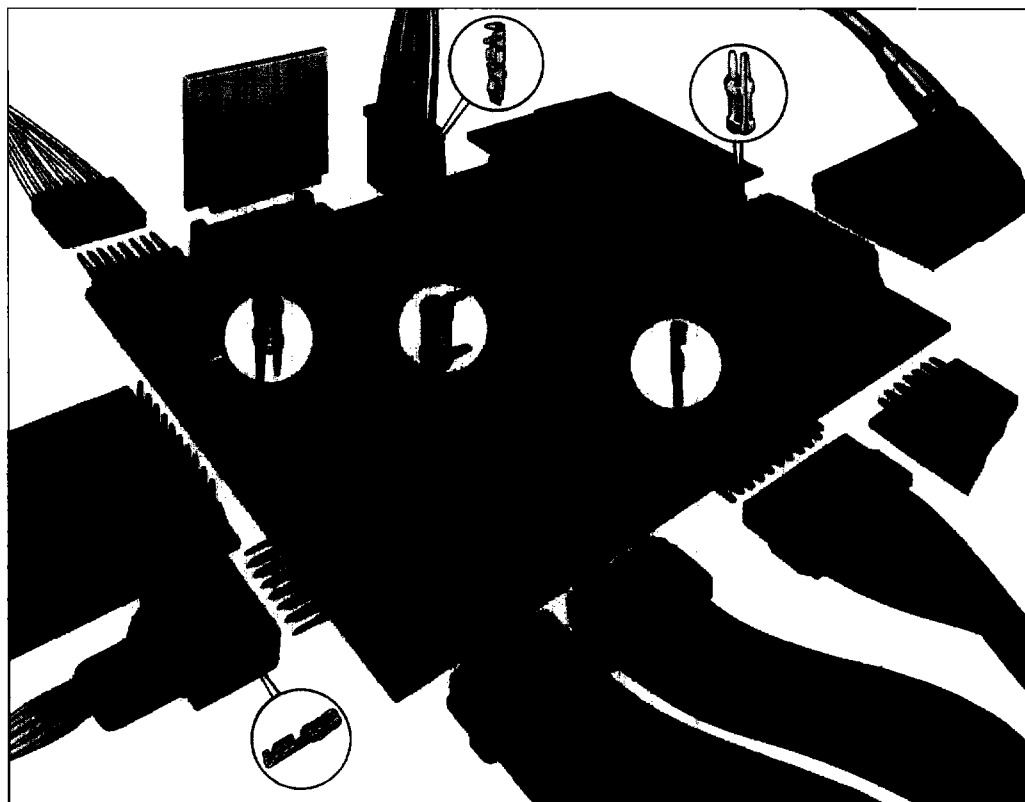


Board-to-Board Connector AMPMODU[®] Interconnection System



Features

- All types of PCB interconnection possible.
- Receptacle has a rectangular cross-section with rounded corners and fully encloses spring members.
- Built-in anti-overstress helps prevent excessive deformation of spring members and allows a wide range of tolerance for misalignment of mating contacts.
- Receptacle is easy to handle and fit to automatic application techniques.
- Mating post is a 0.64mm square or a 0.64mm diameter round post. Available as either as Loose Piece or as a post header preloaded in the housing.
- Tooling available for application of all AMPMODU products.

The AMPMODU Interconnection System, based on a unique modular concept, provides virtually all types of interconnection for the printed circuit board, utilizing precision formed receptacles and mating posts.

The cross-section of the receptacle is primarily rectangular, with rounded corners.

Two cantilever beams form an integral part of the receptacle body, and deflection of these spring members is prevented from excessive permanent deformation of the receptacle by virtue of its built-in anti-overstress. This design feature allows a wide range of tolerance for misalignment of mating contacts. The configuration of the receptacle completely encloses the spring members, thus facilitating handling and preventing damage

during assembly.

The post to mate with the AMPMODU receptacle is a 0.64mm square post or a 0.64mm diameter round post.

These posts are available either as Loose Piece or as a post header preloaded in the housing.

The family of AMPMODU products includes a variety of connectors, ranging from conventional ones used widely for interconnection of the printed circuit board to more recent Shielded MT connectors which have been developed for protecting wiring against EMI and ESD as increasingly required in I/O interface. A range of application tooling is available for use with all these diverse AMPMODU products. For details of the AMPMODU products listed in this catalog, as well as for information

on other numerous product lines available from AMP, contact our Sales Department.

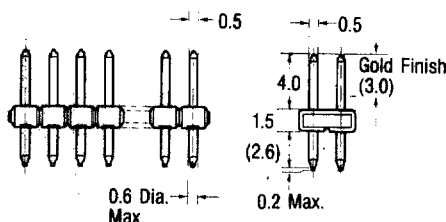
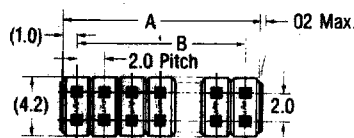
Board to Board Connectors

AMPMODU Interconnection System Model II, Post Header—Unshrouded For PC Board Mount/Double Row, 2mm Centerlines

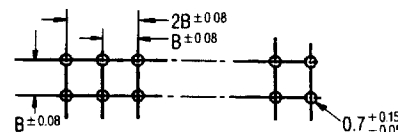
0.5mm Square Straight Post Breakaway Type

Material and Finish:

Housing—94V-0 rated, thermoplastic, black
Post—Brass, duplex plated gold* (see chart) on mating area, 1.0 μ m tin-lead on solder leg area, with entire post underplated 1.3 μ m nickel



Straight Type



PC Board Layout

B—Post centerline to be 2.0mm; ± 0.08 mm tolerances not to accumulate within one connector pattern.
PC Board Thickness: 1.6mm

Acceptable board thickness:

L=For 1.5—0.5 ± 0.1
L=For 1.8—0.8 ± 0.1
L=For 2.2—1.2 ± 0.1
L=For 2.6—1.6 ± 0.1

No. of Pos.	Dim.		Part Number of Header Assemblies							
	A	B	L=1.50mm		L=1.8mm		L=2.2mm		L=2.6mm	
			0.2 μ m	0.76 μ m	0.2 μ m	0.76 μ m	0.2 μ m	0.76 μ m	0.2 μ m	0.76 μ m
4	4	2	178751-1	2-178751-5	178696-1	2-178696-5	178695-1	2-178695-5	176264-1	1-176264-6
6	6	4	178751-2	2-178751-6	178696-2	2-178696-6	178695-2	2-178695-6	176264-2	1-176264-7
8	8	6	178751-3	2-178751-7	178696-3	2-178696-7	178695-3	2-178695-7	176264-3	1-176264-8
10	10	8	178751-4	2-178751-8	178696-4	2-178696-8	178695-4	2-178695-8	176264-4	1-176264-9
12	12	10	178751-5	2-178751-9	178696-5	2-178696-9	178695-5	2-178695-9	176264-5	2-176264-0
14	14	12	178751-6	3-178751-0	178696-6	3-178696-0	178695-6	3-178695-0	176264-6	2-176264-1
16	16	14	178751-7	3-178751-1	178696-7	3-178696-1	178695-7	3-178695-1	176264-7	2-176264-2
18	18	16	178751-8	3-178751-2	178696-8	3-178696-2	178695-8	3-178695-2	176264-8	2-176264-3
20	20	18	178751-9	3-178751-3	178696-9	3-178696-3	178695-9	3-178695-3*	176264-9	2-176264-4
22	22	20	1-178751-0	3-178751-4	1-178696-0	3-178696-4	1-178695-0	3-178695-4	1-176264-0	2-176264-5
24	24	22	1-178751-1	3-178751-5	1-178696-1	3-178696-5	1-178695-1	3-178695-5	1-176264-1	2-176264-6
26	26	24	1-178751-2	3-178751-6	1-178696-2	3-178696-6	1-178695-2	3-178695-6	1-176264-2	2-176264-7
28	28	26	1-178751-3	3-178751-7	1-178696-3	3-178696-7	1-178695-3	3-178695-7	1-176264-3	2-176264-8
30	30	28	1-178751-4	3-178751-8	1-178696-4	3-178696-8	1-178695-4	3-178695-8	1-176264-4	2-176264-9
32	32	30	1-178751-5	3-178751-9	1-178696-5	3-178696-9	1-178695-5	3-178695-9	1-176264-5	3-176264-0
34	34	32	1-178751-6	4-178751-0	1-178696-6	4-178696-0	1-178695-6	4-178695-0	3-176264-1	4-176264-0
36	36	34	1-178751-7	4-178751-1	1-178696-7	4-178696-1	1-178695-7	4-178695-1	3-176264-2	4-176264-1
38	38	36	1-178751-8	4-178751-2	1-178696-8	4-178696-2	1-178695-8	4-178695-2	3-176264-3	4-176264-2
40	40	38	1-178751-9	4-178751-3	1-178696-9	4-178696-3	1-178695-9	4-178695-3	3-176264-4	4-176264-3
42	42	40	2-178751-0	4-178751-4	2-178696-0	4-178696-4	2-178695-0	4-178695-4	3-176264-5	4-176264-4
44	44	42	2-178751-1	4-178751-5	2-178696-1	4-178696-5	2-178695-1	4-178695-5	3-176264-6	4-176264-5
46	46	44	2-178751-2	4-178751-6	2-178696-2	4-178696-6	2-178695-2	4-178695-6	3-176264-7	4-176264-6
48	48	46	2-178751-3	4-178751-7	2-178696-3	4-178696-7	2-178695-3	4-178695-7	3-176264-8	4-176264-7
50	50	48	2-178751-4	4-178751-8	2-178696-4	4-178696-8	2-178695-4	4-178695-8	3-176264-9	4-176264-8

* Gold thickness of Contact area.

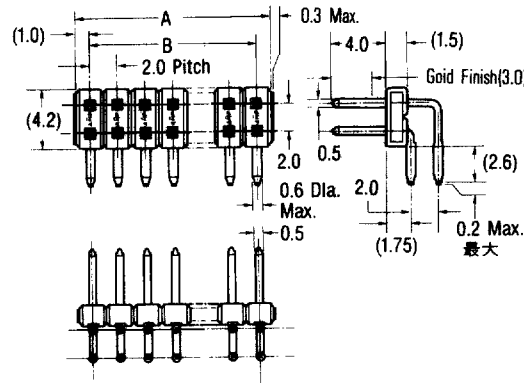
Board to Board Connectors

AMPMODU Interconnection System Model II, Post Header—Unshrouded For PC Board Mount/Double Row, 2mm Centerlines

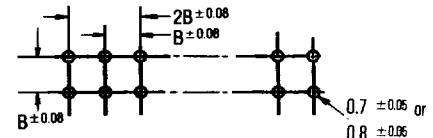
0.5mm Square Right Angle Post Breakaway Type

Material and Finish:

Housing—94V-0 rated, thermoplastic, black
Post—Brass, duplex plated gold* (see chart) on mating area, 1.0μm tin-lead on solder leg area, with entire post underplated 1.3 μm nickel



Right Angle Type



PC Board Layout

B—Post centerline to be 2.0mm; ±0.1mm tolerances not to accumulate within one connector pattern.

