW TO ORDER

19

Prefix

5078

Series Number

XXX

Number of Positions

080
100
120

501

Variation Code

861

Finish Code

861 = Ni Undercoated
1.2µm - 4.0µm
Au overplated
0.25µm/min.

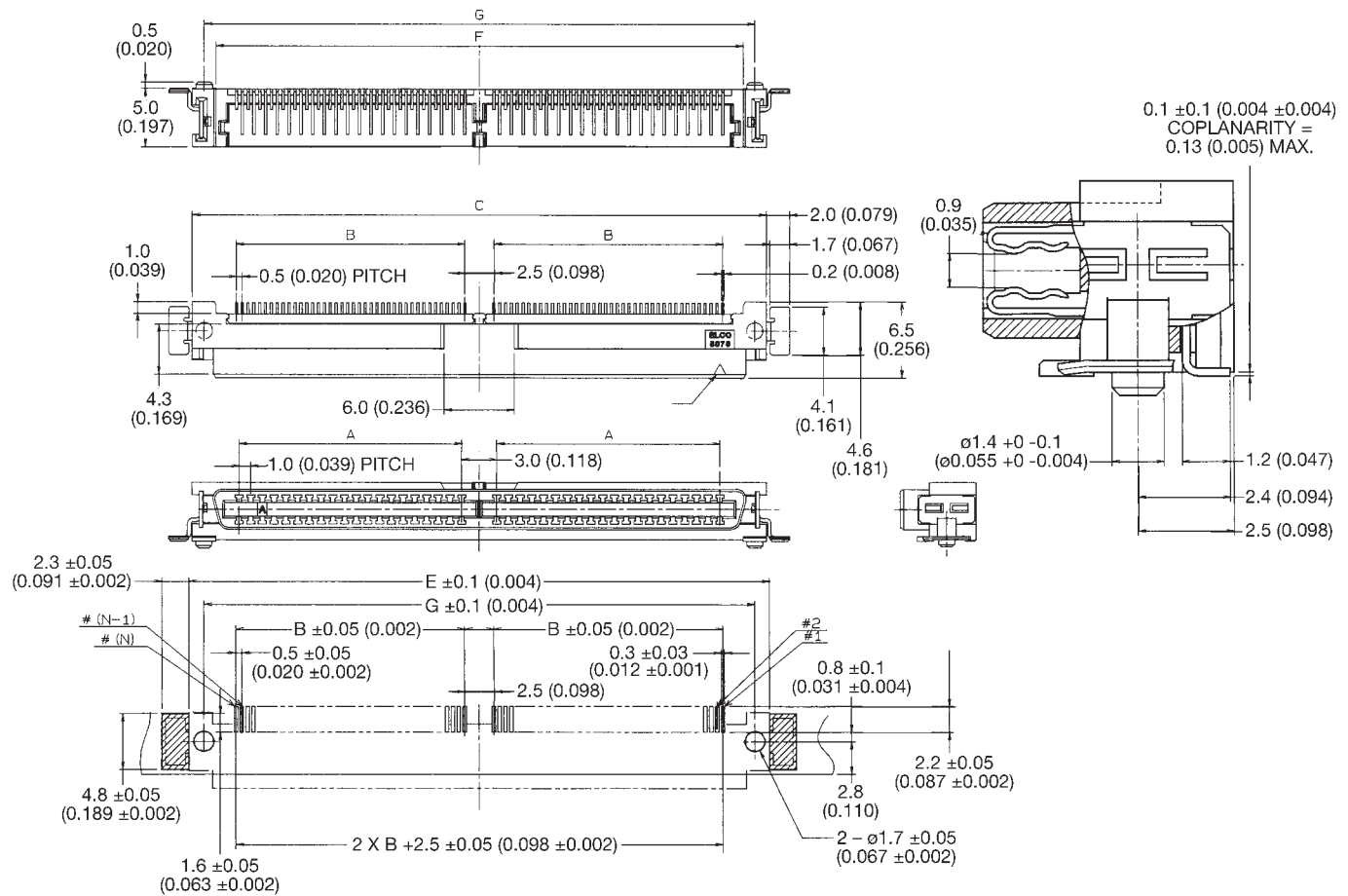
Parts are supplied in trays
with 40 pieces per tray.

Fine Pitch SMT Board to Board Connectors



Series 5078

Standard SMT Receptacle Right Angle (80 - 120 Contacts)



P/N	No. of Pos.	Dimension						Qty. Per Tray
		A	B	C	E	F	G	
29 5078 080 500 861	080	19.0 (0.748)	19.5 (0.768)	49.0 (1.929)	49.0 (1.929)	45.0 (1.772)	47.0 (1.850)	40 pcs.
29 5078 100 500 861	100	24.0 (0.945)	24.5 (0.965)	59.0 (2.323)	59.0 (2.323)	55.0 (2.165)	57.0 (2.244)	40 pcs.
29 5078 120 500 861	120	29.0 (1.142)	29.5 (1.161)	69.0 (2.717)	69.0 (2.717)	65.0 (2.559)	67.0 (2.638)	40 pcs.

HOW TO ORDER

29

Prefix

5078

Series Number

XXX

Number of Positions

080
100
120

500

Variation Code

861

Finish Code

861 = Ni Undercoated
1.2µm - 4.0µm
Au overplated
0.25µm/min.

