

HIGH DENSITY PIN & SOCKET P.C. BOARD CONNECTORS

- Two styles
 - plug (with pins) to receptacle (with sockets)
 - pins (bed of nails) to receptacle (with sockets)
- Alignment pins and keying optional⁴
- Plugs and carriers have male contacts
- Receptacles have female contacts
- Ø.018" (.45mm) pins
- Two rows on .100" (2.54mm) x .100" (2.54mm) centers
- Parallel board connectors
- As little as .240" (6.1mm) or .480" (12.2mm) between boards

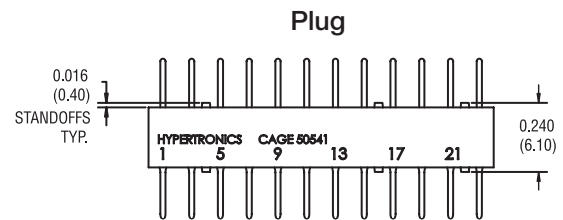
GENERAL SPECIFICATIONS

Number of contacts	4 - 90 (any even number contact count up to 90 available)
Contact diameter	.018 (.45)
Current rating	2.5 amps
Contact resistance	<8 milliohms
Extraction force	.3 - 2 oz.
Contact life cycles	100,000
Breakdown voltage between contacts	>1200V RMS
Dielectric withstanding voltage	900V RMS
Insulation resistance	>105 Megohms
Insulator material / temperature rating: LCP material, Vectra E130i 30% glass Color: Natural	V - O flammability rating: -55°C to + 160°C
Contact Material: Plating:	BeCu (pin) BeCu wires & brass body (socket) (see below plating reference)
Guide hardware	Stainless steel / brass/nickel plated

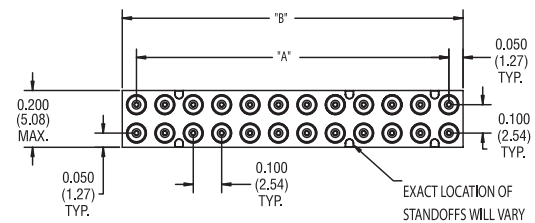
Plating Reference	
Male pins:	TH = 50µin gold (min) over Ni TBH = Hot solder dip over 50µin gold (min) over Ni
Female sockets:	TAH = 50µin gold (min over Ni on mating surface, gold flashover Ni on termination TABH = 50µin gold (min over Ni on mating surface, tin/lead over Ni on termination (straight D style only)

Standard Sizes							
No. of Contacts	22	24	44	46	66	68	90
Dim. A	1.000 (25.40)	1.100 (27.94)	2.100 (53.34)	2.200 (55.88)	3.200 (81.28)	3.300 (83.82)	4.400 (111.76)
Dim. B³	1.141 (28.99)	1.239 (31.47)	2.239 (56.87)	2.341 (59.47)	3.341 (84.86)	3.441 (87.41)	4.557 (115.76)

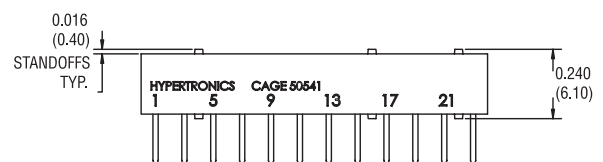
CONNECTOR DIMENSIONS¹



Mating half of plug and receptacle



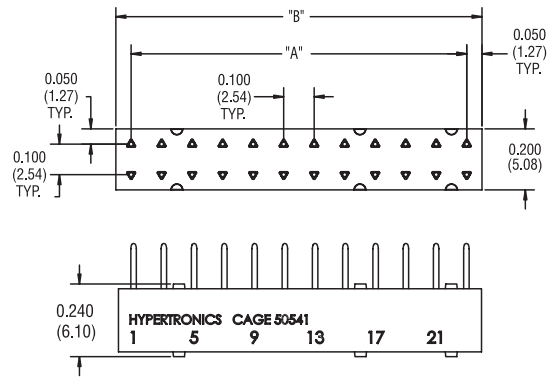
Receptacle



Notes:

- 1) Dimensions in inches (mm).
- 2) Standoffs location will vary depending on the number of contact positions.
- 3) Tolerance: ± .020 (.5)
- 4) Keying is accomplished by locating alignment pins in different positions.