Acceptable board thickness:

L=For 1.8—0.8±0.1
L=For 2.2—1.2±0.1
L=For 2.6—1.6±0.1

No. of Pos.	Dim.		Part Number of Header Assemblies					
	A	B	L=1.8mm		L=2.2mm		L=2.6mm	
			0.2μm*	0.76μm*	0.2μm*	0.76μm*	0.2μm*	0.76μm*
4	4	2	178698-1	2-178698-5	178697-1	2-178697-5	178637-1	2-178637-5
6	6	4	178698-2	2-178698-6	178697-2	2-178697-6	178637-2	2-178637-6
8	8	6	178698-3	2-178698-7	178697-3	2-178697-7	178637-3	2-178637-7
10	10	8	178698-4	2-178698-8	178697-4	2-178697-8	178637-4	2-178637-8
12	12	10	178698-5	2-178698-9	178697-5	2-178697-9	178637-5	2-178637-9
14	14	12	178698-6	3-178697-0	178697-6	3-178697-0	178637-6	3-178637-0
16	16	14	178698-7	3-178698-1	178697-7	3-178697-1	178637-7	3-178637-1
18	18	16	178698-8	3-178698-2	178697-8	3-178697-2	178637-8	3-178637-2
20	20	18	178698-9	3-178698-3	178697-9	3-178697-3	178637-9	3-178637-3
22	22	20	1-178698-0	3-178698-4	1-178697-0	3-178697-4	1-178637-0	3-178637-4
24	24	22	1-178698-1	3-178698-5	1-178697-1	3-178697-5	1-178637-1	3-178637-5
26	26	24	1-178698-2	3-178698-6	1-178697-2	3-178697-6	1-178637-2	3-178637-6
28	28	26	1-178698-3	3-178698-7	1-178697-3	3-178697-7	1-178637-3	3-178637-7
30	30	28	1-178698-4	3-178698-8	1-178697-4	3-178697-8	1-178637-4	3-178637-8
32	32	30	1-178698-5	3-178698-9	1-178697-5	3-178697-9	1-178637-5	3-178637-9
34	34	32	1-178698-6	4-178698-0	1-178697-6	4-178697-0	1-178637-6	4-178637-0
36	36	34	1-178698-7	4-178698-1	1-178697-7	4-178697-1	1-178637-7	4-178637-1
38	38	36	1-178698-8	4-178698-2	1-178697-8	4-178697-2	1-178637-8	4-178637-2
40	40	38	1-178698-9	4-178698-3	1-178697-9	4-178697-3	1-178637-9	4-178637-3
42	42	40	2-178698-0	4-178698-4	2-178697-0	4-178697-4	2-178637-0	4-178637-4
44	44	42	2-178698-1	4-178698-5	2-178697-1	4-178697-5	2-178637-1	4-178637-5
46	46	44	2-178698-2	4-178698-6	2-178697-2	4-178697-6	2-178637-2	4-178637-6
48	48	46	2-178698-3	4-178698-7	2-178697-3	4-178697-7	2-178637-3	4-178637-7
50	50	48	2-178698-4	4-178698-8	2-178697-4	4-178697-8	2-178637-4	4-178637-8

* Gold thickness of Contact area.

Board to Board Connectors

AMPMODU Interconnection System Model II, Receptacle Assemblies For PC Board Mount/Double Row, 2mm Centerlines

Vertical Mount

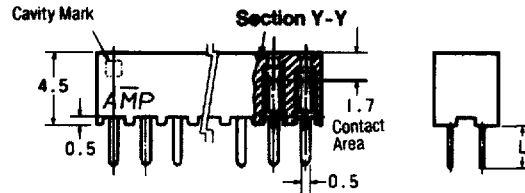
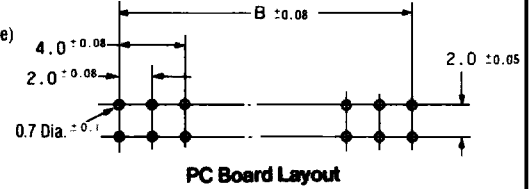
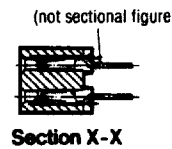
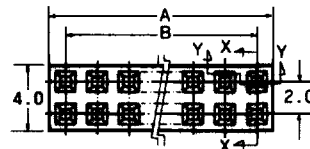
Top Entry (with/without Keying)

Material and Finish:

Housing—UL 94V-0 rated,
glass-filled nylon, black or
white

Receptacle Contact—

Phosphor bronze, duplex
plated gold* (see chart)
on mating area, 1.0μm
or 2.0μm tin-lead on
solder leg area, with entire
contact under-plated 1.3
μm nickel



Acceptable board thickness:

- L=For 1.2—0.3 max.
- L=For 1.5—0.6 max.
- L=For 2.0—1.0±0.2
- L=For 2.6—1.6±0.1

No. of Pos.	Dim. A B	Part Number of Receptacle Assemblies							
		L=1.2mm		L=1.5mm		L=2.0mm		L=2.6mm	
		0.2μm (Circuit #)*	0.76μm (Circuit #)*	0.2μm (Circuit #)*	0.2μm (Circuit #)*	0.76μm (Circuit #)*	0.2μm (Circuit #)*	0.76μm (Circuit #)*	
4	4 2	176135-1 176979-1**	2-176135-5	—	—	—	1-176135-3	3-176135-7	
6	6 4	4-176135-9	5-176135-5	—	—	—	5-176135-2	5-176135-8	
8	8 6	176135-2	2-176135-6 1-176136-3(1,6)	—	—	—	1-176135-4	3-176135-8	
10	10 8	176135-3 176136-1(3,8)	2-176135-7 176136-3(3,8)	—	—	—	1-176135-5 176136-2(3,8)	3-176135-9 176136-4(3,8)	
12	12 10	176135-4	2-176135-8	—	176136-9 1-176136-0(1) 1-176136-1(4) 1-176136-5(2)	—	1-176135-6	4-176135-0	
14	14 12	176135-5	2-176135-9	—	176136-5(2) 1-176136-9	176136-7(2)	1-176135-7 176136-6(2)	4-176135-1 176136-8(2)	
16	16 14	176135-6	3-176135-0	—	—	—	1-176135-8	4-176135-2	
18	18 16	176135-7	3-176135-1	—	—	—	1-176135-9	4-176135-3	
20	20 18	176135-8	3-176135-2	—	—	—	2-176135-0	4-176135-4 4-176979-4**	
22	22 20	176135-9	3-176135-3	—	—	—	2-176135-1	4-176135-5	
24	24 22	1-176135-0	3-176135-4	—	—	—	2-176135-2	4-176135-6	
26	26 24	1-176135-1	3-176135-5	—	—	—	2-176135-3	4-176135-7	
28	28 26	5-176135-0	5-176135-6	—	—	—	5-176135-3	5-176135-9	
30	30 28	5-176135-1	5-176135-7	—	—	—	5-176135-4	6-176135-0	
32	32 30	1-176135-2	3-176135-6	—	—	—	2-176135-4	4-176135-8	
34	34 32	6-176135-1	6-176135-7	—	—	—	6-176135-4	7-176135-0	
36	36 34	7-176135-3	8-176135-5	—	—	—	7-176135-9	9-176135-1	
38	38 36	7-176135-4	8-176135-6	—	—	—	8-176135-0	9-176135-2	
40	40 38	6-176135-2	6-176135-8 2-176136-1(17)	—	—	—	6-176135-5	7-176135-1 2-176136-3(17)	
42	42 40	7-176135-5	8-176135-7	—	—	—	8-176135-1	9-176135-3	
44	44 42	7-176135-6 1-176136-6(20)	8-176135-8	2-176136-5(20)	1-176136-2	—	8-176135-2	9-176135-4	
46	46 44	7-176135-7	8-176135-9	—	—	—	1-176136-7(20)	9-176979-4**	
48	48 46	7-176135-8	9-176135-0	—	—	—	8-176135-3	9-176135-5	
							8-176135-4	9-176135-6	
							6-176135-6	7-176135-2	
50	50 48	6-176135-3	6-176135-9	—	—	—	1-176136-8(5,6,20)	2-176136-4(27)	
								7-176979-2**	
52	52 50	—	—	—	—	—	178714-1	—	

* with Keying. (Circuit # of Keying position)
** Housing color—white

Board to Board Connectors

AMPMODU / 2.0mm Pitch Post Header

Shrouded Type

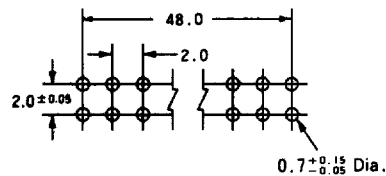
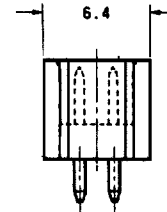
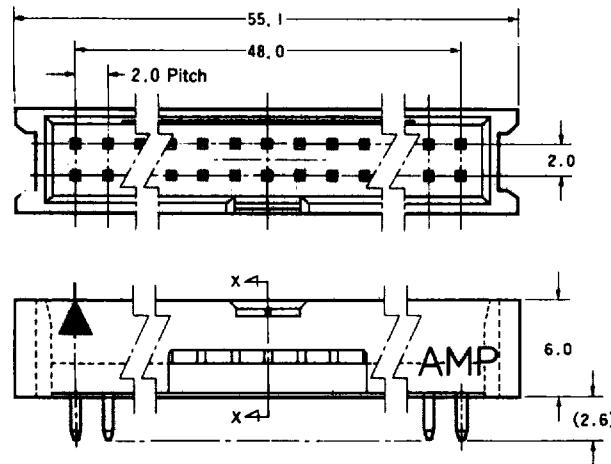
Vertical Mounting Type

0.5mm Square
Straight Post

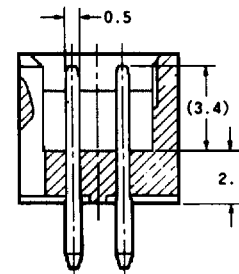
For 50 Position
Part Number : 917393-1

Material and Finish :

Housing —94V-0 rated,
PPS, black
Post—Brass, 0.2 μ m min.
gold on contact area,
1.0 μ m min. tin-lead on
solder area, with entire
contact underplated 1.3
 μ m min. nickel



PC Board Layout



Section X-X

Board to Board Connectors AMPMODU / 2.0mm Pitch SMT Post Header With and Without Post

Horizontal Mounting Type

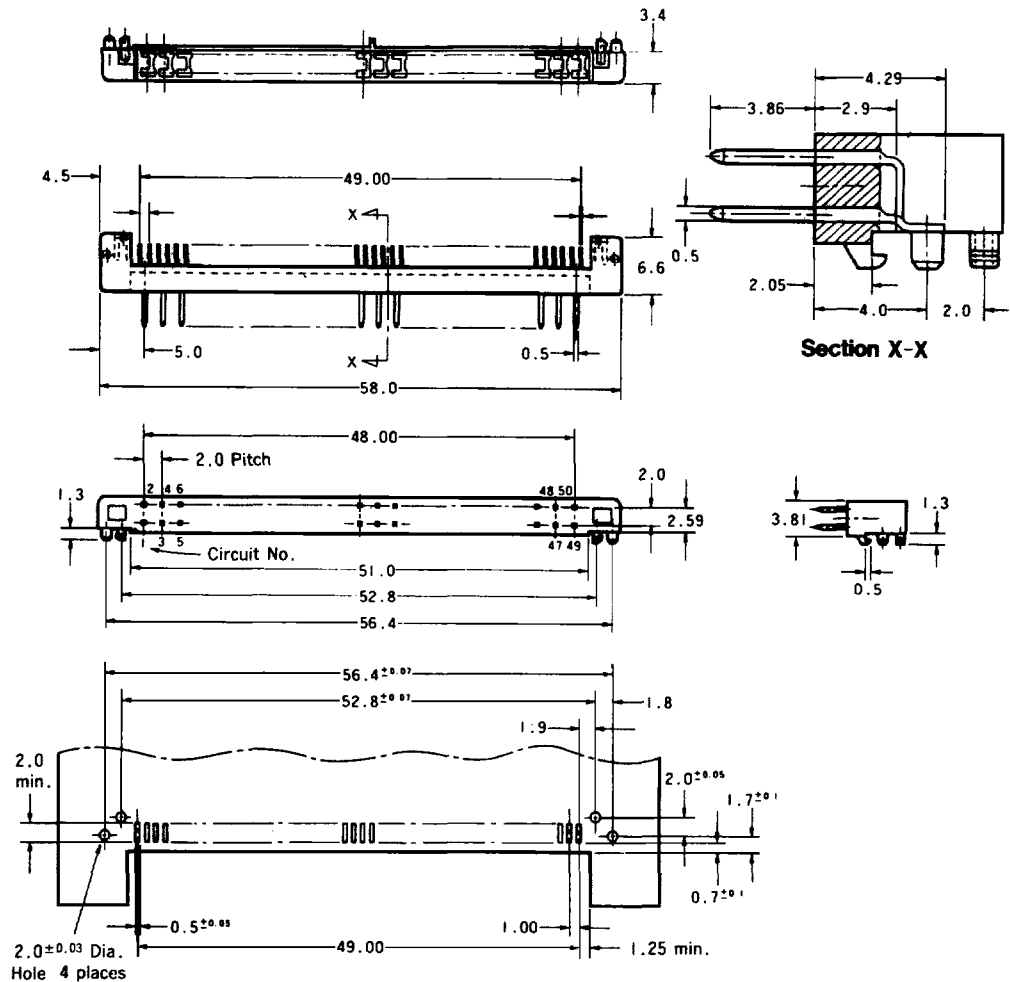
0.5mm Square
 Right Angle Post
 With Plastic
 Retention Leg

Material and Finish :

Housing —94V-0 rated.

