PK5 Series

0.5 mm Straight Stacking, Surface Mount



- 0.5 mm pitch high density connector conserves board space
- Mated heights available from 4 to 8 mm
- Surface mount design allows for easy inspection and repair of solder joints
- Tape and reel packaging available
- RoHS* compliant

Date Modified: July 10, 2006

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Physical

Insulation

Material: Glass filled LCP

Flammability: UL 94V-0

Color: White

Contact

Material: Copper Alloy

Plating

Underplating: Nickel

Wiping Area: 2 μ" [0.05 μm] min. Gold over Nickel

Solder Tails: Gold over Nickel

Electrical

Current Rating: 0.3 A

Insulation Resistance: $10^3 \text{ M}\Omega \text{ min at } 250 \text{ VDC}$ **Withstanding Voltage:** 200 VAC for 1 minute

Environmental

Temperature Rating: -55° C to $+85^{\circ}$ C

Process Rating: 260°C (per J-STD-020C)

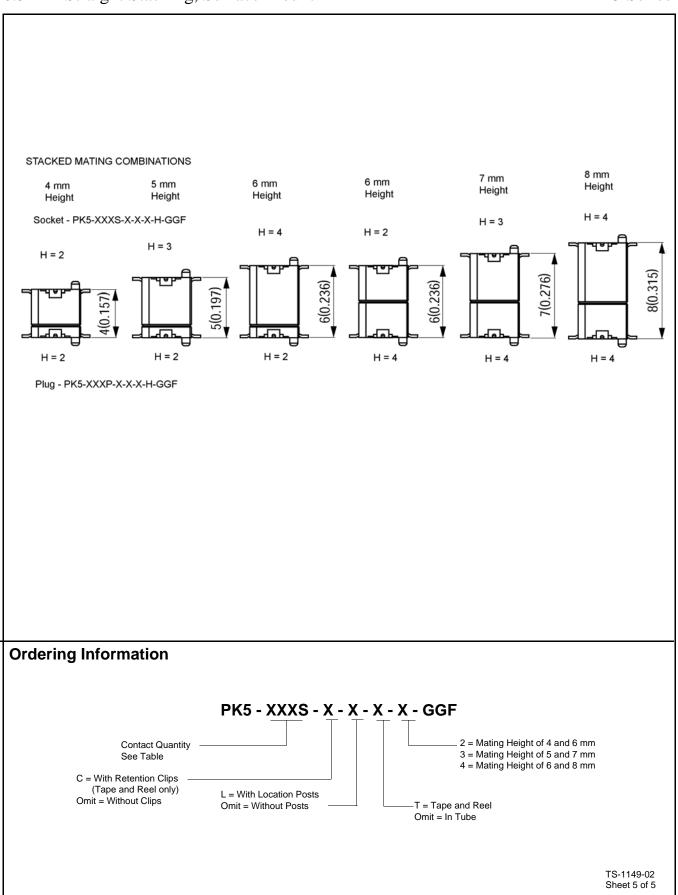
* RoHS = Directive 2002/95/EC, Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment "RoHS compliant" means that the product or part does not contain any of the following substances in excess of the following maximum concentration values in any homogeneous material, 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.

Interconnect Solutions

Quantity	A	В	C	D	E	F	G	Н	
40	9.50	10.82	11.62	13.22	10.50	11.76	14.54	13.59	
	[0.374]	[0.426]	[0.457]	[0.520]	[0.413]	[0.463]	[0.572]	[0.535]	
50	12.00	13.32	14.12	15.72	13.00	14.26	17.04	16.09	
60	[0.472] 14.50	[0.524] 15.82	[0.556] 16.62	[0.619] 18.22	[0.512] 15.50	[0.561] 16.76	[0.671] 19.54	[0.633] 18.59	
00	[0.571]	[0.623]	[0.654]	[0.717]	[0.610]	[0.660]	[0.769]	[0.732]	
80	19.50	20.82	21.62	23.22	20.50	21.76	24.54	23.59	
	[0.768]	[0.820]	[0.851]	[0.914]	[0.807]	[0.857]	[0.966]	[0.929]	
100	24.50	25.82	26.62	28.22	25.50	26.76	29.54	28.59	
	[0.965]	[1.017]	[1.048]	[1.111]	[1.004]	[1.054]	[1.163]	[1.126]	
120	29.50	30.82	31.62	33.22	30.50	31.76	34.54	33.59	
140	[1.161] 34.50	[1.213] 35.82	[1.245] 36.62	[1.308] 38.22	[1.201] 35.50	[1.250] 36.76	[1.360] 39.54	[1.322] 38.59	
140	[1.358]	[1.410]	[1.442]	[1.505]	[1.398]	[1.447]	[1.557]	[1.519]	
160	39.50	40.82	41.62	43.22	40.50	41.76	44.54	43.59	
	[1.555]	[1.607]	[1.639]	[1.702]	[1.594]	[1.644]	[1.754]	[1.716]	
r	•		"n" is	2-4-s number of co	(2-Φ 0.035 F±0.05(F±		n (200 0951.5.	5.5±0.05 (0.217±0.002)	
−E		020) pitch DDDDDDDDDDDD	C B A				4.2(0.165)		X-X´ Cross Section
L		000000000 00) 1888888888888 E F	88888888888 1	0000000000	***************************************	(0.039)	0.7(0.028)	5.8(0.228)