Pin Carrier Dimensions¹



TERMINAL STYLES

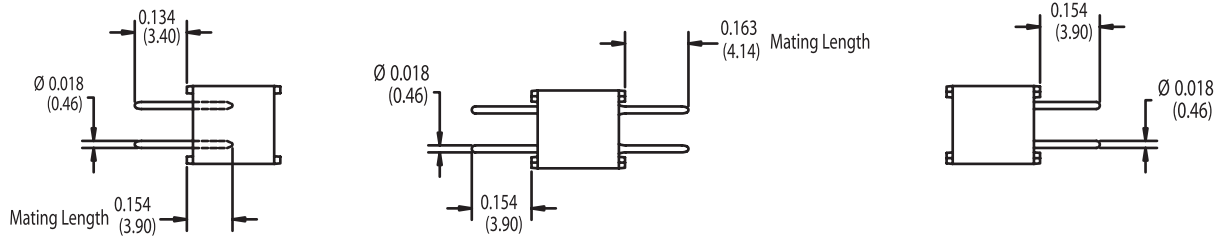
Ref.

Pin Carrier

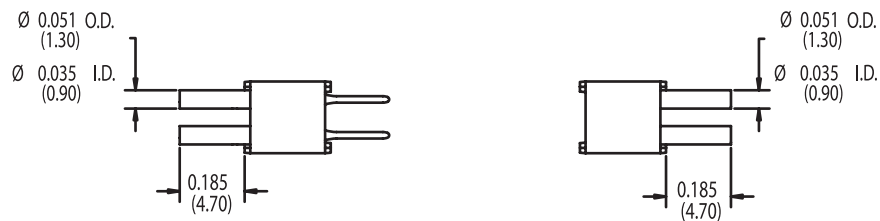
Plugs

Receptacles

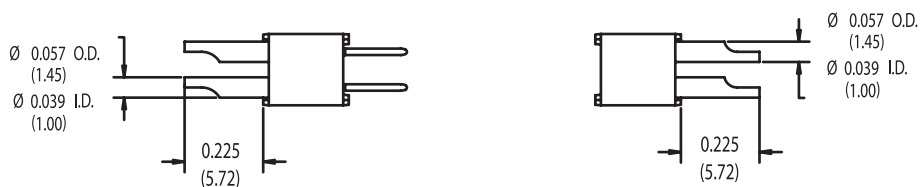
D
Straight dip
solder



R
Crimp accepts
22, 24 and 26
AWG wire
stripped back
.173 (4.4)



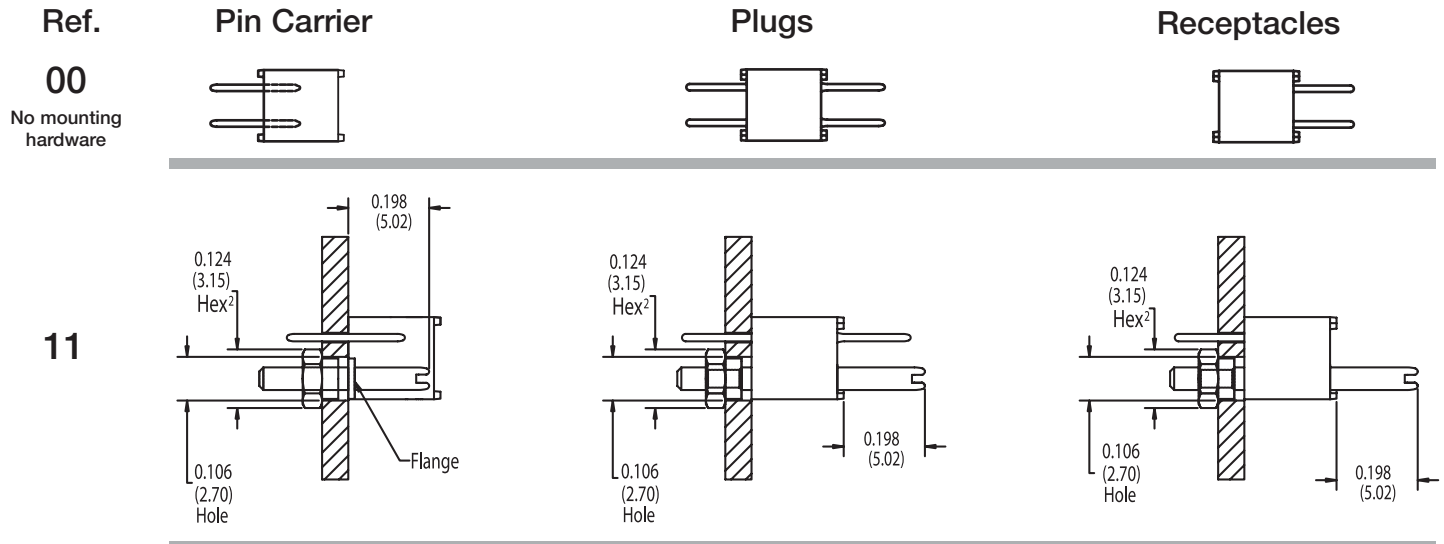
S
Solder cup
accepts up to
22 AWG wire
stripped back
.125 (3.2)



