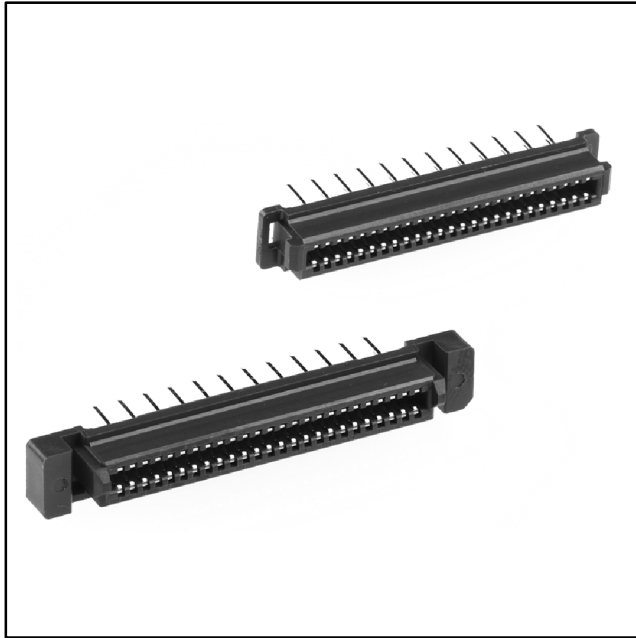


3M™ Pak 50 Low Profile Socket

.050" Vertical Stacking with and without Flanges

P50L Series



- Low profile offers mating heights between 0.276" - 0.472" (7-12 mm) for board stacking applications
- High temperature insulator compatible with IR and wave soldering
- Guide posts for easy mating/unmating
- Retention clips stabilize connector to the board during wave soldering

Date Modified: March 30, 2003

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Sheet 1 of 3

Physical

Insulation

Material: Glass filled PPS
Flammability: UL 94V-0
Color: Brown
Alignment Plate: Glass filled Nylon (Brown)

Contact

Material: Phosphor Bronze

Plating

Underplating: Nickel
Wiping Area: See Ordering Information
Solder Tails: Tin Alloy over Nickel

Electrical

Current Rating: 0.5 A
Insulation Resistance: 10^3 M Ω min. at 500 VDC
Withstanding Voltage: 650 VAC for 1 minute

Environmental

Temperature Rating: -55°C to +85°C

UL File No.: E68080

3M
Interconnect Solutions
<http://www.3M.com/interconnects/>

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3M™ Pak 50 Low Profile Socket .050" Vertical Stacking with and without Flanges

P50L Series

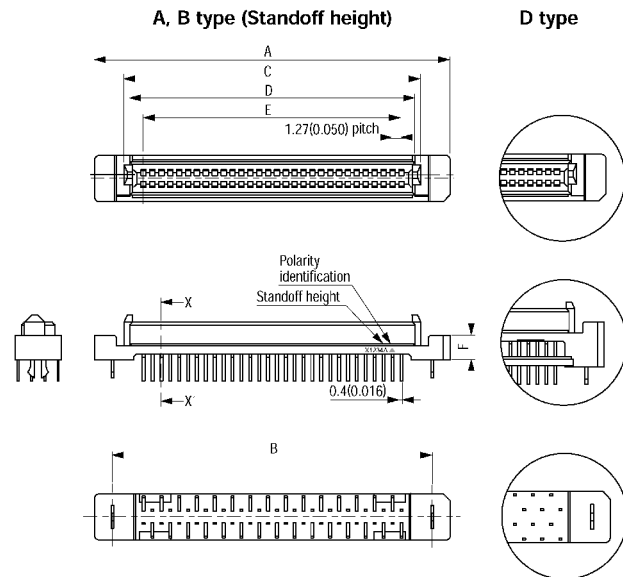
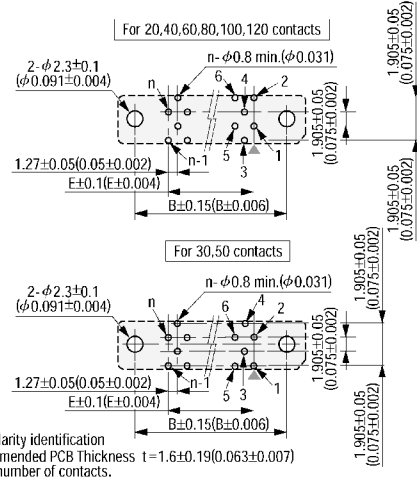
Socket with Flanges and Retention Clips