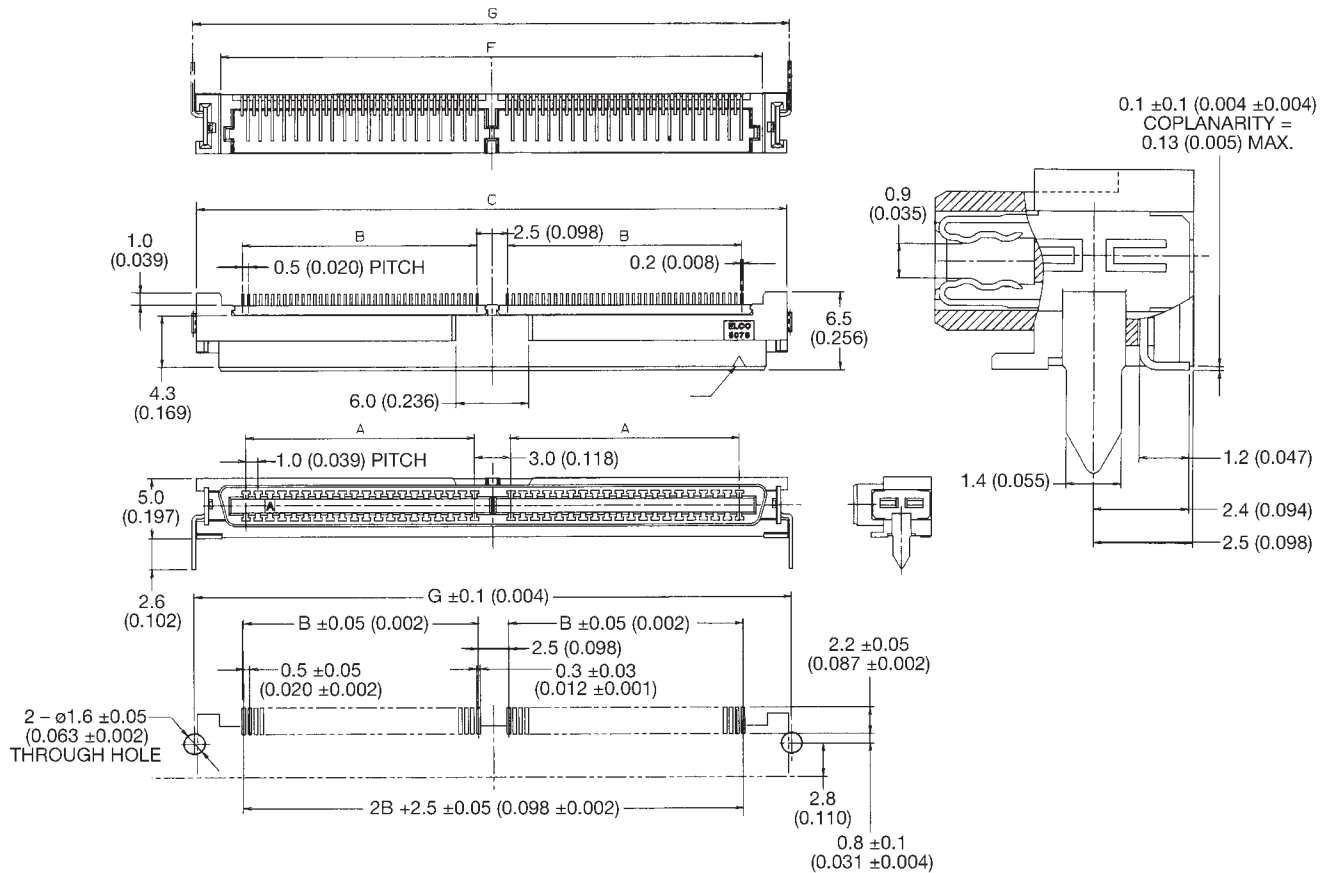
Parts are supplied in trays
with 40 pieces per tray.

Fine Pitch SMT Board to Board Connectors



Series 5078

Lead Reflow Receptacle Right Angle (80 - 120 Contacts)



P/N	No. of Pos.	Dimension					Qty. Per Tray
		A	B	C	F	G	
29 5078 080 501 861	080	19.0 (0.748)	19.5 (0.768)	49.0 (1.929)	45.0 (1.772)	49.5 (1.949)	40 pcs.
29 5078 100 501 861	100	24.0 (0.945)	24.5 (0.965)	59.0 (2.323)	55.0 (2.165)	59.5 (2.343)	40 pcs.
29 5078 120 501 861	120	29.0 (1.142)	29.5 (1.161)	69.0 (2.717)	65.0 (2.559)	69.5 (2.736)	40 pcs.

HOW TO ORDER

29

Prefix

5078

Series Number

XXX

Number of Positions

080
100
120

501

Variation Code

861

Finish Code

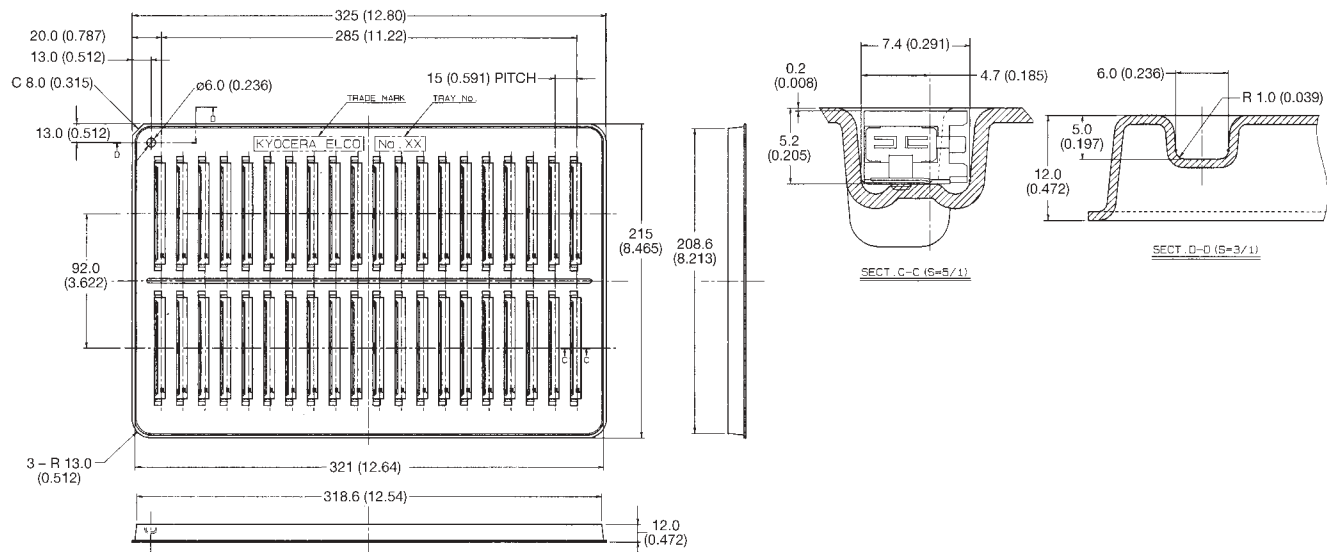
861 = Ni Undercoated
1.2µm - 4.0µm
Au overplated
0.25µm/min.