Notes:

- 1) Dimensions in inches (mm).
- 2) All the tails are .015 (.4) long.
- 3) Crimp contacts will be shipped unmounted.

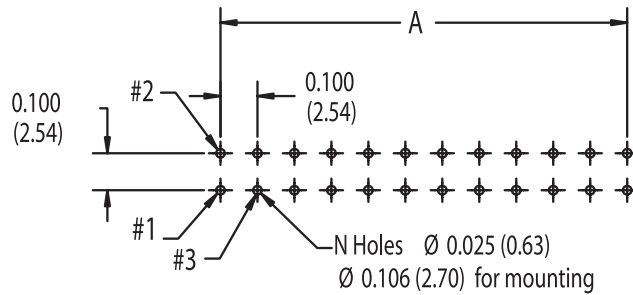
MOUNTING STYLES



MOUNTING DIMENSIONS¹

(Top of Board)

Mother Board Application
 Style 00 & 11
 (Receptacle)

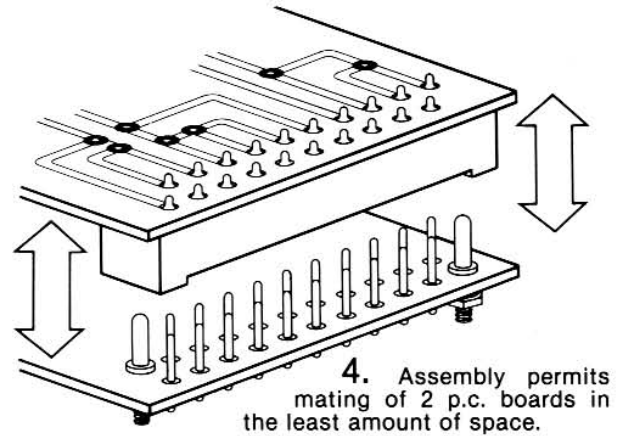
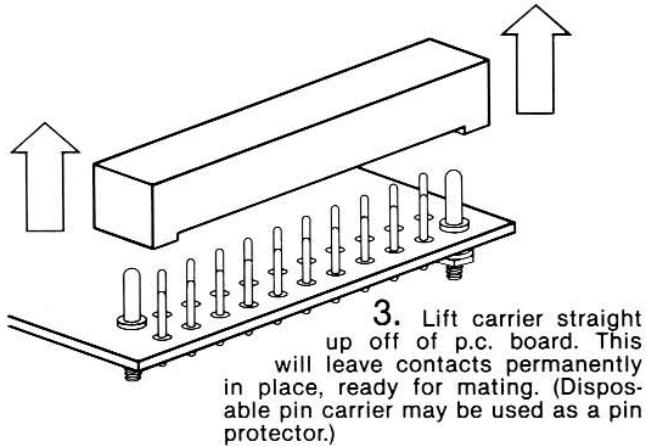
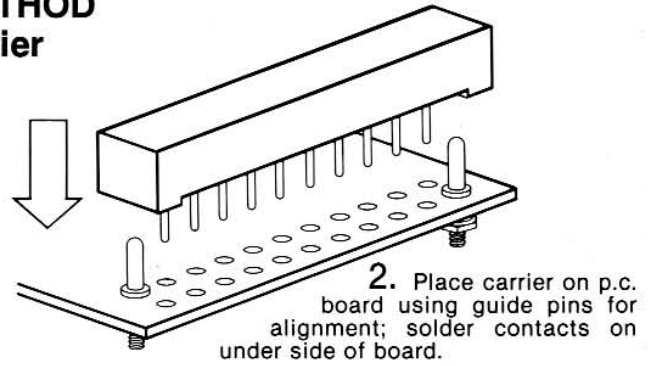
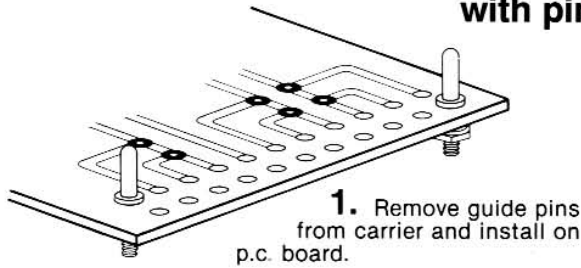