Product Table / Dimensions

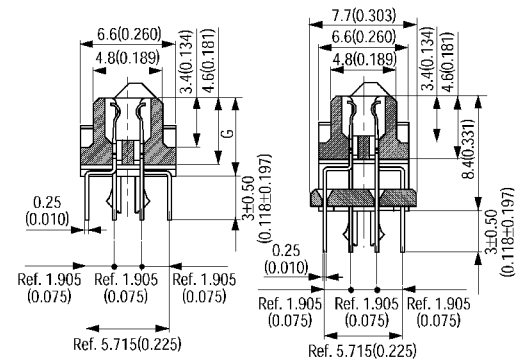
Contact Quantity	A	B	C	D	E
20	25.43	20.32	17.03	15.43	11.43
	[1.001]	[0.800]	[0.670]	[0.607]	[0.450]
30	31.78	26.67	23.38	21.78	17.78
	[1.251]	[1.050]	[0.920]	[0.857]	[0.700]
40	38.13	33.02	29.73	28.13	24.13
	[1.501]	[1.300]	[1.170]	[1.107]	[0.950]
50	44.48	39.37	36.08	34.48	30.48
	[1.751]	[1.550]	[1.420]	[1.357]	[1.200]
60	50.83	45.72	42.43	40.83	36.83
	[2.001]	[1.800]	[1.670]	[1.607]	[1.450]
80	63.53	58.42	55.13	53.53	49.53
	[2.501]	[2.300]	[2.170]	[2.107]	[1.950]
100	76.23	71.12	67.83	66.23	62.23
	[3.001]	[2.800]	[2.670]	[2.607]	[2.450]
120	88.93	83.82	80.53	78.93	74.93
	[3.501]	[3.300]	[3.170]	[3.107]	[2.950]

Type	F	G
A	3.50	5.40
	[0.138]	[0.213]
B	4.50	6.40
	[0.177]	[0.252]
D	6.50	NA
	[0.256]	NA

Printed Circuit Board Layout
(Component Side View)



X-X Cross Section



Ordering Information

P5XL - XXXS - X - XXX

0 = With Flanges and Retention Clips
1 = Without Flanges and Retention Clips

Contact Quantity
See Table

A = Type A
B = Type B
D = Type D

Plating Options:
TGF = $2 \mu\text{m}$ [$0.05 \mu\text{m}$] min. Gold
TG = $10 \mu\text{m}$ [$0.25 \mu\text{m}$] min. Gold

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Sheet 2 of 3

3M™ Pak 50 Low Profile Socket .050" Vertical Stacking with and without Flanges

P50L Series

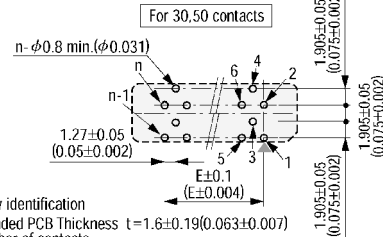
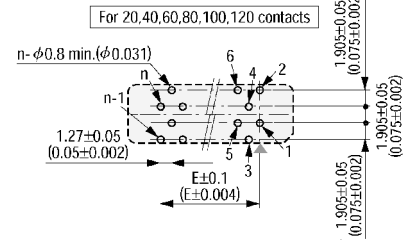
Socket without Flanges and Retention Clips

Product Table / Dimensions

Contact Quantity	A	B	C	D	E
20	18.83	17.03	14.53	13.43	11.43
	[0.741]	[0.670]	[0.572]	[0.529]	[0.450]
30	25.18	23.38	20.88	19.78	17.78
	[0.991]	[0.920]	[0.822]	[0.779]	[0.700]
40	31.53	29.73	27.23	26.13	24.13
	[1.241]	[1.170]	[1.072]	[1.029]	[0.950]
50	37.88	36.08	33.58	32.48	30.48
	[1.491]	[1.420]	[1.322]	[1.279]	[1.200]
60	44.23	42.43	39.93	38.83	36.83
	[1.741]	[1.670]	[1.572]	[1.529]	[1.450]
80	56.93	55.13	52.63	51.53	49.53
	[2.241]	[2.170]	[2.072]	[2.029]	[1.950]
100	69.63	67.83	65.33	64.23	62.23
	[2.741]	[2.670]	[2.572]	[2.529]	[2.450]
120	82.33	80.53	78.03	76.93	74.93
	[3.241]	[3.170]	[3.072]	[3.029]	[2.950]