PPS, black

Post—Brass, 0.1 μ m min.
 gold on contact area,
 1.0 μ m min. tin-lead on
 solder area, with entire
 contact underplated 1.3
 μ m min. nickel



PC Board Layout

No. of Pos.	Without Post No.	Post Header Part No.
		179589-1
50	25, 45, 46	179589-2
	24, 41, 42	179589-3

Board-to-Board Connector AMPMODU Interconnection System Header Assemblies, Breakaway—Unshrouded For PC Board Mount/Double Row, 2.54mm Centerlines

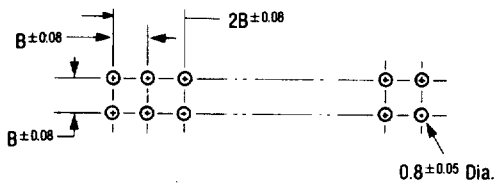
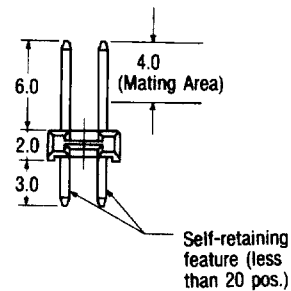
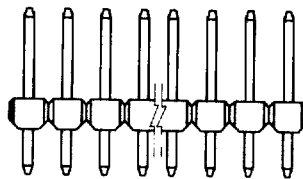
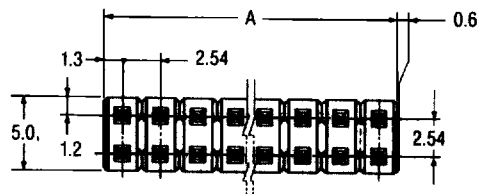
0.64mm Square Straight Post

Material:

Housing—94V-0 rated,
thermoplastic polyester,
black

Contacts—Brass

Finish: Duplex plated 0.1μm gold
on mating area, 1.0μm tin-lead
on solder leg area, with entire
post underplated 1.3μm nickel.



PC Board Layout

B—Post centerline to be 2.54mm;
±0.08 tolerances not to
accumulate within one connector
pattern.
PC Board Thickness: 1.6mm

No. of Position	Dimensions A	Part Number of Header Assembly
2	2.5	174221-1
4	5.1	174221-2
6	7.6	174221-3
8	10.2	174221-4
10	12.7	174221-5
12	15.2	174221-6
14	17.8	174221-7
16	20.3	174221-8
18	22.9	174221-9
20	25.4	1-174221-0
22	27.9	1-174221-1
24	30.5	1-174221-2
26	33.0	1-174221-3
28	35.6	1-174221-4
30	38.1	1-174221-5
32	40.6	1-174221-6

No. of Position	Dimensions A	Part Number of Header Assembly
34	43.2	1-174221-7
36	45.7	1-174221-8
38	48.3	1-174221-9
40	50.8	2-174221-0
42	53.3	2-174221-1
44	55.9	2-174221-2
46	58.4	2-174221-3
48	61.0	2-174221-4
50	63.5	2-174221-5
52	66.0	2-174221-6
54	68.6	2-174221-7
56	71.1	2-174221-8
58	73.7	2-174221-9
60	76.2	3-174221-0
62	78.7	3-174221-1
64	81.3	3-174221-2

Note: Headers may be broken to desired number of positions.
Single row breakaway header assemblies are available.

Board-to-Board Connector

AMPMODU Interconnection System, Header Assemblies, Breakaway—Unshrouded For PC Board Mount Double Row, 2.54mm Centerlines

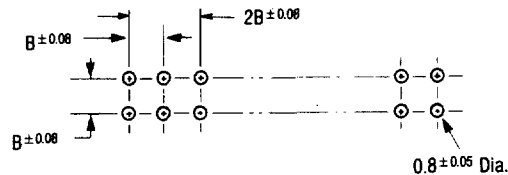
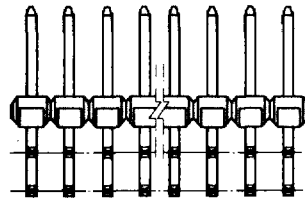
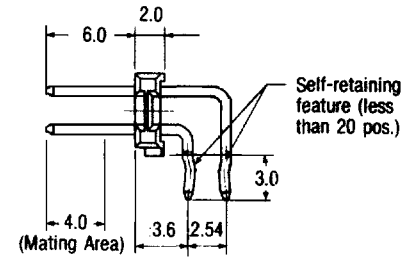
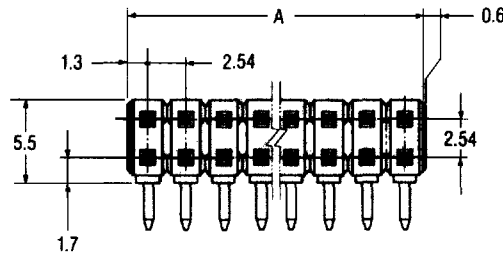
0.64mm Square Right Angle Post

Material:

Housing—94V-0 rated,
thermoplastic polyester,
black

Contacts—Brass

Finish: Duplex plated 0.1μm gold
on mating area, 1.0μm tin-lead
on solder leg area, with entire
post underplated 1.3μm nickel.



PC Board Layout

B—Post centerline to be 2.54mm;
±0.08 tolerances not to
accumulate within one connector
pattern.

PC Board Thickness: 1.6mm

No. of Position	Dimensions A	Part Number of Header Assembly
2	2.5	174222-1
4	5.1	174222-2
6	7.6	174222-3
8	10.2	174222-4
10	12.7	174222-5
12	15.2	174222-6
14	17.8	174222-7
16	20.3	174222-8
18	22.9	174222-9
20	25.4	1-174222-0
22	27.9	1-174222-1
24	30.5	1-174222-2
26	33.0	1-174222-3
28	35.6	1-174222-4
30	38.1	1-174222-5
32	40.6	1-174222-6

No. of Position	Dimensions A	Part Number of Header Assembly
34	43.2	1-174222-7
36	45.7	1-174222-8
38	48.3	1-174222-9
40	50.8	2-174222-0
42	53.3	2-174222-1
44	55.9	2-174222-2
46	58.4	2-174222-3
48	61.0	2-174222-4
50	63.5	2-174222-5
52	66.0	2-174222-6
54	68.6	2-174222-7
56	71.1	2-174222-8
58	73.7	2-174222-9
60	76.2	3-174222-0
62	78.7	3-174222-1
64	81.3	3-174222-2

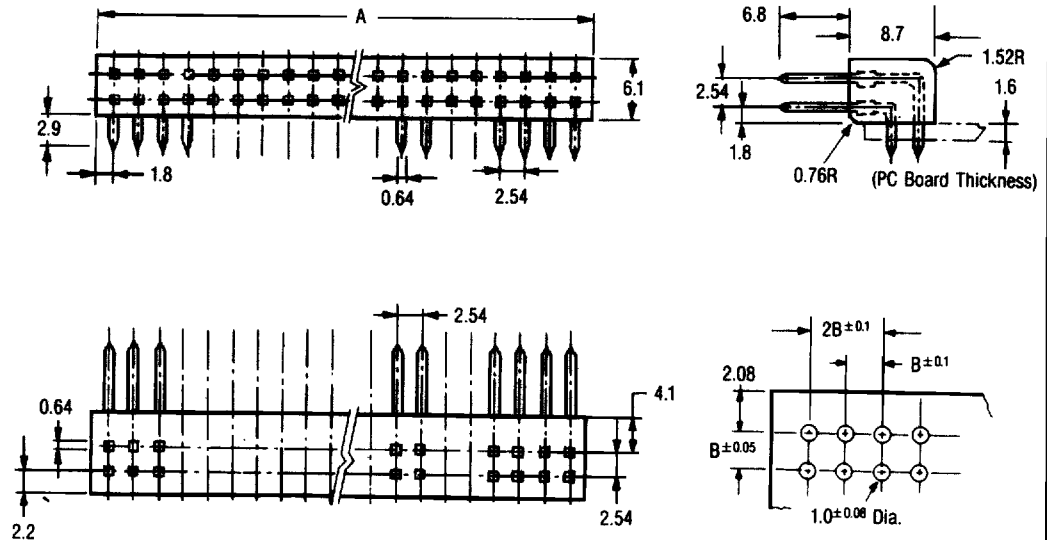
Note: Headers may be broken to desired number of positions.
Single row breakaway header assemblies are available.

Board-to-Board Connector AMPMODU Interconnection System, Header Assemblies—Unshrouded For PC Board Mount Double Row, 2.54mm Centerlines

0.64mm Square Right Angle Post

Material and Finish:

Housing—Diallylphthalate,
green
Contacts—Phosphor Bronze,
0.4μm gold plated



PC Board Layout

B—Post centerline to be 2.54mm;
±0.08 tolerances not to
accumulate within one connector
pattern.

No. of Position	Dimensions A	Part Number of Header Assembly
8	11.2	—
10	13.7	—
12	16.3	—
14	18.8	—
16	21.3	—
18	23.9	—
20	26.4	2-170850-1
22	29.0	—
24	31.5	—
26	34.0	—
28	36.6	—
30	39.1	3-170850-1
32	41.7	—
34	44.2	3-170850-5
36	46.7	—
38	49.3	3-170850-9
40	51.8	—
42	54.4	—
44	56.9	—

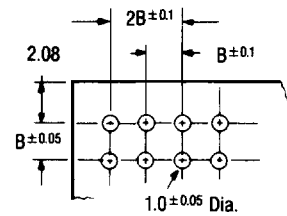
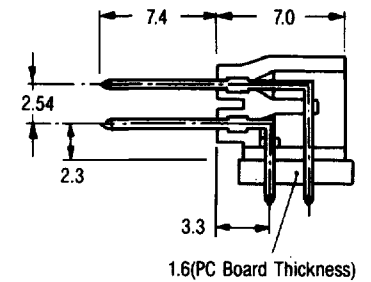
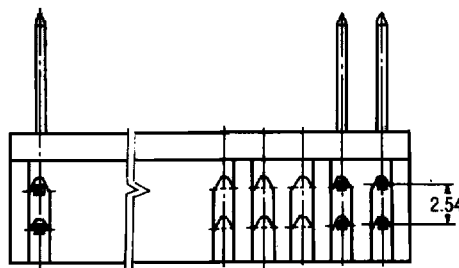
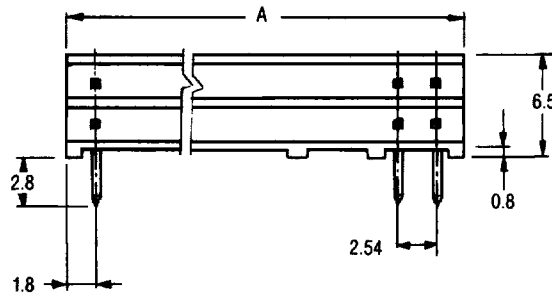
No. of Position	Dimensions A	Part Number of Header Assembly
46	59.4	—
48	62.0	—
50	64.5	5-170850-1
52	67.1	5-170850-3
54	69.6	—
56	72.1	5-170850-7
58	74.7	—
60	77.2	6-170850-1
62	79.8	6-170850-3
64	82.3	6-170850-5
66	84.8	—
68	87.4	—
70	89.9	—
72	92.5	7-170850-3
74	95.0	7-170850-5
76	97.5	—
78	100.1	7-170850-9
80	102.6	170850-1
—	—	—

Board-to-Board Connector **AMPMODU Interconnection System, Header Assemblies—Unshrouded** **For PC Board Mount Double Row, 2.54mm Centerlines**

0.64mm Square Right Angle Post

Material and Finish:

Housing—Glass-filled P.B.T.,
black
Contacts—CA725 Copper
alloy, 0.4μm gold plated



PC Board Layout

B—Post centerline to be 2.54mm;
±0.1 tolerances not to
accumulate within one connector
pattern.

