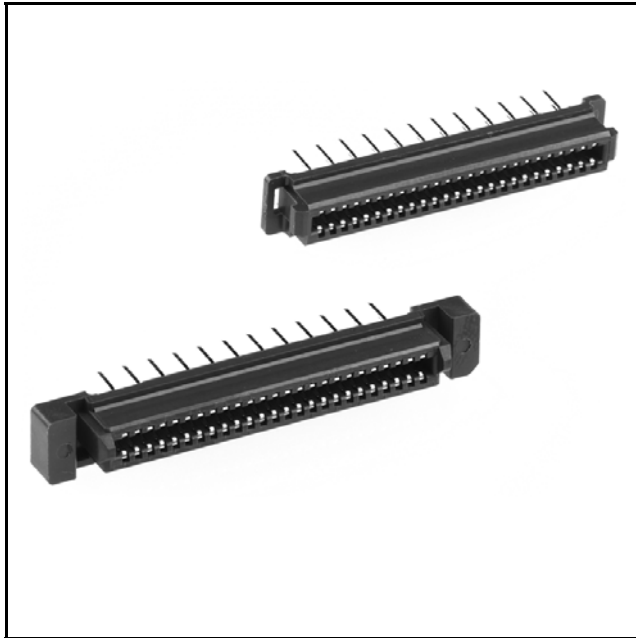


3M™ Pak 50 Low Profile Socket

.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
- RoHS* compliant

Date Modified: December 11, 2006

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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: Gold flash
Solder Tails: Gold Flash
Retaining Clips: Tin-Copper

Electrical

Current Rating: 0.5 A
Insulation Resistance: $10^3 \Omega$ at 500 V_{DC}
Withstanding Voltage: 650 V_{AC} for 1 minute

Environmental

Temperature Rating: -55°C to +85°C
Process Rating: 260°C (per J-STD-020C)

"RoHS compliant" means that the product or part does not contain any of the following substances in excess of the following maximum concentration values in any homogeneous material, unless the substance is in an application that is exempt under RoHS: (a) 0.1% (by weight) for lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers; or (b) 0.01% (by weight) for cadmium. Unless otherwise stated by 3M in writing, this information represents 3M's knowledge and belief based upon information provided by third party suppliers to 3M.

UL File No.: E68080

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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

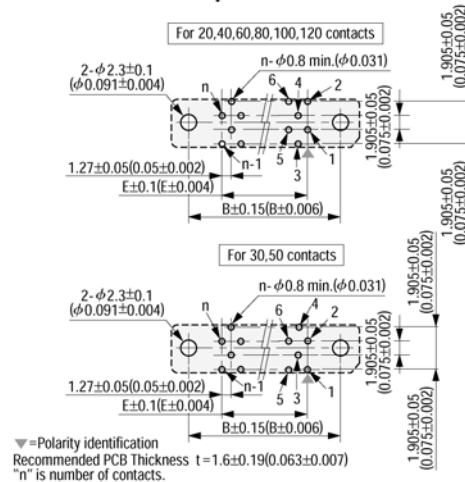
Product Table / Dimensions

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]

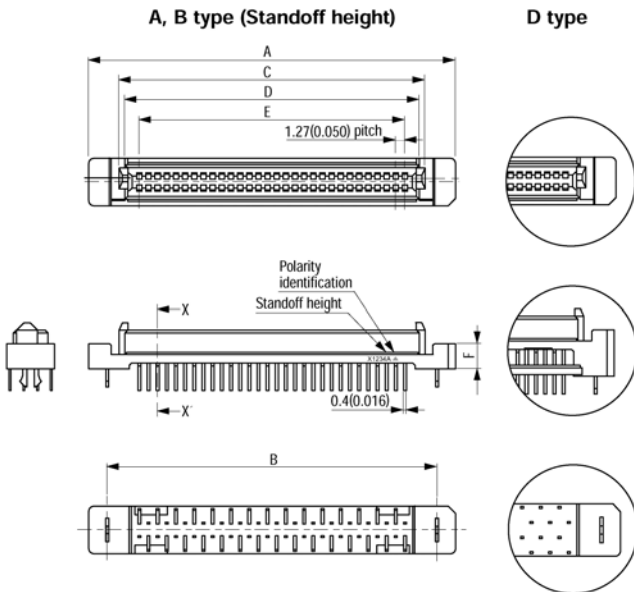
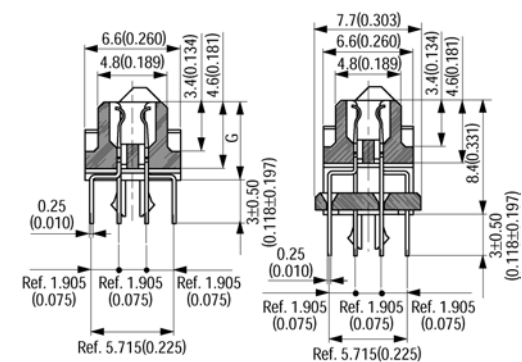