Parts are supplied in trays
with 40 pieces per tray.

Fine Pitch SMT Board to Board Connectors



Series 5078 Standard SMT Plug and Receptacle
Right Angle with Tray (80 - 120 Contacts)



HOW TO ORDER

XX

Prefix

19 = Plug
29 = Receptacle

5078

Series Number

XXX

Number of Positions

080
100
120

500

Variation Code

Right Angle Standard
SMT Type

861

Finish Code

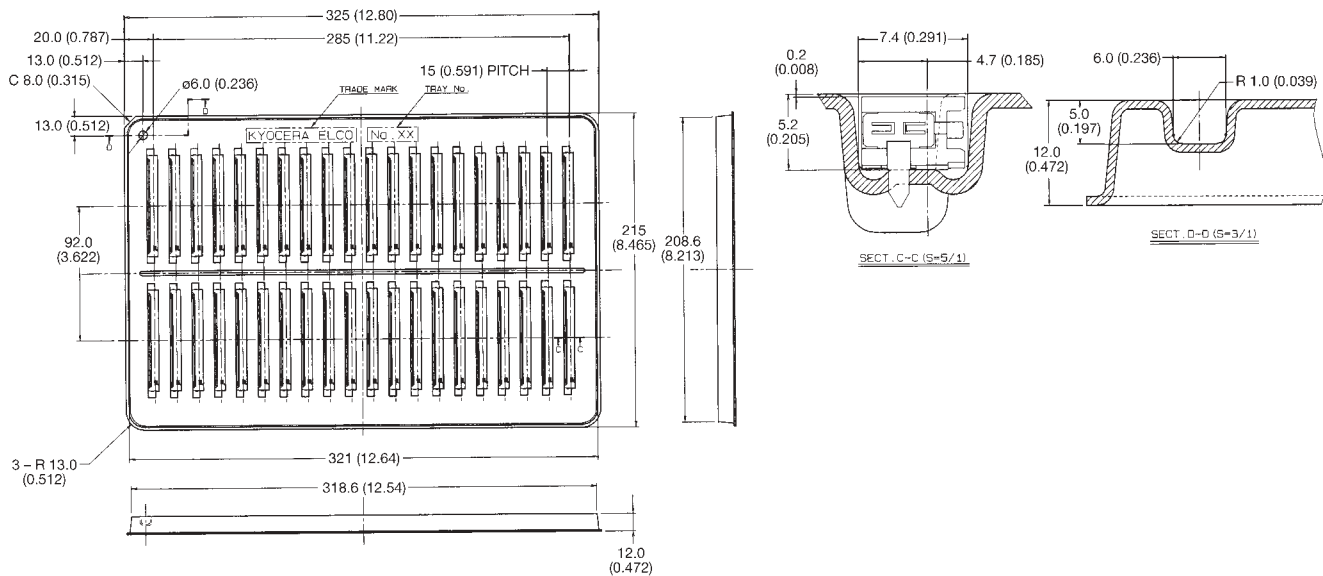
861 = Ni Undercoated
1.2µm - 4.0µm
Au overplated
0.25µm/min.

Parts are supplied in trays
with 40 pieces per tray.

Fine Pitch SMT Board to Board Connectors



Series 5078 Plug and Receptacle Reflow Pin Type
Right Angle with Tray (80 - 120 Contacts)



HOW TO ORDER

XX	5078	XXX	501	861
Prefix	Series Number	Number of Positions	Variation Code	Finish Code
19 = Plug 29 = Receptacle		080 100 120	Right Angle Reflow Pin Type	861 = Ni Undercoated 1.2 μ m - 4.0 μ m Au overplated 0.25 μ m/min.

Parts are supplied in trays
with 40 pieces per tray.

Fine Pitch SMT Board to Board Connectors

Series 5078 Ordering Code



HOW TO ORDER

ASSEMBLY (TAPE AND REEL PACKAGE)

XX	5078	XXX	XXX	861
Prefix 14 = Plug 24 = Receptacle	Series Number	Number of Positions 030 040 050 060	Variation Code 100 = Straight with Vacuum Pick Up Clip (PPS) 510 = Right Angle Standard SMT Type 511 = Right Angle Reflow Pin Type 515 = Right Angle Reflow Pin Wide Type	Finish Code 861 = Ni Undercoated 1.2 - 4.0µm, Over Au Plating 0.25µm/min.

Parts are supplied in tape and reel packaging
with 1000 pieces per reel.

ASSEMBLY (TRAY)

XX	5078	XXX	XXX	861
Prefix 19 = Plug 29 = Receptacle	Series Number	Number of Positions 080 100 120	Variation Code 000 = Straight with Vacuum Pick Up Clip (Metal) 500 = Right Angle Standard SMT Type 501 = Right Angle Reflow Pin Type	Finish Code 861 = Ni Undercoated 1.2 - 4.0µm, Over Au Plating 0.25µm/min.

Parts are supplied in trays
with 40 pieces per tray.

Fine Pitch SMT Board to Board Connectors

Series 5077



Series 5077 is the board to board, fine pitch and low-profile connector designed for the demand of high density circuit in the market.

FEATURES

1.0mm pitch, 2 pieces board to board, SMT type connector. 5077 series is designed to have 8.0mm-19.0mm of extended mated height based on the same design concept with 5078 series.