No. of Position	Dimensions A	Part Number of Header Assembly
8	11.0	—
10	13.6	—
12	16.1	—
14	18.6	—
18	23.7	—
20	26.3	—
22	28.8	2-171451-2
24	31.3	—
26	33.9	—

No. of Position	Dimensions A	Part Number of Header Assembly
28	36.4	2-171451-8
32	41.5	—
34	44.0	—
40	51.7	—
44	56.7	4-171451-4
50	64.4	—
58	74.5	5-171451-8
60	77.1	6-171451-0
66	84.7	—

Board-to-Board Connector AMPMODU Interconnection System, Model II, Receptacle Assemblies For PC Board Mount/Single Row, 2.54mm Centerlines

Vertical Mount Top Entry

Material and Finish:

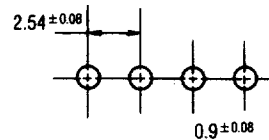
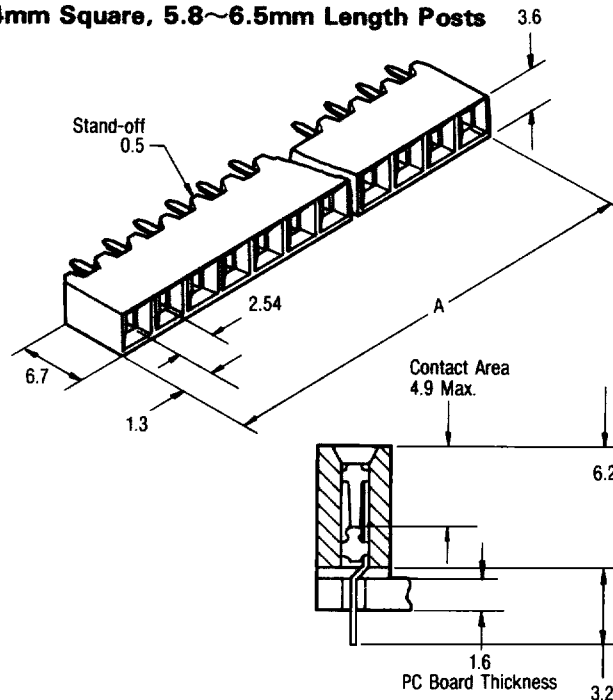
Housing—UL94V-0 rated,
glass-filled nylon
Contact—Phosphor Bronze,
duplex plated gold* (see
chart) on mating area,
1.0μm min. tin-lead on
solder leg area, with entire
contact under-plated 1.3μm
min. nickel

Keying Plug



Part Number: 86286-1
(Plugs into Receptacle contact)

Mate with 0.64mm Square, 5.8~6.5mm Length Posts



PC Board Layout

Note—Post centerline to be 2.54mm;
±0.08mm tolerances not to
accumulate within one connector
pattern.

No. of Pos.	Dimension A	Part Number of Receptacle Assembly	
		0.1μm*	0.4μm min.*
9	22.9	—	1-174224-1
12	30.5	174224-1	—
14	35.6	174224-2	—
21	53.3	174224-3	—

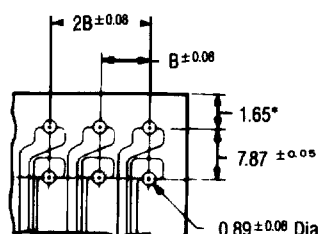
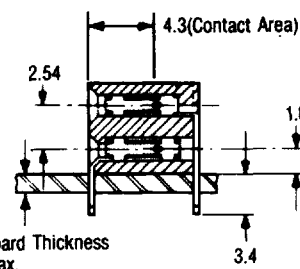
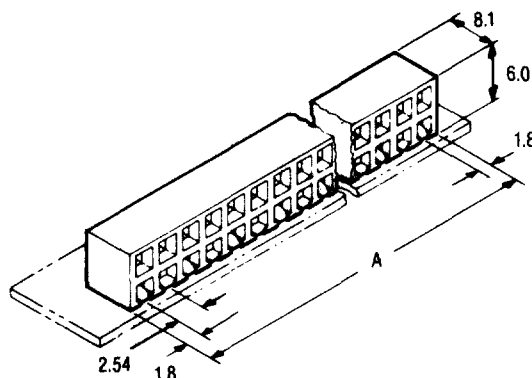
Board-to-Board Connector AMPMODU Interconnection System, Model II Receptacle Assemblies—PC Board Mount For PC Board Mount/Double Row, 2.54mm Centerlines

Horizontal Mount Short-beam Type

Material and Finish:

Housing—UL 94V-0 rated,
Diallyl Phthalate, blue
Contacts—Phosphor Bronze,
duplex plated $0.8\mu\text{m}$ gold on
mating area, $1.0\mu\text{m}$ tin-lead
on solder leg area, with
entire contact underplated
 $1.3\mu\text{m}$ nickel

Mate with 0.64mm Square, 5.9-8.1mm Length Posts



PC Board Layout

B—Post centerline to be 2.54mm;
 ± 0.08 tolerances not to
accumulate within one connector
pattern.

* Dimension varies according
to the type of post header
to be used. For details,
request drawings.

No. of Position	Dimension A	Part Number of Receptacle Assembly
8	11.2	—
10	13.7	3-172072-6
12	16.3	3-172072-7
14	18.8	2-172072-0
16	21.3	3-172072-8
20	26.4	2-172072-1
22	29.0	—
24	31.5	—
30	39.1	2-172072-2
34	44.2	2-172072-3
38	49.3	2-172072-4
40	51.8	2-172072-5
50	64.5	2-172072-6
58	74.7	4-172072-1
60	77.2	2-172072-7
66	84.8	2-172072-8
70	89.9	2-172072-9
76	97.5	—
80	102.6	3-172072-0
100	128.0	3-172072-1
114	145.8	3-172072-2
120	153.4	3-172072-3
130	166.1	—

Keying Plug



Part No.: 86286-1
(Plugs into Receptacle contact)

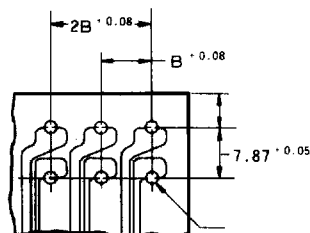
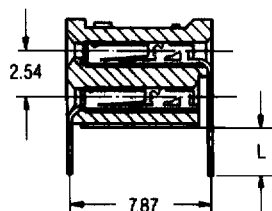
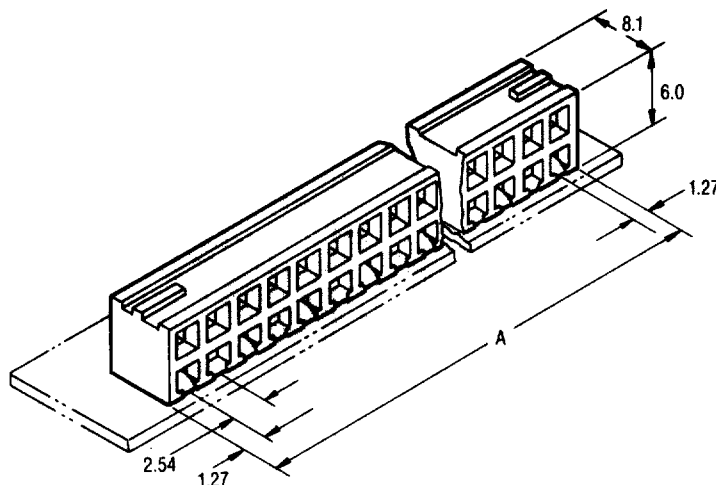
Board-to-Board Connector AMPMODU Interconnection System, Model II, Receptacle Assemblies For PC Board Mount/Double Row, 2.54mm Centerlines

Horizontal Mount Economy Type

Material and Finish:

Housing—UL94V-0 rated,
thermoplastic, polyester
Contact—Phosphor Bronze,
duplex plated gold*(see
chart) on mating area,
1.0μm tin-lead on solder
leg area, with entire contact
under-plated 1.3μm nickel

Mate with 0.64mm Square, 5.9-8.1mm Length Posts



PC Board Layout

Note: Post centerline to be 2.54mm;
±0.08mm tolerances not to
accumulate within one connector
pattern.

Applicable PC Board Thickness Post Length=L	No. of Pos.	Dimension		Part Number of Receptacle Assembly			
		A	B	0.1μm*	0.2μm min.*	0.4μm min.*	0.76μm min.*
1.2	8	10.2	7.62	174809-1	1-174809-1	6-174809-1	2-174809-1
	12	15.2	12.70	174809-2	1-174809-2	6-174809-2	2-174809-2
	14	17.8	15.24	174809-3	1-174809-3	—	2-174809-3
	16	20.3	17.78	174809-4	1-174809-4	6-174809-4	2-174809-4
	24	30.5	27.94	174809-5	1-174809-5	6-174809-5	2-174809-5
2.7	8	10.2	7.62	3-174809-1	4-174809-1	7-174809-1	5-174809-1
	12	15.2	12.70	3-174809-2	4-174809-2	—	5-174809-2
	14	17.8	15.24	3-174809-3	4-174809-3	7-174809-3	5-174809-3
	16	20.3	17.78	3-174809-4	4-174809-4	7-174809-4	5-174809-4
	24	30.5	27.94	3-174809-5	4-174809-5	7-174809-5	5-174809-5

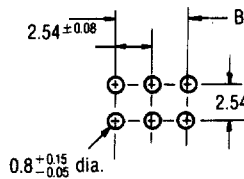
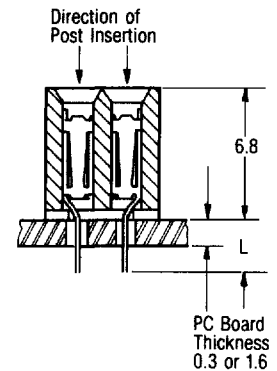
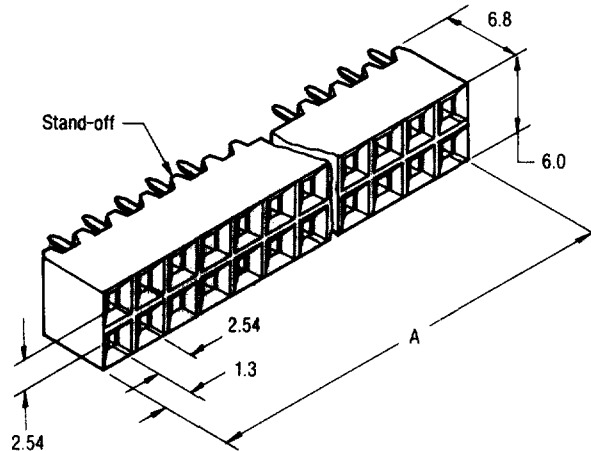
Board-to-Board Connector AMPMODU Interconnection System, Model II, Receptacle Assemblies For PC Board Mount/Double Row, 2.54mm Centerlines

Vertical Mount Top Entry Economy Type

Material and Finish:

Housing—UL94V-0 rated, thermoplastic, polyester
Contact—Phosphor Bronze, duplex plated gold* (see chart) on mating area, 1.0μm min. tin-lead on solder leg area, with entire contact under-plated 1.3μm nickel

Mate with 0.64mm Square, 5.8~6.5mm Length Posts



PC Board Layout

Note: Post centerline to be 2.54mm; ±0.08mm tolerances not to accumulate within one connector pattern.

