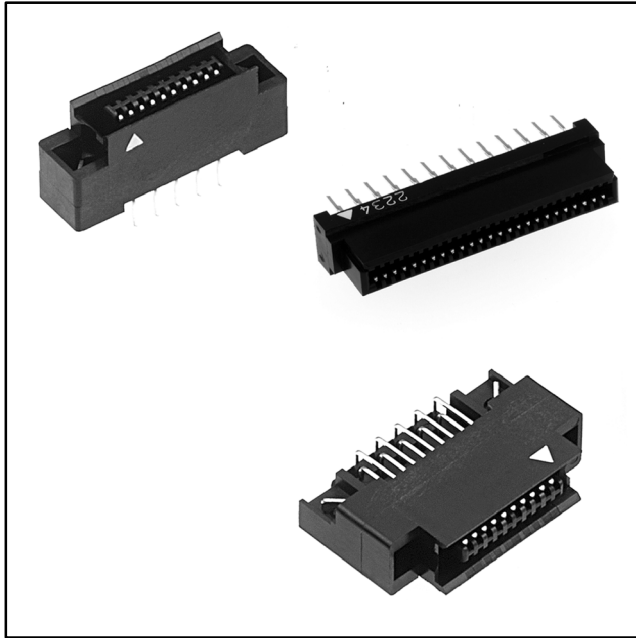


# 3M™ Pak 50 Socket

.050" Straight and Right Angle Socket, with Ret. Clips, Flng. Option

P50 Series



- Contact design features two contact points and straight beam construction for connector reliability and low insertion force
- Available retention clip secures connector for wave soldering eliminating additional hardware expenses
- Horizontal, parallel or vertical mating available
- Insulator design prevents mis-insertion errors and contact damage
- Available with and without flanges

Date Modified: May 15, 2003

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## Physical

**Insulation**  
Material: Glass Filled Nylon  
Flammability: UL 94V-0  
Color: Black

**Contact**  
Material: Phosphor Bronze

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

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## Electrical

**Current Rating:** 0.5 A  
**Insulation Resistance:**  $10^3$  M $\Omega$  min. at 500V DC  
**Withstanding Voltage:** 650V AC for 1 minute

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## Environmental

**Temperature Rating:** -55°C to +85°C

UL File No.: E68080

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

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**800-225-5373**

# 3M™ Pak 50 Socket

## .050" Straight and Right Angle Socket, with Ret. Clips, Flng. Option

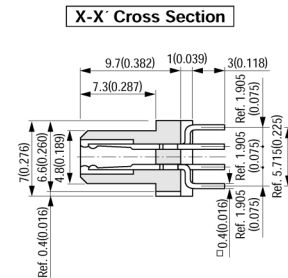
P50 Series

Without Flanges

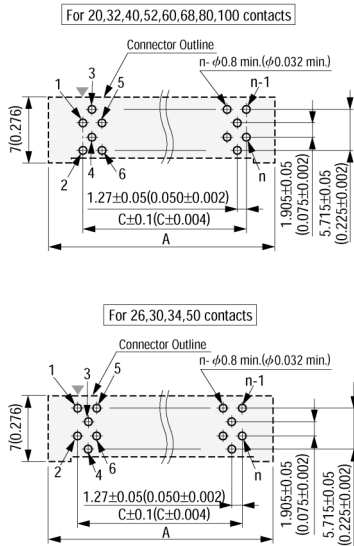
Product Table / Dimensions for Straight Plug without Flanges

Contact Quantity	A	B	C
20	17.83	15.43	11.43
	[0.702]	[0.608]	[0.450]
26	21.64	19.24	15.24
	[0.852]	[0.758]	[0.600]
30	24.18	21.78	17.78
	[0.952]	[0.858]	[0.700]
32	25.45	23.05	19.05
	[1.002]	[0.908]	[0.750]
34	26.72	24.32	20.32
	[1.052]	[0.958]	[0.800]
40	30.53	28.13	24.13
	[1.202]	[1.108]	[0.950]

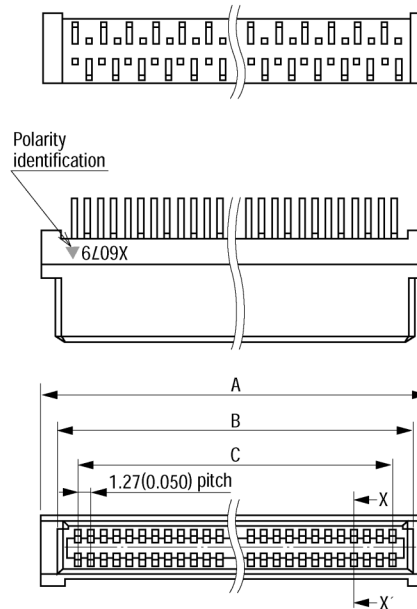
Contact Quantity	A	B	C
50	36.88	34.48	30.48
	[1.452]	[1.358]	[1.200]
52	38.15	35.75	31.75
	[1.502]	[1.408]	[1.250]
60	43.23	40.83	36.83
	[1.702]	[1.608]	[1.450]
68	48.31	45.91	41.91
	[1.902]	[1.808]	[1.650]
80	55.93	53.53	49.53
	[2.202]	[2.108]	[1.950]
100	68.63	66.23	62.23
	[2.702]	[2.608]	[2.450]



### 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.



## Ordering Information

**P5X - XXXS - XXX - XXXX**

Mounting Options:  
 0 = With Flanges  
 1 = Without Flanges, offered without retention clips only

Contact Quantity  
 See Table

Solder Tail and Clip Options:  
 S1 = Straight without retention clips  
 SR1 = Right Angle without retention clips  
 \*R1 = Straight with retention clips  
 \*RR1 = Right Angle with retention clips

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  
 TG30 =  $30 \mu\text{m}$  [  $0.75 \mu\text{m}$  ] min. Gold

\*Note: R1 and RR1 do not apply to P51

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