Type	F
A	5.40
	[0.213]
B	6.40
	[0.252]

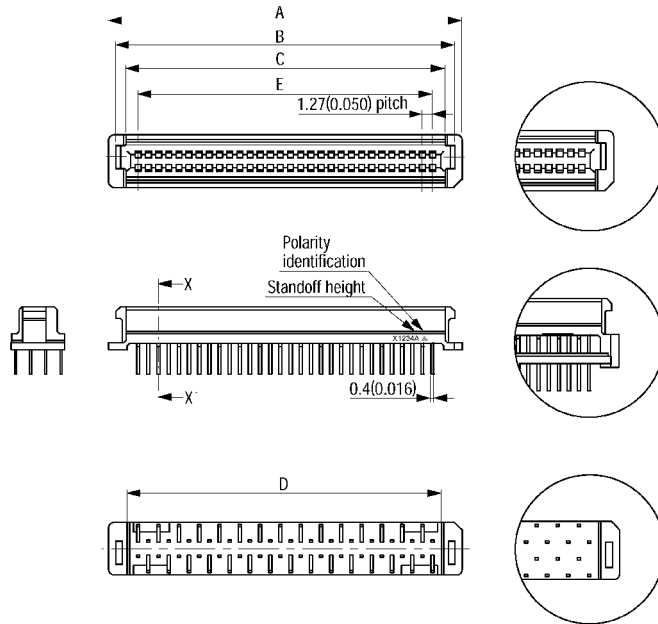
Printed Circuit Board Layout
(Component Side View)



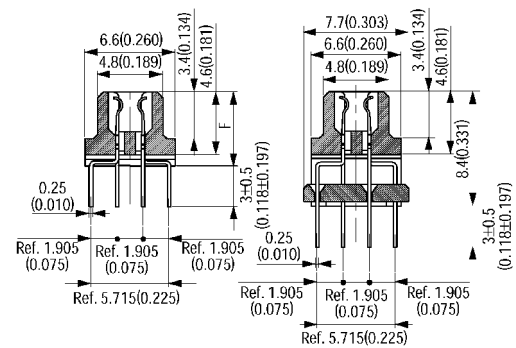
▽=Polarity identification
Recommended PCB Thickness $t=1.6\pm0.19(0.063\pm0.007)$
"n" is number of contacts.

A, B type (Standoff height)

D type



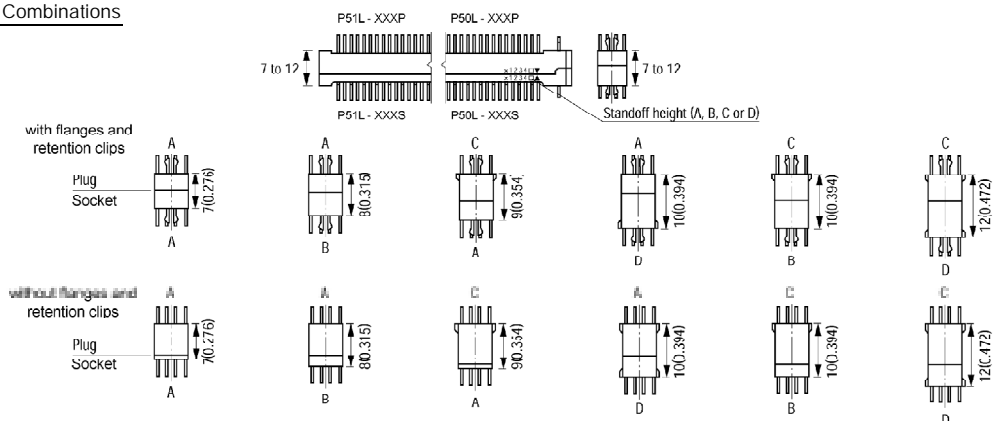
X-X' Cross Section



A, B type

D type

Stacked Mating Combinations



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