Keying Plug



Part Number: 86286-1
(Plugs into Receptacle contact)

Applicable PC Board Thickness Post Length=L	No. of Pos.	Dimension		Part Number of Receptacle Assembly			
		A	B	0.1μm*	0.2μm min.*	0.4μm min.*	0.76μm min.*
0.3 min. L=1.2	2	2.5	—	174650-1	1-174650-1	175426-1	2-174650-1
	4	5.1	2.58	174650-2	1-174650-2	175426-2	2-174650-2
	6	7.6	5.08	174650-3	1-174650-3	175426-3	2-174650-3
	8	10.2	7.62	174650-4	1-174650-4	175426-4	2-174650-4
	10	12.7	10.16	6-174650-1	6-174650-2	2-175426-1	6-174650-3
	16	20.3	17.78	174650-5	1-174650-5	175426-5	2-174650-5
	20	25.4	22.86	174650-6	1-174650-6	175426-6	2-174650-6
	22	27.9	25.40	174650-7	1-174650-7	175426-7	2-174650-7
	34	43.2	40.64	174650-8	1-174650-8	—	2-174650-8
	36	45.7	43.18	174650-9	1-174650-9	175426-9	2-174650-9
1.6±0.1 L=2.6	40	50.8	48.26	1-174650-0	2-174650-0	1-175426-0	3-174650-0
	2	2.5	—	3-174650-1	4-174650-1	1-175426-1	5-174650-1
	4	5.1	2.58	3-174650-2	4-174650-2	1-175426-2	5-174650-2
	6	7.6	5.08	3-174650-3	4-174650-3	1-175426-3	5-174650-3
	8	10.2	7.62	—	4-174650-4	1-175426-4	—
	10	12.7	10.16	6-174650-4	6-174650-2	2-175426-2	6-174650-6
	16	20.3	17.78	3-174650-5	4-174650-5	1-175426-5	5-174650-5
	20	25.4	22.86	—	4-174650-6	1-175426-6	5-174650-6
	22	27.9	25.40	3-174650-7	4-174650-7	1-175426-7	5-174650-7
	34	43.2	40.64	3-174650-8	4-174650-8	1-175426-8	5-174650-8
	36	45.7	43.18	3-174650-9	4-174650-9	1-175426-9	5-174650-9
	40	50.8	48.26	—	5-174650-0	2-175426-0	6-174650-0

Board-to-Board Connector

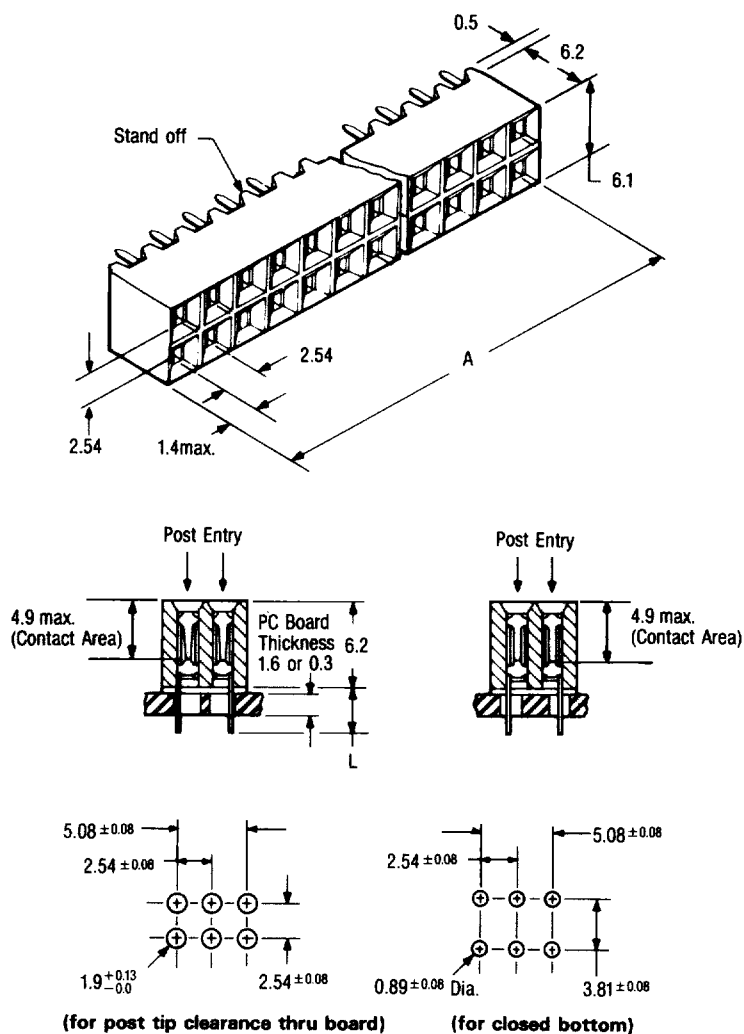
AMPMODU Interconnection System, Model IV Receptacle Assemblies For PC Board Mount/Double Row, 2.54mm Centerlines

Vertical Mount Top Entry

Material:

Housing—Frame retardant
thermoplastic, black
Contacts—Phosphor Bronze

Mate with 0.64mm Square, 5.8-6.5mm Length Posts



PC Board Layout

Note:—Post centerline to be 2.54mm;
±0.08 tolerances not to
accumulate within one connector

Keying Plug



Part No.: 86286-1

(Plugs into Receptacle contact)

Board-to-Board Connector

AMPMODU Interconnection System, Model IV Receptacle Assemblies—PC Board Mount For PC Board Mount/Double Row, 2.54mm Centerlines

Vertical Mount Top Entry

Material:

Housing—Frame retardant
thermoplastic, black
Contacts—Phosphor Bronze

Standard Pressure Contact Type

Applicable PC Board Thickness Post Length=L	No. of Pos.	Dimensions A	Part No. of Receptacle Assembly			
			0.1μm.*	0.2μm min.	0.4μm min.	0.76μm min.*
0.3 Max. L=1.2	2	2.5	4-174007-1	5-174007-1	175425-1	174007-7
	4	5.1	4-174007-2	5-174007-2	175425-2	—
	6	7.6	4-174007-3	5-174007-3	175425-3	174007-1
	8	10.2	4-174007-4	5-174007-4	175425-4	174007-9
	10	12.7	8-174007-2	8-174007-3	2-175425-1	8-174007-1
	12	15.2	—	—	—	174007-2
	16	20.3	4-174007-5	5-174007-5	175425-5	2-174007-1
	20	25.4	4-174007-6	5-174007-6	175425-6	2-174007-2
	22	27.9	4-174007-7	5-174007-7	175425-7	—
	24	30.5	—	—	—	174007-4
	26	33.0	—	—	—	1-174007-0
	34	43.2	4-174007-8	6-174007-8	175425-8	174007-5
	36	45.7	4-174007-9	7-174007-9	175425-9	174007-6
	40	50.8	5-174007-0	7-174007-0	1-175425-0	2-174007-3
	2	2.5	6-174007-1	7-174007-1	1-175425-1	1-174007-7
	4	5.1	6-174007-2	7-174007-2	1-175425-2	1-174007-8
1.6±0.1 L=2.6	6	7.6	6-174007-3	8-174007-3	1-175425-3	—
	8	10.2	6-174007-4	7-174007-4	1-175425-4	1-174007-9
	10	12.7	8-174007-5	8-174007-6	2-175425-2	8-174007-4
	12	15.2	—	—	—	1-174007-2
	16	20.3	6-174007-5	7-174007-5	1-175425-5	3-174007-1
	20	25.4	6-174007-6	7-174007-6	1-175425-4	3-174007-2
	22	27.9	6-174007-7	7-174007-7	1-175425-7	—
	24	30.5	—	—	—	—
	26	33.0	—	—	—	2-174007-0
	34	43.2	—	7-174007-8	1-175425-8	1-174007-5
	36	45.7	6-174007-9	7-174007-9	1-175425-9	—
	40	50.8	6-174007-0	8-174007-0	2-175425-0	3-174007-3

Duplex plated gold() on mating area, 1.0μm tin-lead on solder leg area, with entire contact under-plated 1.3μm nickel.

High Pressure Contact Type

Applicable PC Board Thickness	No. of Pos.	Dimensions A	Part No. of Receptacle Assembly 0.76μm min.*
0.3 Max. L=1.2	2	2.1	—
	4	5.2	—
	6	7.7	—
	8	10.3	174819-9
	12	15.9	174819-5
	14	17.7	—
	16	20.3	—
	22	27.9	174819-4
1.6±0.1 L=2.6	36	45.7	174819-7
	2	2.5	1-174819-1
	4	5.1	1-174819-2
	6	7.6	1-174819-3
	8	10.1	1-174819-9
	12	15.2	1-174819-5
	14	17.7	1-174819-6
	16	20.3	1-174819-8
	22	27.9	1-174819-4
	36	45.7	1-174819-7

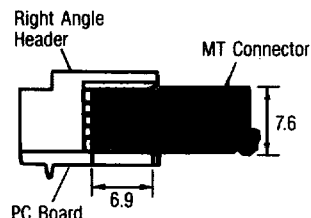
Duplex plated gold () on mating area, 1.0μm tin-lead on Solder leg area, with entire contact under-plated 1.3μm nickel.

Board-to-Board Connector AMPMODU Interconnection System, MT Receptacle Connectors For Wire Application/Double Row, 2.54mm Centerlines

Housings Preloaded with Standard Pressure Contacts

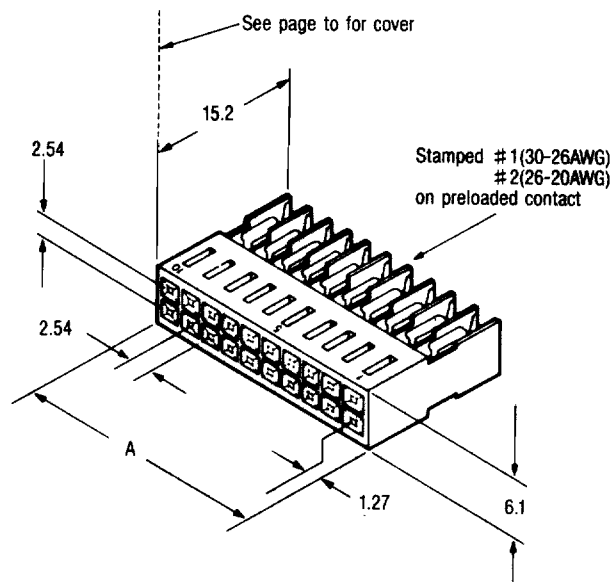
Material:

Housing — UL94V-0 rated,
flame retardant thermoplastic
black
Contact — Phosphor Bronze



Typical Mating of Assembly

Mate with 0.64mm Square, 5.7-6.9mm Length Posts
Wire Insulation Diameter: 1.27mm max.



Keying Plug

Material: Nylon, natural color



Part No.: 86286-1
(Plugs into Receptacle contact)



Part No.: 87077-2
(Plugs into Housing)

No. of Pos.	Dim. A	Housing Assembly Part No.			
		30-26AWG (0.05~0.15mm ²)		26-22AWG (0.12~0.3mm ²)	
		Sel.Gold/Nickel ^(X)	Sel.Gold/Nickel ^(Y)	Sel.Gold/Nickel ^(X)	Sel.Gold/Nickel ^(Y)
6	7.7	—	2-173247-2	—	2-173246-2
10	12.7	173247-4	2-173247-4	173246-4	2-173246-4
12	15.2	—	2-173247-5	—	2-173246-5
16	20.4	173247-7	2-173247-7	—	2-173246-7
18	22.9	173247-8	2-173247-8	—	2-173246-8
20	25.4	173247-9	2-173247-9	—	2-173246-9

Plating Code:

^(X) Duplex plated 0.8μm gold on mating area, tin-lead on termination area, with entire contact underplated 1.3μm nickel.