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Notes:

- 1) Dimensions in inches (mm).
- 2) 9.5 oz. in [.07 Nm (.68kg cm)] torque

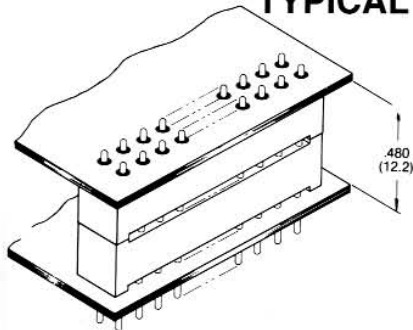
**ASSEMBLY METHOD
with pin carrier**



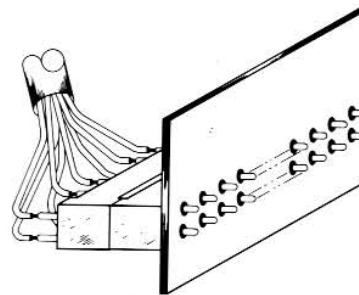
Notes:

- 1) Number of contacts. (special pad configuration required next to mounting holes).
- 2) See pg. 65 for a description of mounting styles/guides/keys.
- 3) Dimensions in inches (mm).

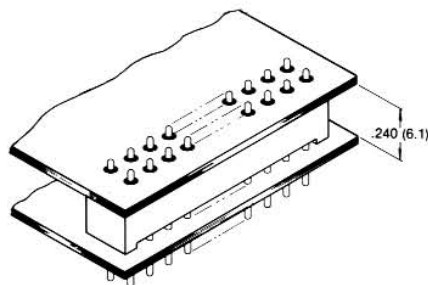
TYPICAL APPLICATIONS



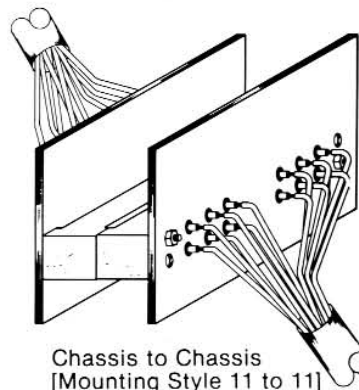
P.C. Board to P.C. Board —
Thick Parallel Sandwich
for tall board components
[Mounting Style 00 to 00]



Cable to P.C. Board
[Mounting Style 00 to 00]



P.C. Board to P.C. Board —
Thin Parallel Sandwich
for maximum density
[Mounting Style 00 to 00 (Carrier)]