ontact	A	В	С	D	E	F	G	Н	
uantity 40	9.50	10.82	11.62	13.22	10.50	11.76	14.54	13.59	V V Oraca Castian
40	[0.374]	[0.426]	[0.457]	[0.520]	[0.413]	[0.463]	[0.572]	[0.535]	X-X' Cross Section
50	12.00	13.32	14.12	15.72	13.00	14.26	17.04	16.09	
	[0.472]	[0.524]	[0.556]	[0.619]	[0.512]	[0.561]	[0.671]	[0.633]	E 0(0.220)
60	14.50	15.82	16.62	18.22	15.50	16.76	19.54	18.59	5.8(0.228) 2.86(0.113)
0.0	[0.571]	[0.623]	[0.654]	[0.717]	[0.610]	[0.660]	[0.769]	[0.732]	2.00(0.113)
80	19.50 [0.768]	20.82 [0.820]	21.62 [0.851]	[0.914]	20.50 [0.807]	21.76 [0.857]	24.54 [0.966]	23.59 [0.929]	
100	24.50	25.82	26.62	28.22	25.50	26.76	29.54	28.59	[69]
100	[0.965]	[1.017]	[1.048]	[1.111]	[1.004]	[1.054]	[1.163]	[1.126]	4.04(0.159)
120	29.50	30.82	31.62	33.22	30.50	31.76	34.54	33.59	
	[1.161]	[1.213]	[1.245]	[1.308]	[1.201]	[1.250]	[1.360]	[1.322]	
140	34.50	35.82	36.62	38.22	35.50	36.76	39.54	38.59	\oplus
100	[1.358]	[1.410]	[1.442]	[1.505]	[1.398]	[1.447]	[1.557]	[1.519]	
160	39.50 [1.555]	40.82 [1.607]	41.62 [1.639]	43.22 [1.702]	40.50 [1.594]	41.76 [1.644]	44.54 [1.754]	43.59 [1.716]	
						4.2(0.165)			
1 800 0633			E F			(6800)]1		inavit D	and I arout
1,860,0633			E F			(6800)1 -21.15(0)	045) nted Ci Compo H±0.0 A±0.0 0.5±0.03	*1: "with *2: "with *0.05(H±0.002) 03(A±0.001) (0.020±0.001) 0.03(5±0.002) 0.03(5±0.002)	1.95±0.05(0.077±0.002)
I secures			E F			(FZ0'0)9'0 (680'0)1 (71.15(0)	045) nted Ci Comp H±0.0 A±0.0 0.5±0.03 3 (2-\$\phi\$)	*1: "with *2: "with *0.05(H±0.002) 03(A±0.001) (0.020±0.001) 0.03(5±0.002) 0.03(5±0.002)	Side View) SMT retention clips" type only positioning posts" type only 0.3±0.03(0.012±0.001) 1.3±0.03(0.012±0.001) 1.3±0.03(0.012±0.001)

Socket for 6 and 8 mm stacked height. **Product Table / Dimensions** X-X´ Cross Section Contact C D F \mathbf{G} \mathbf{E} A H Quantity 9.50 10.82 11.62 13.22 10.50 11.76 14.54 13.59 40 5.8(0.228) [0.374] [0.413] [0.426][0.457][0.520][0.463] [0.572][0.535]2.86(0.113) 13.00 50 12.00 13.32 14.12 15.72 14.26 17.04 16.09 [0.472] [0.524][0.556][0.619] [0.512] [0.561] [0.671] [0.633]60 14.50 15.82 16.62 18.22 15.50 16.76 19.54 18.59 [0.571][0.623][0.654][0.717][0.610][0.660][0.769][0.732]5.04(0.198) 80 19.50 20.82 21.62 23.22 20.50 21.76 24.54 23.59 [0.768][0.820][0.851][0.914][0.807][0.857][0.966][0.929]100 24.50 25.82 26.62 28.22 25.50 26.76 29.54 28.59 [0.965][1.017] [1.163] [1.126][1.048][1.111][1.004][1.054]34.54 120 29.50 30.82 33.22 30.50 31.76 33.59 31.62 [1.213] [1.161] [1.245] [1.201] [1.250] [1.360] [1.322] [1.308]140 34.50 35.82 36.62 38.22 35.50 36.76 39.54 38.59 [1.358] [1.410] [1.442] [1.505] [1.398] [1.447] [1.557] [1.519] 41.62 44.54 160 39.50 40.82 43.22 40.50 41.76 43.59 [1.639] [1.555] [1.607] [1.702] [1.594] [1.644] [1.754] [1.716] 0.5(0.020) pitch 21.15(0.045) **Printed Circuit Board Layout** $.3\pm0.03(0.051\pm0.001)$ (Component Side View) *1: "with SMT retention clips" type only $6\pm0.05(0.063\pm0.02)$ *2: "with positioning posts" type only H±0.05(H±0.002) A±0.03(A±0.001) 0.5±0.03(0.020±0.001) 0.3±0.03(0.012±0.001) 1 1.95±0.05(0.077±0.002) *2 2-\$\phi\$ 0.9\pm0.05 5.5±0.05 1.217±0.002) $(2-\phi 0.035\pm 0.002)$ TS-1149-02 F±0.05(F±0.002) Sheet 4 of 5 "n" is number of contacts.



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