^(Y) Duplex plated 0.1μm gold on mating area, tin-lead on termination area, with entire contact underplated 1.3μm nickel.

Note: 1. Each housing is provided with stampings, which include position number for every fifth position (one side only);
Date Code; Plating Identification Code X (0.8μm selected gold plating), Y (0.1μm selected gold plating).
2. Replacement Extraction Tool Part No.: 91052-1
3. Size up to 72 positions are available for this connector style. Also, one-row style connectors are available.

Board-to-Board Connector

AMPMODU Interconnection System, MT Post Header Assemblies—PC Board Mount For PC Board Mount/Double Row, 2.54mm Centerlines

0.64mm Square Right Angle Post

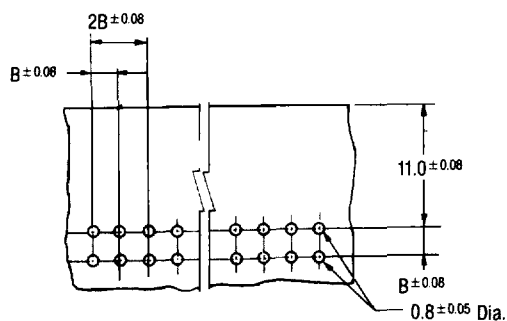
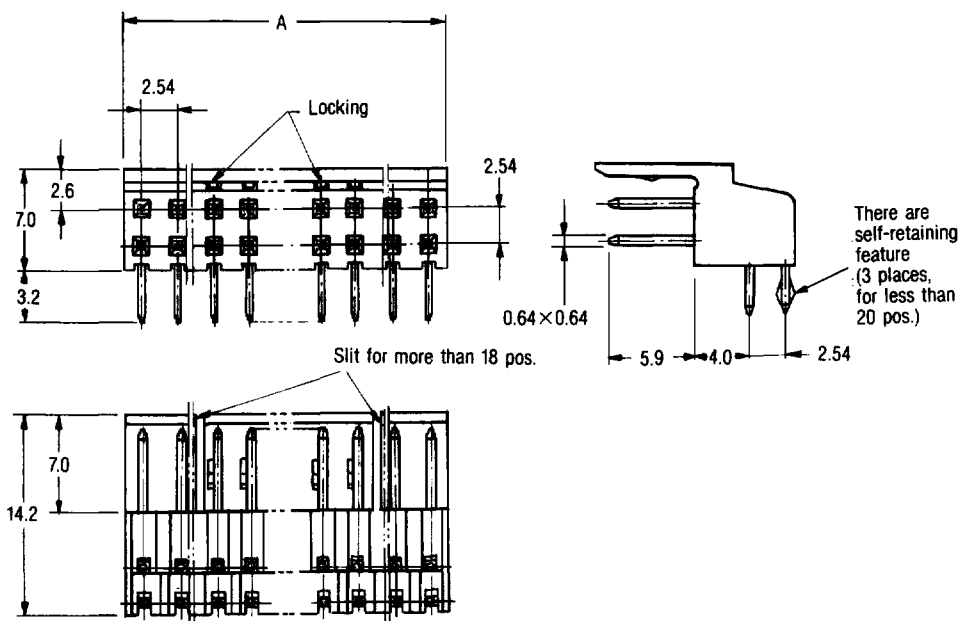
Mates with MT Receptacle Connector

Part Numbers:
173247, 173246

Material and Finish:

Housing—P. B. T.
Post—Phosphor Bronze,
duplex plated 0.1 μ m gold on
mating area, tin-lead on
solder leg area, with entire
contact underplated nickel

Product Specification:
108-5225



PC Board Layout

B—Post centerline to be 2.54mm;
 ± 0.08 tolerances not to
accumulate within one connector
pattern.

No. of Position	Dimensions A	Right Angle Header Assembly Part No.
4	5.1	173283-1
6	7.6	—
8	10.2	173283-3
10	12.7	173283-4
12	15.2	173283-5
14	17.8	173283-6
16	20.3	173283-7
18	22.9	173283-8
20	25.4	173283-9
26	33.0	1-173283-0
30	38.1	1-173283-1
40	50.8	1-173283-3
50	63.5	1-173283-4
60	76.2	1-173283-5

Note: Mating AMPMODU MT Receptacles are double row connectors listed in page 257 : use either hermaphrodite or unpolarized cover (page 259).

Board-to-Board Connector AMPMODU Interconnection System, MT Low Profile Cover For Wire Application

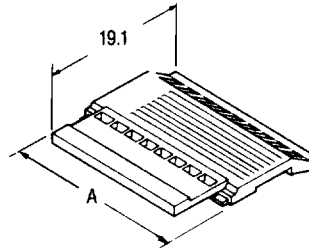
For Double Row Receptacle Connector

Material and Finish:

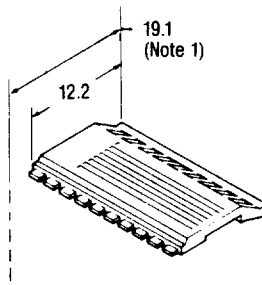
Housing—UL94V-0 rated,
frame retardant thermo-
plastic, black

Note:

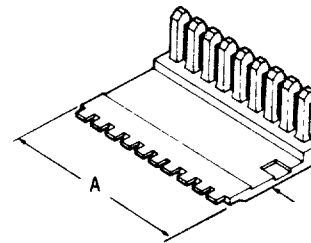
1. Dimension when assembled
with receptacle.
2. Back cover is used in combi-
nation with other types of
cover. One back cover is
required..



Polarizing Cover
P/N: 102540



Non-Polarizing Cover
P/N: 102541



Back Cover
P/N: 102536 (Note 2)

Acceptable No. of Pos.	Dim. A	Part No. of Cover		Part No. of Back Cover(Note 2)
		Polarized	Non Polarized	
6	7.6	102540-1	102541-1	102536-1
8	10.2	102540-2	102541-2	102536-2
10	12.7	102540-3	102541-3	102536-3
12	15.2	102540-4	102541-4	102536-4
14	17.8	—	102541-5	102536-5
16	20.3	102540-6	102541-6	102536-6
18	22.9	102540-7	102541-7	102536-7
20	25.4	102540-8	102541-8	102536-8
22	27.9	102540-9	102541-9	102536-9
24	30.5	1-102540-0	1-102541-0	1-102536-0
26	33.0	1-102540-1	1-102541-1	1-102536-1
28	35.6	1-102540-2	1-102541-2	1-102536-2
30	38.1	1-102540-3	1-102541-3	1-102536-3
32	40.6	1-102540-4	1-102541-4	1-102536-4
34	43.2	1-102540-5	1-102541-5	1-102536-5
36	45.7	1-102540-6	1-102541-6	1-102536-6
38	48.3	1-102540-7	1-102541-7	1-102536-7
40	50.8	1-102540-8	1-102541-8	1-102536-8
42	53.3	1-102540-9	1-102541-9	1-102536-9
44	55.9	2-102540-0	2-102541-0	2-102536-0
50	63.5	2-102540-3	2-102541-3	2-102536-3
54	68.6	2-102540-5	2-102541-5	2-102536-5
60	76.2	2-102540-8	2-102541-8	2-102536-8
64	81.3	3-102540-0	3-102541-0	3-102536-0
70	88.9	3-102540-3	3-102541-3	3-102536-3
72	91.4	3-102540-4	3-102541-4	3-102536-4

Board-to-Board Connector AMPMODU Interconnection System, Shielded MT Post Header Assemblies For PC Board Mount/Double Row, 2.54mm Centerlines

**Header Assembly
with Shields (Shell)
Right Angle
0.64mm
Square Post**

**Mate with Shielded
MT Receptacle
Connector**

Part Numbers:
102393, 102398, 102448

Material and Finish:

Housing—Frame retardant
thermoplastic, black
Post—Phosphor Bronze,
(1) 0.8 μ m gold over 1.3 μ m
nickel underplated
(2) Duplex plated 0.81 μ m
gold on mating area, tin-
lead on solder leg area,
with entire contact under-
plated nickel
Shield—Pretin Phosphor
Bronze

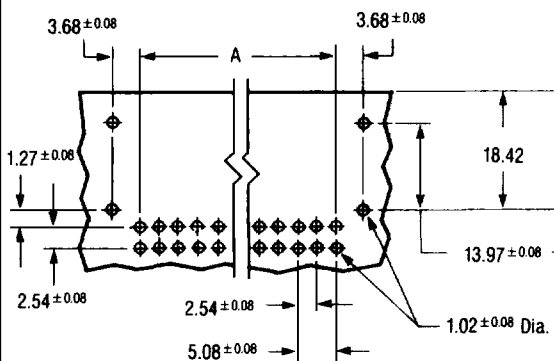
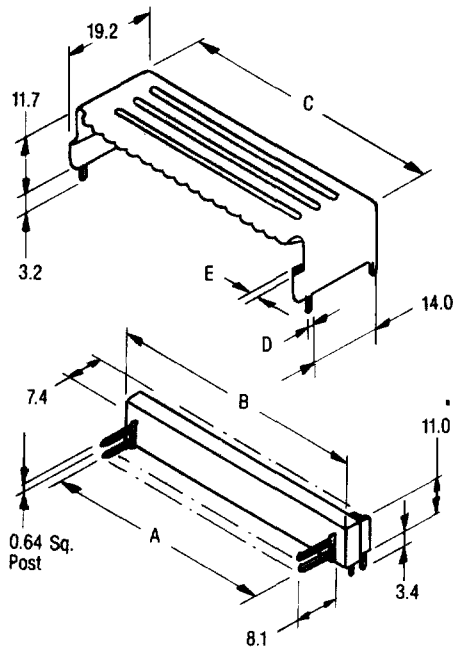


Fig. 1

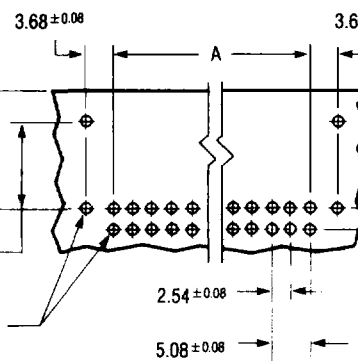


Fig. 2

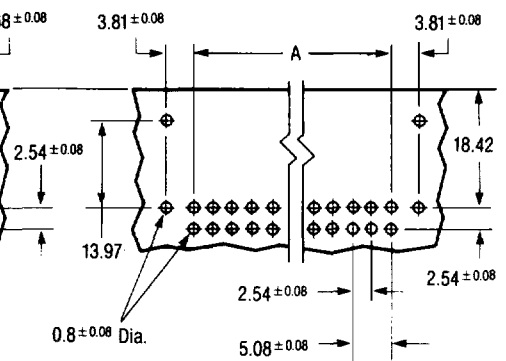


Fig. 3

PC Board Layout

No. of Position	Dimensions					Fig.	Kit Part No.		Dimensions					Kit Part No.
	A	B	C	D	E		Plating Code ⁽¹⁾		D	E	Fig.	Plating Code ⁽²⁾		
6	5.08	10.9	13.0	0.8	1.8	1	102989-1		0.5	1.9	3	173248-4		
8	7.62	13.5	15.5	0.8	1.8	1	102989-2		0.5	1.9	3	173248-5		
10	10.16	16.0	18.0	0.8	1.8	1	102893-5		0.5	1.9	3	173248-6		
16	17.78	23.6	25.6	0.8	1.8	2	102893-6		0.5	1.9	3	173248-7		
18	20.32	26.2	28.2	0.8	1.8	2	102893-1		0.5	1.9	3	173248-8		
20	22.86	28.7	30.7	0.8	1.8	2	102893-2		0.5	1.9	3	173248-9		
26	30.48	36.3	38.4	0.8	1.8	2	102893-7		—	—	—	—		
40	48.26	54.1	56.1	0.8	1.8	2	102893-3		—	—	—	—		
50	60.96	66.8	68.8	0.8	1.8	2	102893-4		—	—	—	—		
60	73.66	79.5	81.5	0.8	1.8	2	102893-8		—	—	—	—		