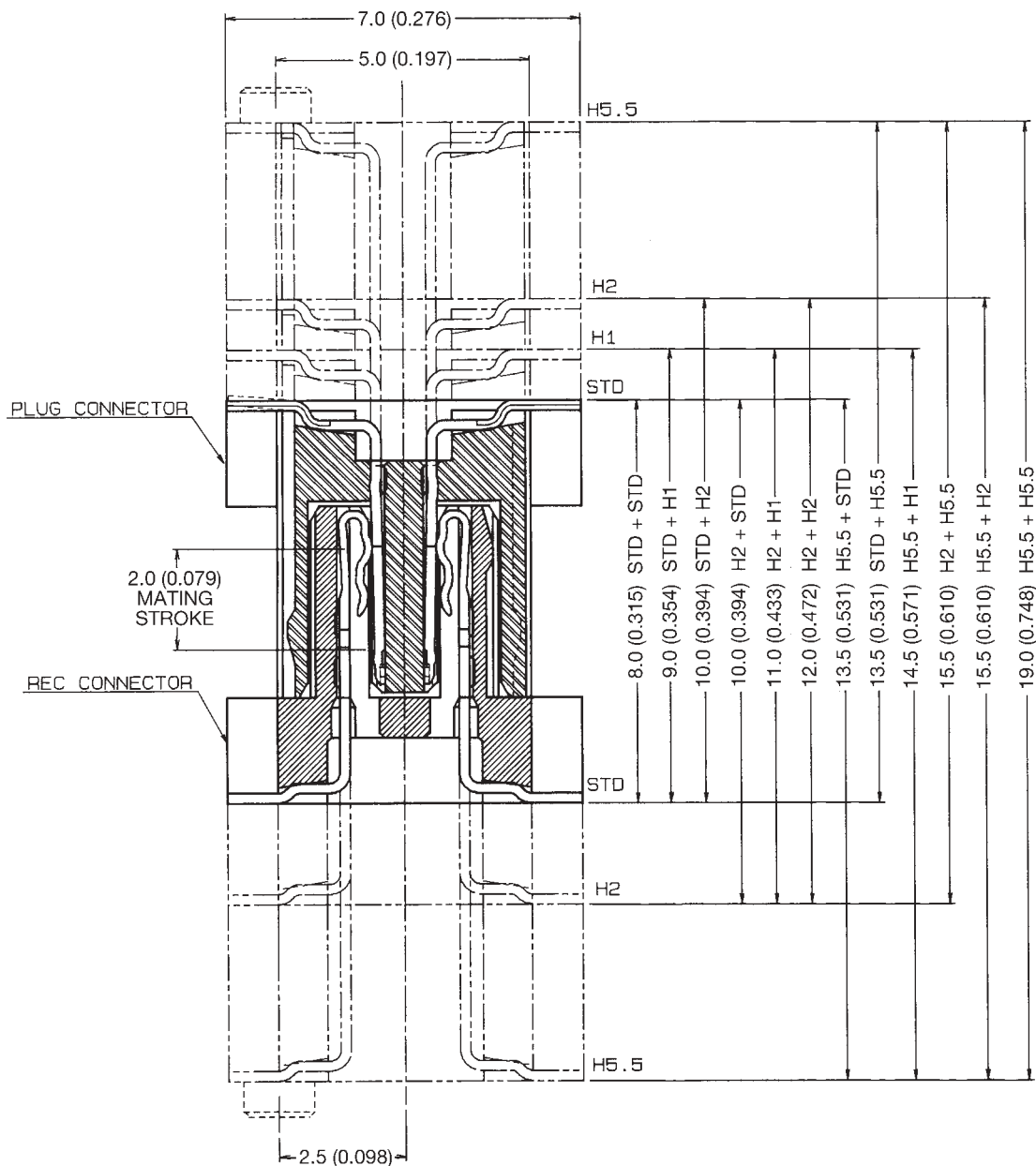
The number of positions available for 5077 is 30, 40, 50 and 60.

SPECIFICATIONS

Series	5077
Number of Contacts	30, 40, 50, 60
Contact Spacing	1.0mm
Current Rating	0.5A Max
Voltage Rating	100V Max
D.W. Voltage	500V rms/min
Insulator Material	PPS (UL94V-0)
Contact Material	Phosphor bronze, gold plating (contact), solder plating (tail)
Metal Tab	Phosphor bronze, solder plating
Mating Cycles	100

Fine Pitch SMT Board to Board Connectors

Series 5077 Applications



		Receptacle Variation		
Plug Variation		STD	H2	*H5.5
	STD	8.0 (0.315)	10.0 (0.394)	13.5 (0.531)
	H1	9.0 (0.354)	11.0 (0.433)	14.5 (0.571)
	H2	10.0 (0.394)	12.0 (0.472)	15.5 (0.610)
	*H5.5	13.5 (0.531)	15.5 (0.610)	19.0 (0.748)

