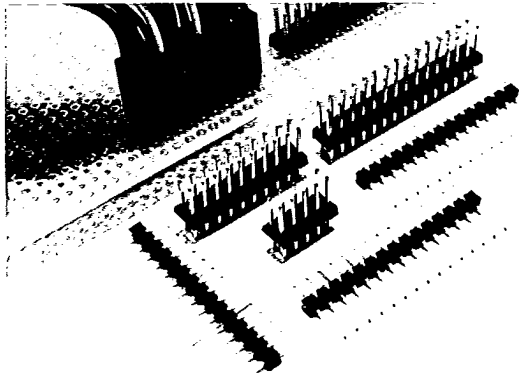


# • **LOW PROFILE PIN HEADER STRAIGHT, THROUGH HOLE TAIL (T)**



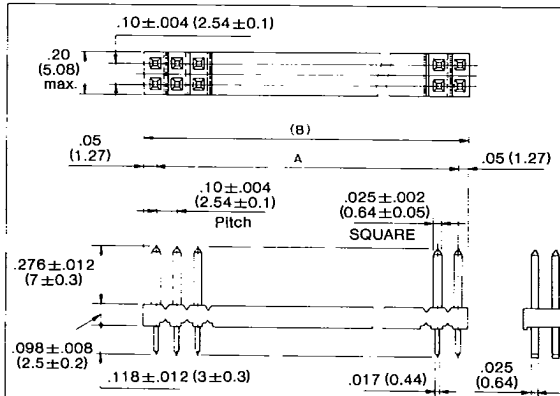
- .10 (2.54) pitch, high density packaging lengthwise and laterally
- Double row (less than 30 contacts) and single row (less than 15 contacts)
- Grooves are provided on insulator between each laterally adjacent contacts, so desirable number of contacts can be cut easily with cutting tool shown below:

- **Materials/Finishes**  
Insulator... PPS  
Contact... Phosphor bronze/gold over nickel (.000004 (0.1  $\mu$ ) min. on connecting area, gold flash on the other area)

- **Contact pitch:** .10 (2.54)  
**Rated current:** 3A  
**D.W.V.:** 1000 VAC rms (one minute)

Low profile pin header, of which insulator height is .10 (2.54). Higher density packaging is achieved in combination with socket connector.

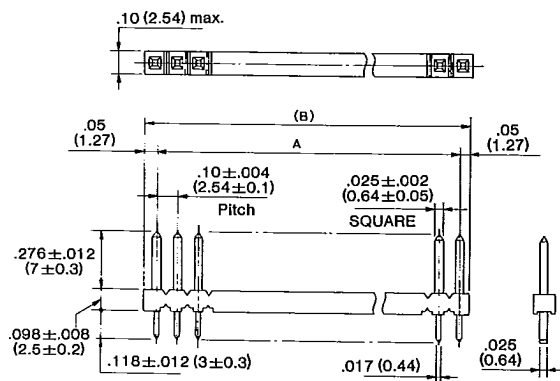
## **DOUBLE ROW: PS-\*\*PA-D4T1-PKL\***



No. of Contacts	Part Number	A $\pm .008 (\pm 0.2)$	B Ref.
10	PS-10PA-D4T1-PKL*	.400 (10.16)	.500 (12.7)
20	PS-20PA-D4T1-PKL*	.900 (22.86)	1.00 (25.4)
30	PS-30PA-D4T1-PKL*	1.400 (35.56)	1.50 (38.1)

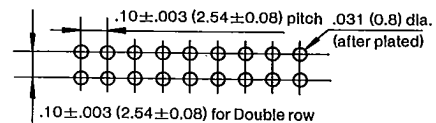
Other than above standard number of contacts, any number (even) of contacts less than 30 contacts can be available.  
(Note) Finish code of selective gold plate on connecting area is filled in \*.

## **SINGLE ROW: PS-\*\*PA-S4T1-PKL\***



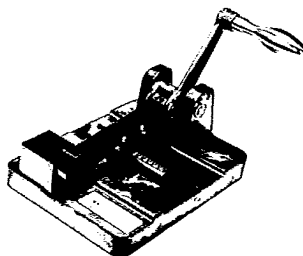
No. of Contacts	Part Number	A $\pm .008 (\pm 0.2)$	B Ref.
3	PS-3PA-S4T1-PKL*	.200 (5.08)	.300 (7.62)
5	PS-5PA-S4T1-PKL*	.400 (10.16)	.500 (12.7)
15	PS-15PA-S4T1-PKL*	1.400 (35.56)	1.500 (38.1)

Other than above standard number of contacts, any number less than 15 contacts can be available.



## • **CUTTING TOOL: WT150-1-KL1**

Cutting tool is used to cut above low profile pin header to desirable number of contacts. Insert pin header with mating side facing downwards, and set the desirable number of contacts on the tool. Then check if knife is on cutting groove. Rotate cutter to cut off insulator. Cutting knife can be easily changed.