Type	F	G
A	3.50	5.40
	[0.138]	[0.213]
B	4.50	6.40
	[0.177]	[0.252]
D	6.50	NA
	[0.256]	NA

Printed Circuit Board Layout (Component Side View)



X-X' Cross Section



Note:
Plugs/Sockets with flanges and retention clips are not interchangeable with plugs/sockets without flanges and retention clips

Ordering Information

P5XL - XXXS - X - DA

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

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Sheet 2 of 3

3M™ Pak 50 Low Profile Socket

.050" Vertical Stacking with and without Flanges

P50L Series

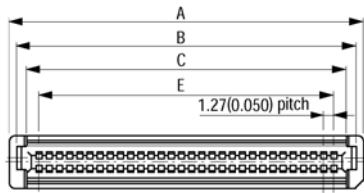
Socket without Flanges and Retention Clips

Product Table / Dimensions

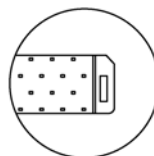
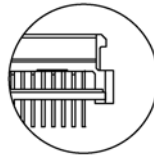
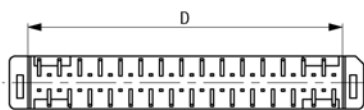
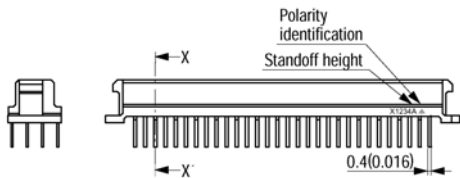
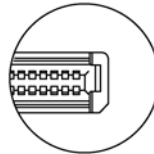
Contact Quantity	A	B	C	D	E
20	18.83	17.03	14.53	13.43	11.43
	[0.741]	[0.670]	[0.572]	[0.529]	[0.450]
30	25.18	23.38	20.88	19.78	17.78
	[0.991]	[0.920]	[0.822]	[0.779]	[0.700]
40	31.53	29.73	27.23	26.13	24.13
	[1.241]	[1.170]	[1.072]	[1.029]	[0.950]
50	37.88	36.08	33.58	32.48	30.48
	[1.491]	[1.420]	[1.322]	[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]

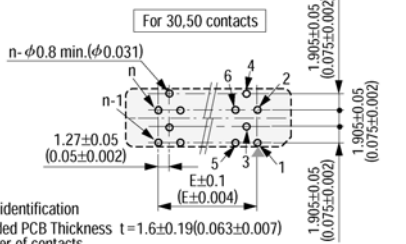
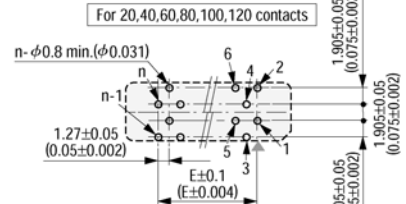
A, B type (Standoff height)



D type

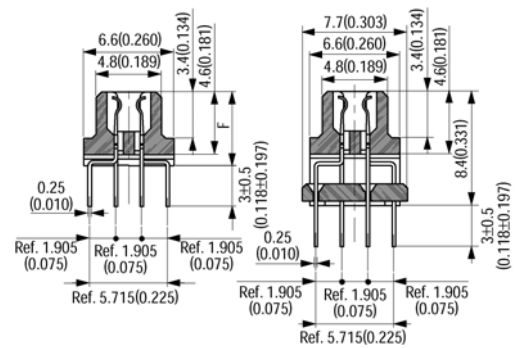


Printed Circuit Board Layout (Component Side View)



▽ = Polarity identification
 Recommended PCB Thickness $t = 1.6 \pm 0.19 (0.063 \pm 0.007)$
 n is number of contacts.

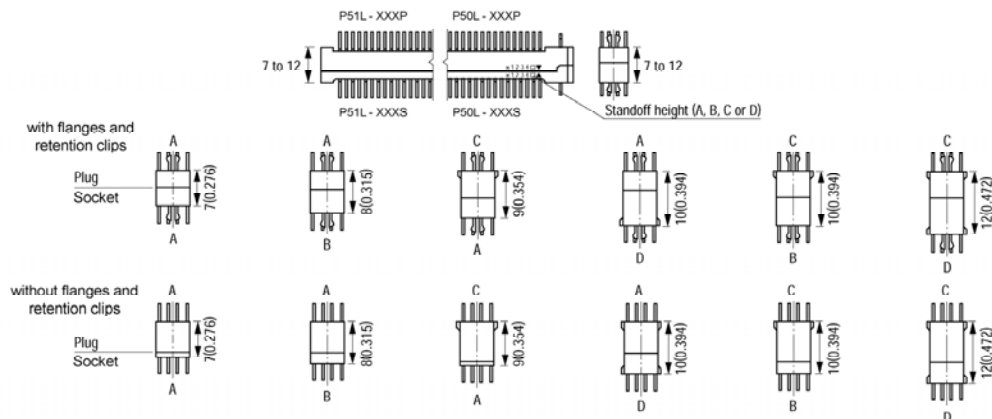
X-X' Cross Section



A, B type

D type

Stacked Mating Combinations



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 Sheet 3 of 3

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