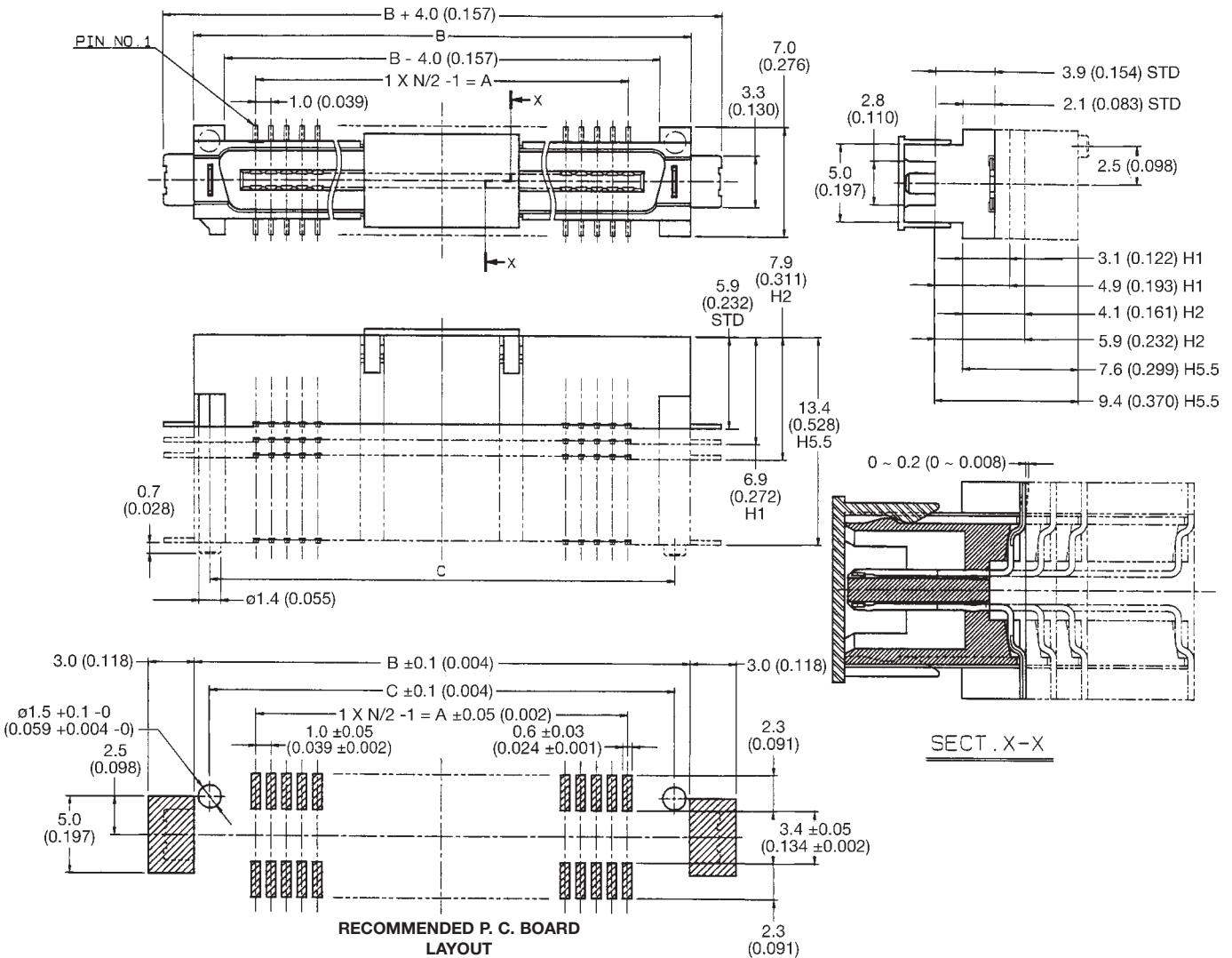
*H5.5 Type = 50P only

Fine Pitch SMT Board to Board Connectors



Series 5077

Plug Straight with Vacuum Pick Up Clip (30 - 60 Contacts)



P/N	No. of Pos.	Dimension			Qty. Per Reel
		A	B	C	
14 5077 030 1XX 861	030	14.0 (0.551)	22.0 (0.866)	20.0 (0.787)	500 pcs.
14 5077 040 1XX 861	040	19.0 (0.748)	27.0 (1.063)	25.0 (0.984)	500 pcs.
14 5077 050 1XX 861	050	24.0 (0.945)	32.0 (1.260)	30.0 (1.181)	500 pcs.
14 5077 060 1XX 861	060	29.0 (1.142)	37.0 (1.457)	35.0 (1.378)	500 pcs.

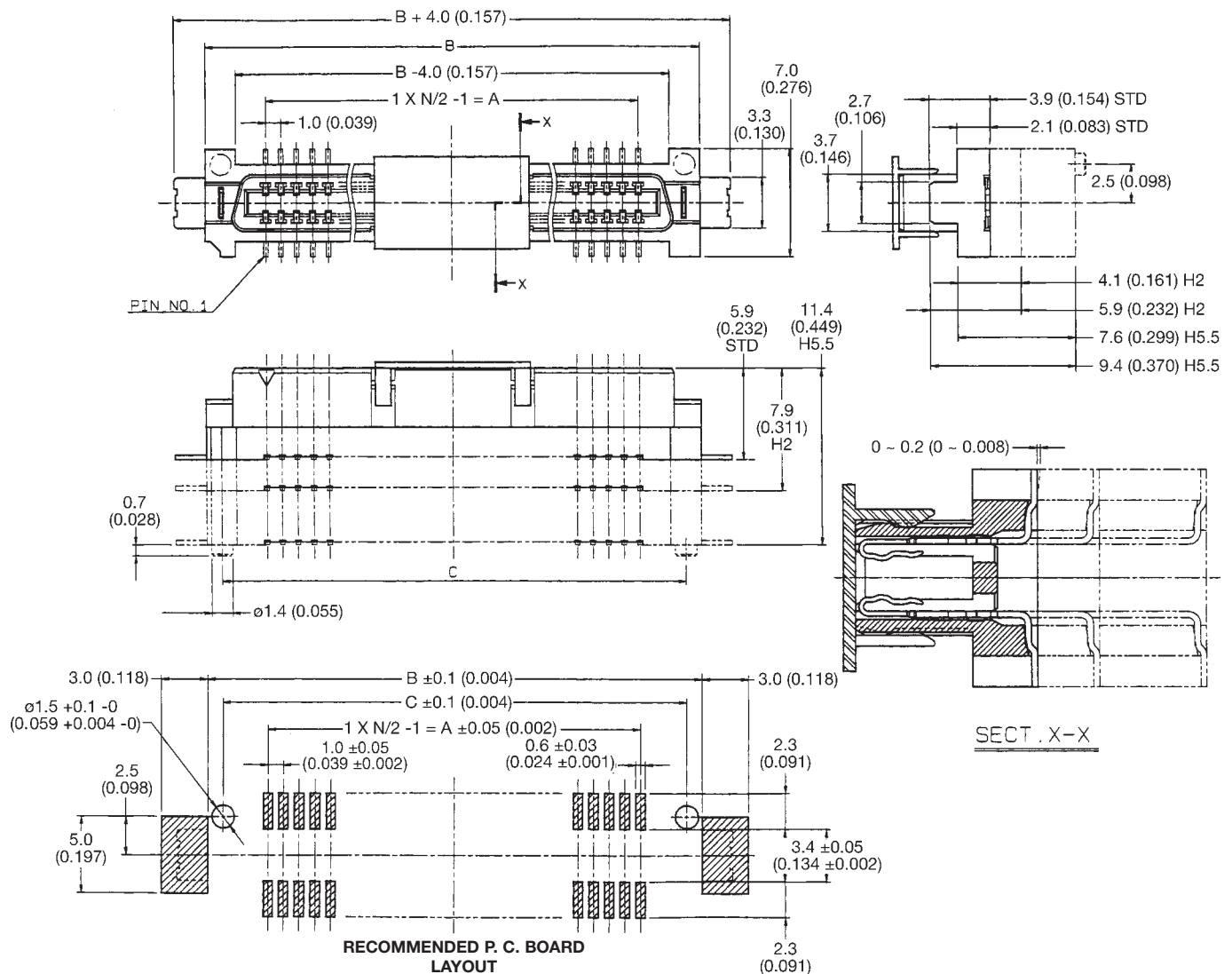
See page 69 for options of 1XX Variation Code to get complete part number.
Parts are supplied in tape and reel packaging with 500 pieces per reel.