Dimensions subject to change.  
(millimeters are in parentheses)

# GENERAL SPECIFICATIONS (MAIN PERFORMANCE)

(Note) Group A... crimp type socket connector, dip receptacle pin header, pin connector  
 Group B... socket connector for FRC (contact installed) and PCB transition connector

TEST ITEM		PERFORMANCE			TEST METHOD
		GROUP A		GROUP B	
ELECTRICAL	Rated current	3 A		1 A	—
	Insulation resistance	1000 M $\Omega$ min.		1000 M $\Omega$ min.	To be measured within 1 min. with 500 VDC (100 VDC for FRC socket) applied between contacts
	D.W.V.	1000 VAC r.m.s.		500 VAC r.m.s.	Between the most adjacent contacts for 1 min.
	Contact resistance	10 m $\Omega$ max.		(a) socket. . . 20 m $\Omega$ max. (b) transition 10 m $\Omega$ max.	Voltage drop measurement, test current 0.1 A DC, applied voltage 3—6 V
	Low level contact resistance	10 m $\Omega$ max.		(a) socket. . . 20 m $\Omega$ max. (b) transition 10 m $\Omega$ max.	Test current 1 mA max. Open test voltage 20 mV max.
MECHANICAL	Lever operating force (shrouded pin header)	2 kg max. for 10 contact connector 2.5 kg max. for 16—34 contact connector 3 kg max. for 40—50 contact connector 3.5 kg max. for 60 contact connector			Both levers are operated evenly to unmate mated connectors and the load is measured using tester
	Locking strength (shrouded pin header)	(a) 8 kg min. (b) no cracking, breaking or loosening of parts			Mated connectors are pulled in the axial direction and the load is measured using tester.
	Individual contact unmating force	40 g min.			A steel pin gage (.025 $\pm$ .00004 (0.64 $\pm$ 0.01)) is inserted into and withdrawn from socket contact in the axial direction and withdrawal force is measured
	Connector mating/unmating force	(a) connector mating force. . . 300 g x (no. of contacts) max. (b) connector unmating force. . . 40 g x (no. of contacts) min.			Pin header is inserted into and withdrawn from socket connector in the axial direction and the load is measured using a tester
	Cover holding force	—		(a) socket. . . 10 kg min. (b) transition 5 kg min.	Cover insulator assembled in base insulator is pulled to separate from base insulator and the load is measured
	Crimp tensile strength (crimp contact only)	Nominal sect. area	Corresponding AWG No.	Min. crimp tensile strength	Both ends of crimped contact and wire are pulled to the axial direction until the contact and the wire are ultimately separated or broken
		0.2 mm <sup>2</sup>	#24	3.5 kg	
0.15		#26	2.1		
0.08		#28	1.4		
ENVIRONMENTAL	Thermal shock	Step	Temperature (°C)		MIL-STD-202, Method 107, condition B (condition A for FRC connector), mated connector, 5 cycles, no physical damage during test.
		1	—65 $\pm$ $\frac{3}{2}$ (—55 $\pm$ $\frac{3}{2}$ for Group B)		
		2	+25 $\pm$ $\frac{3}{2}$		
		3	+125 $\pm$ $\frac{3}{2}$ (+85 $\pm$ $\frac{3}{2}$ for Group B)		
		4	+25 $\pm$ $\frac{3}{2}$		
	Moisture resistance	After test Insulation resistance 100 M $\Omega$ min.			MIL-STD-202, Method 103, condition B, Mated connector, 40 $\pm$ 2°C, 90 to 95% relative humidity, 96 hours
	Salt spray	No evidence of corrosion on contacts sufficient to interfere with operation of connectors.			MIL-STD-202, method 101, condition B, Mated connector, 5% salt solution, 35°C, 48 hours
	Vibration	No cracking, breaking or loosening of parts, no interruption more than 1 microsecond max. Individual contact unmating force and connector mating/unmating force are to be passed			MIL-STD-202, Method 204 (Method 201 for FRC connector) Mated connectors, carrying a 100 mA current during test
	Shock	No cracking, breaking or loosening of parts. No interruption more than 1 microsecond			MIL-STD-202, Method 202, Mated connector, 50G, one blow in each direction of three mutually perpendicular axes, carrying a 100mA current during test
	Durability	No physical defects during test After test, Individual contact unmating force: 40 g min. Contact resistance: 10 m $\Omega$ max. (40 m $\Omega$ max. for FRC connector)			500 cycles of mating and unmating
	Current cycling	Wire size (AWG)	Test current (A)	Voltage drop (mV)	50 cycles of current cycling test (one cycle consists current running of 30 minutes and no current of 15 minutes) are conducted and the resistance at connecting portion is measured.
		#28	1.25	5	
		#26	1.25	4	
		#24	3.75	10	

Note: For detailed specifications, consult us.

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