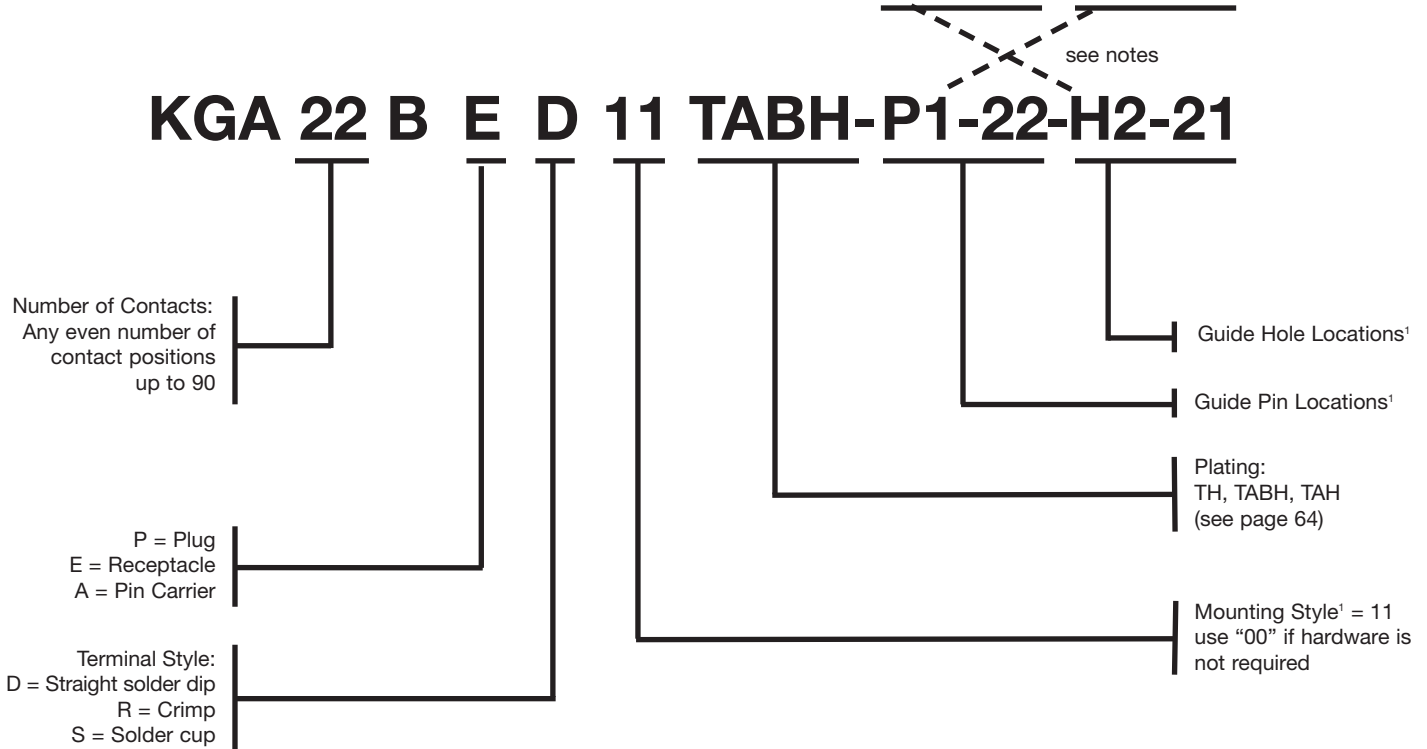


Chassis to Chassis
[Mounting Style 11 to 11]

ORDERING INFORMATION

KGA 22 B P D 11 TH-P2-21-H1-22

KGA 22 B E D 11 TABH-P1-22-H2-21



ACCESSORIES	
Crimp Tool	AFM8 or (M22520/2-01)
Positioner	SS1.0045
Insertion Tool	S/MONT1.0045

Notes:

- 1) Style 11 uses 2 contact position for guide pin. For a mated pair, holes and guides must be complementary (i.e., if position 1 in the plug has a guide pin then, position 1 in the receptacle must have a guide hole, etc.). If omitted, connectors will be shipped fully loaded without guiding hardware.