Fine Pitch SMT Board to Board Connectors



Series 5077

Receptacle Straight with Vacuum Pick Up Clip (30 - 60 Contacts)



P/N	No. of Pos.	Dimension			Qty. Per Reel
		A	B	C	
24 5077 030 1XX 861	030	14.0 (0.551)	22.0 (0.866)	20.0 (0.787)	500 pcs.
24 5077 040 1XX 861	040	19.0 (0.748)	27.0 (1.063)	25.0 (0.984)	500 pcs.
24 5077 050 1XX 861	050	24.0 (0.945)	32.0 (1.260)	30.0 (1.181)	500 pcs.
24 5077 060 1XX 861	060	29.0 (1.142)	37.0 (1.457)	35.0 (1.378)	500 pcs.

See page 69 for options of 1XX Variation Code to get complete part number.
Parts are supplied in tape and reel packaging with 500 pieces per reel.

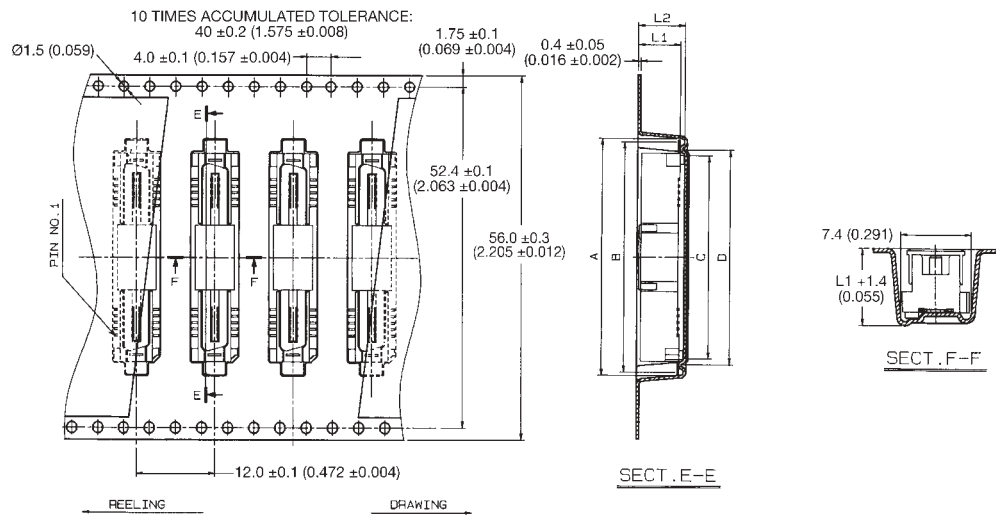
Fine Pitch SMT

Board to Board Connectors

Series 5077

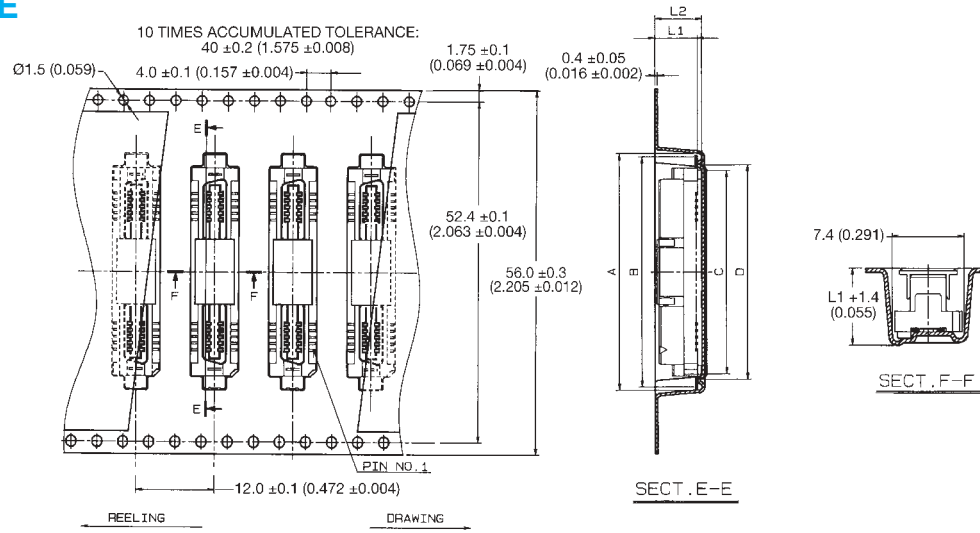
Plug and Receptacle Straight Embossed (30 - 60 Contacts)

PLUG



Dimension														
P/N	No. of Pos.	A	B	C	D	L1				L2				Qty. Per Reel
						STD Type	H1 Type	H2 Type	H5.5 Type	STD Type	H1 Type	H2 Type	H5.5 Type	
14 5077 030 1XX 861	030	26.4 (1.039)	25.4 (1.000)	21.3 (0.839)	23.0 (0.906)	6.50 (0.256)	7.60 (0.299)	8.60 (0.339)		7.2 (0.283)	8.3 (0.327)	9.3 (0.366)		500 pcs.
↑ 040 ↑	040	31.4 (1.236)	30.4 (1.197)	26.3 (1.035)	28.0 (1.102)	6.50 (0.256)	7.60 (0.299)	8.60 (0.339)		7.2 (0.283)	8.3 (0.327)	9.3 (0.366)		500 pcs.
↓ 050 ↓	050	36.4 (1.433)	35.4 (1.394)	31.3 (1.232)	33.0 (1.299)	6.50 (0.256)	7.60 (0.299)	8.60 (0.339)	12.1 (0.476)	7.2 (0.283)	8.3 (0.327)	9.3 (0.366)	12.8 (0.504)	500 pcs.
14 5077 060 1XX 861	060	41.4 (1.630)	40.4 (1.591)	36.3 (1.429)	38.0 (1.496)	6.50 (0.256)	7.60 (0.299)	8.60 (0.339)		7.2 (0.283)	8.3 (0.327)	9.32 (0.366)		500 pcs.