Board-to-Board Connector

AMPMODU Interconnection System, Shielded MT Receptacle Connectors For Wire Application/Double Row, 2.54mm Centerlines

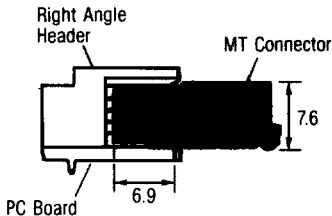
**Housing Assembly
with Standard
Pressure Contacts
Preloaded**

**Mate with Shielded
MT Post Header**

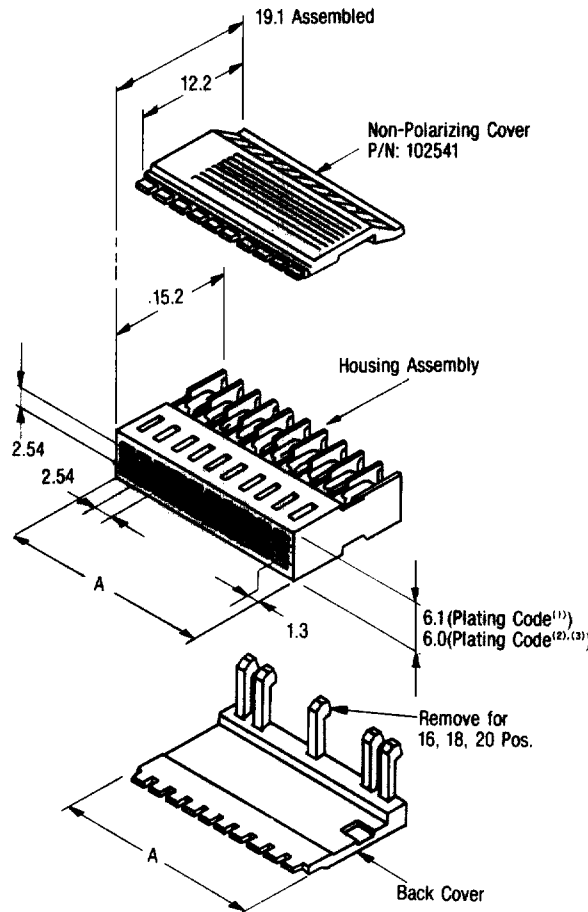
**Part Numbers
102989, 173248**

Material and Finish:

- Housing and Cover—
Thermoplastic, black
Post—Phosphor Bronze,
(1) 0.8μm gold on mating
area, 2.5-5.1μm bright
tin-lead on termination
area, with entire contact
underplated 0.8μm nickel
(2) 0.8μm gold on mating
area, tin-lead on ter-
mination area, with entire
contact underplated 1.3
μm nickel
(3) 0.1μm gold on mating
area, tin-lead on ter-
mination area, with entire
contact underplated 1.3
μm nickel



Typical Mating of Assembly



Keying Plug



Part No.: 86286-1
(Plugs into receptacle contact)



Part No.: 87077-2
(Plugs into housing)

Housing Assembly Part No.

No. of Pos.	Dim. A	For 30-26AWG (0.05-0.15mm ²)			For 26-22AWG (0.12-0.3mm ²)			For 22-20AWG (0.3-0.6mm ²)	Non- Polarizing Cover P/N	Back Cover Part No.
		Contact Plating			Contact Plating			Contact Plating		
		Code ⁽¹⁾	Code ⁽²⁾	Code ⁽³⁾	Code ⁽¹⁾	Code ⁽²⁾	Code ⁽³⁾	Code ⁽¹⁾		
6	7.6	102393-1	—	—	102398-1	—	—	102448-1	102541-1	102536-1
	7.7	—	173247-2	2-173247-2	—	—	2-173246-2	—		
8	10.2	102393-2	—	—	102398-2	—	—	102448-2	102541-2	102536-2
10	12.7	102393-3	173247-4	2-173247-4	102398-3	173246-4	2-173246-4	102448-3	102541-3	102536-3
16	20.3	102393-6	—	—	102398-6	—	—	102448-6	102541-6	102823-7
	20.4	—	173247-7	2-173247-7	—	173246-7	2-173246-7	—		
18	22.9	102393-7	173247-8	2-173247-8	102398-7	—	2-173246-8	102448-7	102541-7	102823-1
20	25.4	102393-8	173247-9	2-173247-9	102398-8	173246-9	2-173246-9	102448-8	102541-8	102823-4
26	33.0	1-102393-1	—	—	1-102398-1	—	—	1-102448-1	1-102541-1	1-102823-0
40	50.8	1-102393-8	—	—	1-102398-8	—	—	1-102448-8	1-102541-8	102823-2
50	63.5	2-102393-3	—	—	2-102398-3	—	—	2-102448-3	2-102541-3	102823-3
60	76.2	2-102393-8	—	—	2-102398-8	—	—	2-102448-8	2-102541-8	2-102823-5
64	81.3	3-102393-0	—	—	3-102398-0	—	—	—	3-102541-0	2-102823-7

Note: Extraction Tool Part No. 91052-1

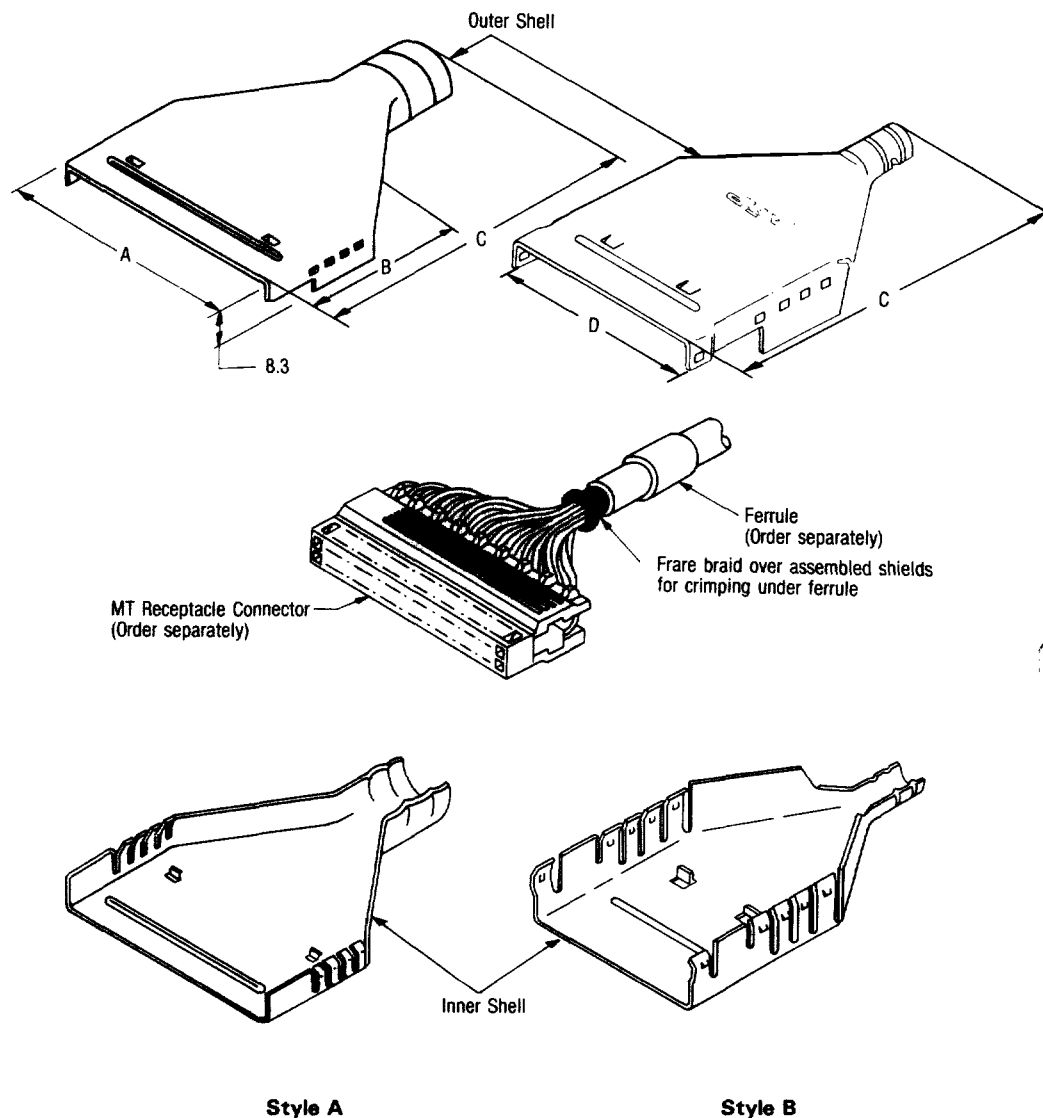
Board-to-Board Connector AMPMODU Interconnection System, Shielded MT, Shielding Kit For Wire Application

**Straight Exit
(180° Cable Exit)**

**Mate with MT
Receptacle Connector**

Part Numbers
102393, 173247, 102398,
173246, 102448

Material and Finish:
Pre-tin Brass



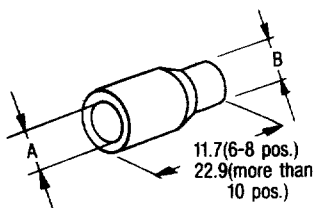
Applicable No. of Position	Dimensions				Shielding Kit Part No.	
	A	B	C	D	Style A	Style B
6	10.4	20.8	32.2	11.3	103125-8	173230-1
8	13.0	20.8	42.4	13.8	103125-4	173230-2
10	15.5	20.8	42.4	16.4	103125-2	173230-3
16	23.1	24.1	48.9	24.0	103125-5	173230-4
18	25.7	24.1	48.9	26.5	103125-1	173230-5
20	28.2	24.1	48.9	29.1	103125-6	173230-6
26	35.8	24.1	48.9	—	103125-9	—
40	53.6	24.1	62.7	—	103125-7	—
50	66.3	24.1	62.7	—	103125-3	—
60	79.0	24.1	62.7	—	1-103125-0	—

Note: Right angle shielding kits are available.