RECEPTACLE



Dimension													
P/N	No. of Pos.	A	B	C	D	L1			L2			Qty. Per Reel	
						STD Type	H2 Type	H5.5 Type	STD Type	H2 Type	H5.5 Type		
24 5077 030 1XX 861	030	26.4 (1.039)	25.4 (1.000)	21.3 (0.839)	23.0 (0.906)	6.50 (0.256)	8.60 (0.339)		7.2 (0.283)	9.3 (0.366)		500 pcs.	
↑ 040 ↑	040	31.4 (1.236)	30.4 (1.197)	26.3 (1.035)	28.0 (1.102)	6.50 (0.256)	8.60 (0.339)		7.2 (0.283)	9.3 (0.366)		500 pcs.	
↓ 050 ↓	050	36.4 (1.433)	35.4 (1.394)	31.3 (1.232)	33.0 (1.299)	6.50 (0.256)	8.60 (0.339)	12.1 (0.476)	7.2 (0.283)	9.3 (0.366)	12.8 (0.504)	500 pcs.	
24 5077 060 1XX 861	060	41.4 (1.630)	40.4 (1.591)	36.3 (1.429)	38.0 (1.496)	6.50 (0.256)	8.60 (0.339)		7.2 (0.283)	9.32 (0.366)		500 pcs.	

See page 69 for options of 1XX Variation Code to get complete part number.
Parts are supplied in tape and reel packaging with 500 pieces per reel.

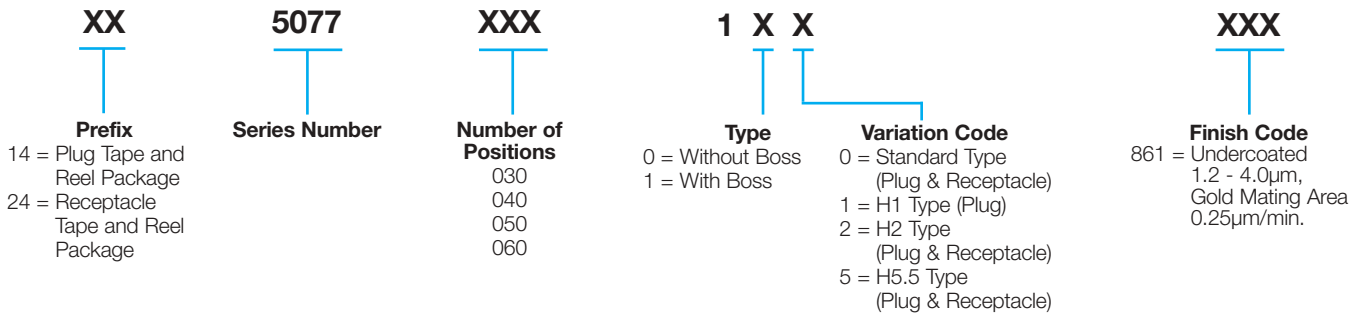
Fine Pitch SMT Board to Board Connectors

Series 5077 Ordering Code



HOW TO ORDER

ASSEMBLY (TAPE AND REEL PACKAGE)



Parts are supplied in tape and reel packaging with 500 pieces per reel.

Fine Pitch SMT Board to Board Connectors

Series 9158 MOBO™ SOLO STACKER™



The MOBO™ Series 9158 is a one-piece connector used to connect two PCB's within mobile phones, pagers, PDA's, security, hand held scanners, etc. in a cost-effective manner.

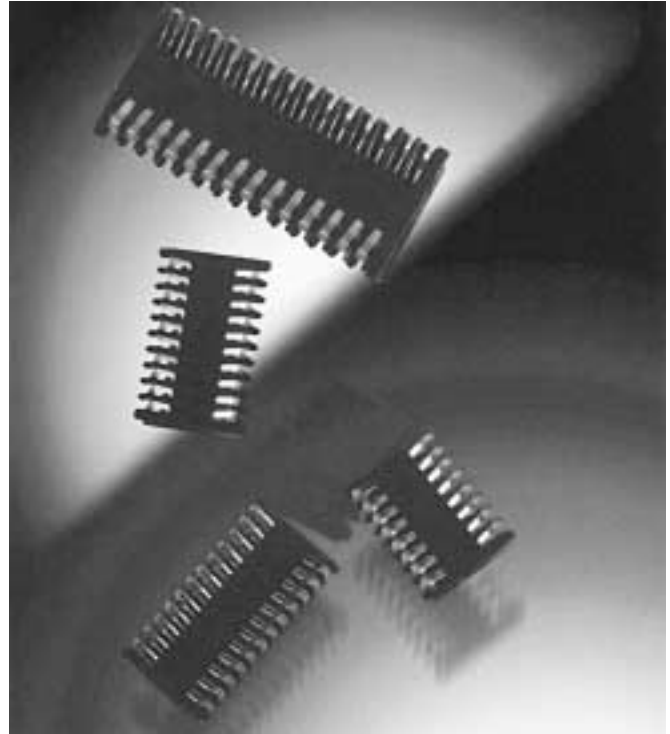
A standard range is available with 16, 20, 24 and 28 contacts to suit stack heights of 1.90mm to 3.30mm. Other contact variants are also available from 1.90mm to 5.10mm, in custom housings. The SOLO STACKER™ can allow a spacing tolerance of up to ± 0.30 mm and still provide reliable connections between the PCB's, even if they are not parallel.

SOLO STACKER™ is designed for PCB surface mounting and is supplied in tape and reel packaging. Gold plated pads on the mating PCB provide connection between boards.

Whatever your requirements this SOLO STACKER™ can also be customized to suit your application.

KEY FEATURES AND BENEFITS

- Single piece connector – no mating half connector required to connect two boards together which means:
 - Reduced assembly time.
 - Only one part to purchase and stock.
 - Due to the unique contact design, the mating device does not have to be parallel.
 - Extremely robust when subjected to shock and vibration.
 - Cost effective
 - Helps reduce tolerance accumulation within system.
- Manufactured on fully automatic machines to support high volume requirements.

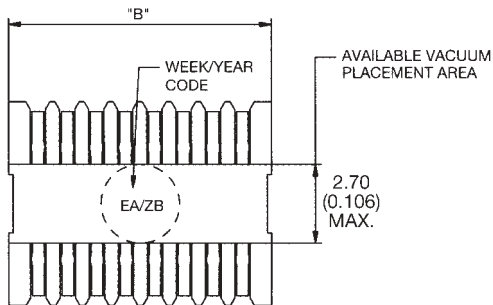


APPLICATIONS

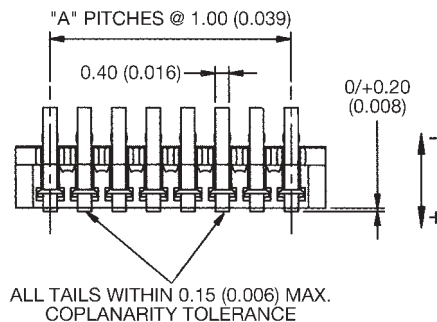
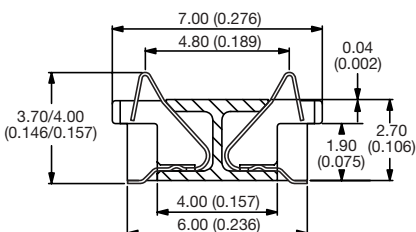
Suitable applications include:

- Mobile Phones
- PDA
- Medical
- PMR
- Industrial
- Security
- Hand Held Scanner

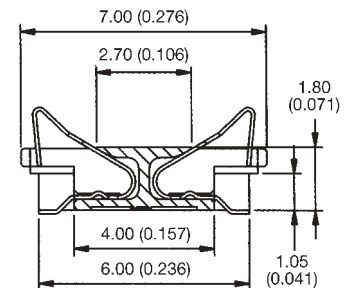
DRAWINGS AND DIMENSIONS



For version stack height 030



For version stack height 020 & 025



P/N	Dimension		
	No. of Pos.	A	B
00 9158 016 XXX XXX	016	7.00 (0.276)	9.00 (0.354)
00 9158 020 XXX XXX	020	9.00 (0.354)	11.0 (0.433)
00 9158 024 XXX XXX	024	11.0 (0.433)	13.0 (0.512)
00 9158 028 XXX XXX	028	13.0 (0.512)	15.0 (0.591)

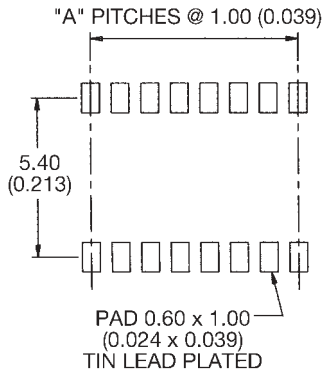
Fine Pitch SMT Board to Board Connectors

Series 9158 MOBO™ SOLO STACKER™



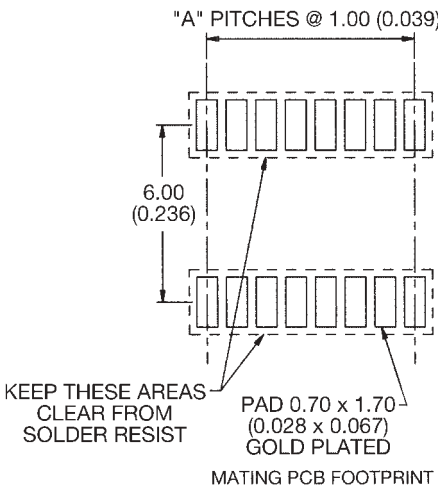
DRAWINGS AND DIMENSIONS CONT'D

SMT PCB FOOTPRINT



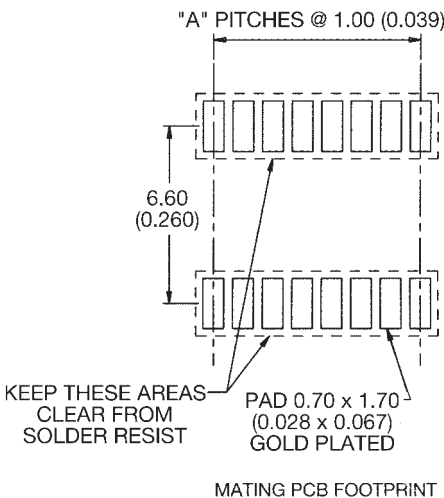
MATING PCB FOOTPRINT

for version stack height 020 & 030



MATING PCB FOOTPRINT

for version stack height 025



N.B. refer to table overleaf for dimensions

HOW TO ORDER

00	9158	XXX	XXX	XX	X
Prefix	Series	No. of Ways	Stack Height	Plating Variation	PCB Location Bosses
00 = Standard 58 = Special		16 = 016 20 = 020 24 = 024 28 = 028	020 = 1.9mm to 2.1mm 025 = 2.1mm to 2.7mm 030 = 2.8mm to 3.3mm	00 = Selective 0.25µ Gold Plated Contact Nose	1 = With PCB Location Bosses 2 = Without PCB Location Bosses

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Resistors

Chip
Networks/Arrays
Potentiometers

Timing Devices

Resonators
Oscillators
Crystal

Filters

EMI
Bulk
Saw
Dielectric

Thin Film

Inductors
Fuses
Capacitors

Integrated Passive

Components
Low Inductance Chip Arrays
“Z” Chips
Capacitor Arrays
Dual Resonance Chips

Voltage Suppressor, Varistors and Thermistors

Acoustical Piezos

Ferrites

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2mm Hard-Metric for CompactPCI®
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Board to Board Connectors –
SMT and Through-Hole
Card Edge
Compact Flash
Custom Designed Connectors
Customized Backpanel, Racking and
Harnessing Services
DIN 41612 Connectors
FFC/FPC Connectors
Insulation Displacement Connectors
I/O Connectors
Memory Card Headers and Sockets
MOBO™, I/O, Board to Board and
Battery Connectors
PCMCIA
Press-fit Connectors
Torson, 1.27mm (.050") Board to
Board Connectors
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Wire to Board, Crimp or IDC

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