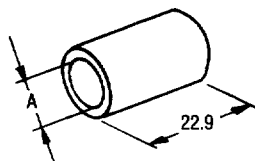
Board-to-Board Connector AMPMODU Interconnection System, Shielded MT For Wire Application/Crimping Ferrule and Crimping Dies

Crimping Ferrule for Shielding Kit

Material and Finish:
Copper, bright tin plated



Style I



Style II

AMP-O-LECTRIC* Semi-Automatic Terminating Machine



Body: 565435-5
Ferrule Applicator: 812407-1
(Instruction Sheet No. AI-8083)



CERTI-CRIMP* Hand Tool
Part No.: 91410-1
Die to be purchased separately.
(Instruction Sheet No. 6837)

Applicable Shielding Kits			Ferrule			Die Assembly Part No. for AMP-O-LECTRIC	Die Part No. for CERTI-CRIMP Hand Tool		
No. of Pos.	Straight Type	Right Angle Type	Cable O.D. (Max./Min.)	Style	Dimensions A B	Part No.	For Outer Jacket (Note¹)	For Braid (Note¹)	Spacer (Note¹)
6	103125-8	—	4.4- 5.0	I	6.7 5.0	1-102903-8	812665-2	1-527116-9	
	173230-1	—	5.1- 6.4	I	6.7 6.2	102985-3 or 173212-9	812665-1	1-527116-8	527116-4 527116-9
					6.8 6.2				
8	103125-4	—	4.8- 6.1	I	10.8 6.4	1-102903-5 or 173212-2	812665-6	1-527116-7	
10	103125-2	103126-5	6.4- 7.6	I	10.8 7.6	102903-9 or 173212-3	812665-5	1-527116-6	
	173230-3	—							
16	103125-5	—				102903-3 or 173212-4	812665-4	1-527116-5	527116-3 —
18	103125-1	103126-1	7.9- 9.1	I	10.8 9.3				
	173230-5	—							
20	103125-6	103126-2	9.4-10.7	II	10.8 —	102789-3	812665-3	1-527116-4	
	173230-6	—							
26	103125-9	103126-6	8.1- 9.4	I	11.7 9.3	2-102903-4	812665-9	1-527116-3	
	103844-2	103845-2	9.7-10.7	I	11.7 10.8	2-102903-1	812665-8	1-527116-2	527116-2 —
40	103125-7	103126-3	10.9-11.7	II	11.7 —	102789-6	812665-7	1-527116-1	
	103844-3	103845-3							
50	103125-3	103126-4	9.7-10.7	I	13.3 10.8	3-102903-0	1-812665-5	1-527116-2	
			10.9-11.7	I	13.3 11.8	2-102903-7	1-812665-4	1-527116-1	527116-1 —
	103844-4	103845-4	11.9-13.2	II	13.3 —	102789-9	1-812665-3	1-527116-0	
60	1-103125-0	103126-7	11.9-13.2	I	15.2 13.3	3-102903-6	1-812665-8		
			12.7-13.8	I	15.2 14.0	3-102903-3	1-812665-7		
	103844-5	103845-5	14.0-15.2	II	15.2 —	1-102789-2	1-812665-6		

Note: Crimping dies for jacket and braid each to be purchased separately. Spacer required for 6-position connector only and to be purchased separately.

Board-to-Board Connectors AMPMODU Interconnection System, Shielded MT Application Tooling for MT Receptacle Connectors

Pistol Grip Manual and Air Powered MT Hand Tools

These tools are self-indexing and terminate one wire per cycle. The modular head can be rotated to adjust to the required work position. The manual tool is designed for prototype or low volume production, while the air operated version has excellent rates for moderate volume production. An air actuated bench mount tool is available with a foot switch. This capability frees the operator's hands for optimum positioning permitting termination of 1000 wires per hour typically.

Part Numbers:

Manual Pistol Grip

Handle - 58074-1

Air-Powered Pistol Grip

Handle - 58075-1

Bench Mount Power Assembly -

58338-1

Modular Head (for tools above) -

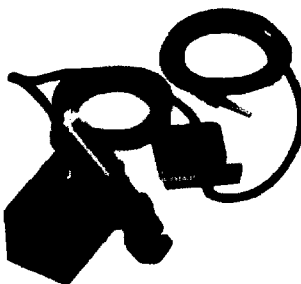
58062-1



Manual Tool



Air Operated
Tool



Bench Mount
Power Assembly

Manually Operated Bench Arbor Tool

This tool is available for use with jacketed, ribbon or discrete wire. One side of a double row connector may be terminated in a single actuation after the wires have been placed in the proper comb position (up to 25 terminations per actuation; connectors may be stacked end-to-end). The cable jacket can be in close proximity to the connector and excess wire length is sheared during termination.

Part Numbers:

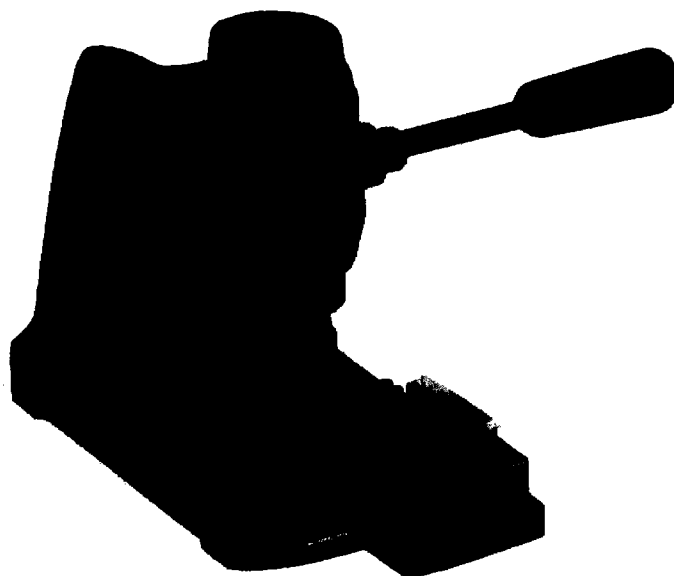
Manual Arbor Tool

Frame - 91085-2

Applicator - 91411-2

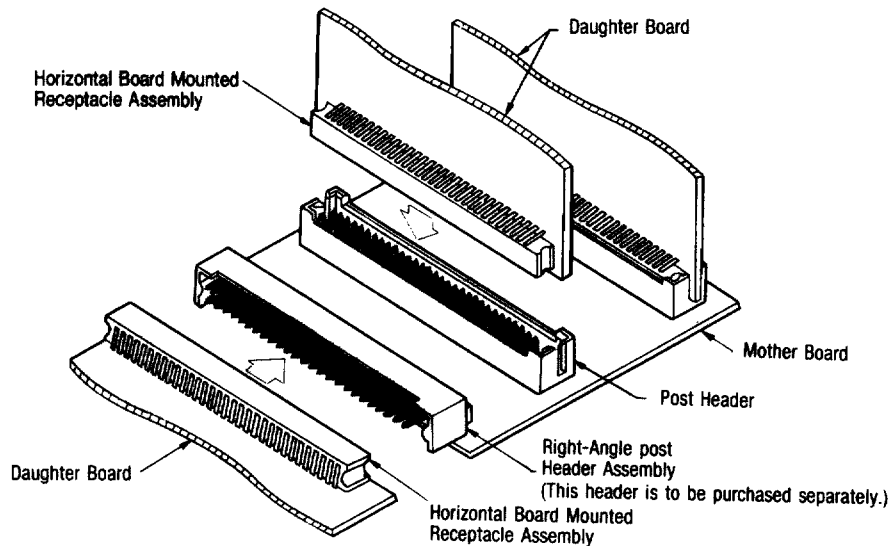
Discrete Wire requires

wire comb - 527085-1



Board-to-Board Connector AMPMODU Two-Piece Interconnection System—Shrouded For PC Board Mount/Double Row, 2.54mm Centerlines

Typical Assembly



ACTION PIN and Solder 0.64×0.64mm Square Straight Post (with Pin Protection and Guide Pins)

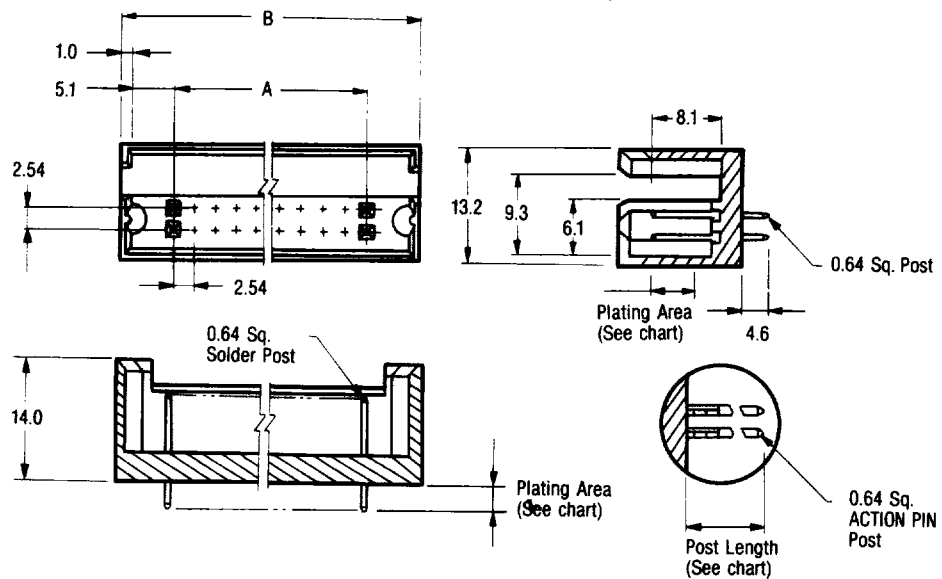
Material and Finish:

Housing—Glass-filled Nylon
Contact—Phosphor Bronze,

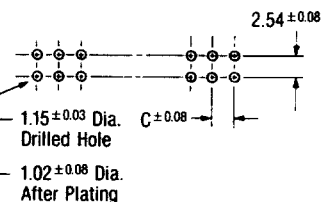
(1) 0.4μm gold on mating area, 2.5-5.1μm bright tin-lead on solder leg area, with entire contact under-plated 1.3μm nickel

(2) gold* on mating area, 1μm non bright tin-lead on solder leg area, with entire contact under-plated 1.3μm nickel

(3) 0.8μm gold on mating area, 2.5-5.1μm bright tin-lead on solder leg area, with entire contact under-plated 1.3μm nickel



Replacement ACTION PIN Post For 6.4mm Post Length
Part No.: 102824-9 Code⁽¹⁾
1-102824-0 Code⁽³⁾
For 12.2mm Post Length
Part No.: 102824-6 Code⁽¹⁾
102824-2 Code⁽³⁾



PC Board Layout

C—Post centerline to be 2.54mm;
±0.08 tolerances not to
accumulate within one connector
pattern.

Straight Post Header Assembly Part No.							
No. of Pos.	Dimensions		Solder Post Length=4.6mm			Post Length	With ACTION PIN Post
	A	B	Contact Plating (Sel. Gold)				Contact Plating (Sel. Gold)
			Code ⁽¹⁾	Code ⁽²⁾	Code ⁽³⁾		Code ⁽³⁾
24	27.94	40.1	102567-2	1-173282-1*	102692-2	6.4	102690-2
				173282-1*		12.2	102691-2
50	60.96	73.2	102567-6	1-173282-2*	102692-4	6.4	102690-4
				173282-6*		12.2	102691-4
70	86.36	98.6	1-102567-0	1-173282-3*	1-102692-4	6.4	1-102690-7
				2-173282-3*		12.2	1-102691-6
80	99.06	111.3	102567-8	1-173282-4*	102692-6	6.4	102690-6
				2-173282-4*		12.2	102691-6
100	124.46	136.7	102567-9	1-173282-5*	102692-8	6.4	102690-8
				2-173282-5*		12.2	102691-8
120	149.86	162.1	102567-7	1-173282-6*	102692-9	6.4	102690-9
				173282-5*		12.2	102691-8
				2-173282-6*			

Note: 1. ACTION PIN Header accommodates pc boards of 2.4mm or more in thickness.
Header for 1.6mm thick board also available. Contact the Sales Department.
2. Header for grounding post also available. Contact the Sales Department.
3. Semi-Automatic pc board insertion machine SM-10, 20 and SM-3 are used for application tooling for ACTION PIN Header.

Board-to-Board Connector AMPMODU Two-Piece Connector Receptacle Assembly — Shrouded, For PC Board Mount/Double Row, 2.54mm Centerlines

Horizontal Mount (with Guide Pin Slots and Standoff)

Material and Finish:

Housing — Polyphenylene
sulphide

Receptacle Contact —
Phosphor Bronze

- (1) 0.4 μ m gold on mating
area, 1.3-2.5 μ m bright
tin-lead on solder leg area,
with entire contact under-
plated 1.3 μ m nickel
- (2) gold* on mating
area, 1 μ m non
bright tin-lead on solder
leg area, with entire
contact underplated 1.3
 μ m nickel
- (3) 0.8 μ m gold on mating
area, 1.3-2.5 μ m bright
tin-lead on solder leg area,
with entire contact under-
plated 1.3 μ m nickel

Replacement ACTION PIN Post

For 6.4mm Post Length

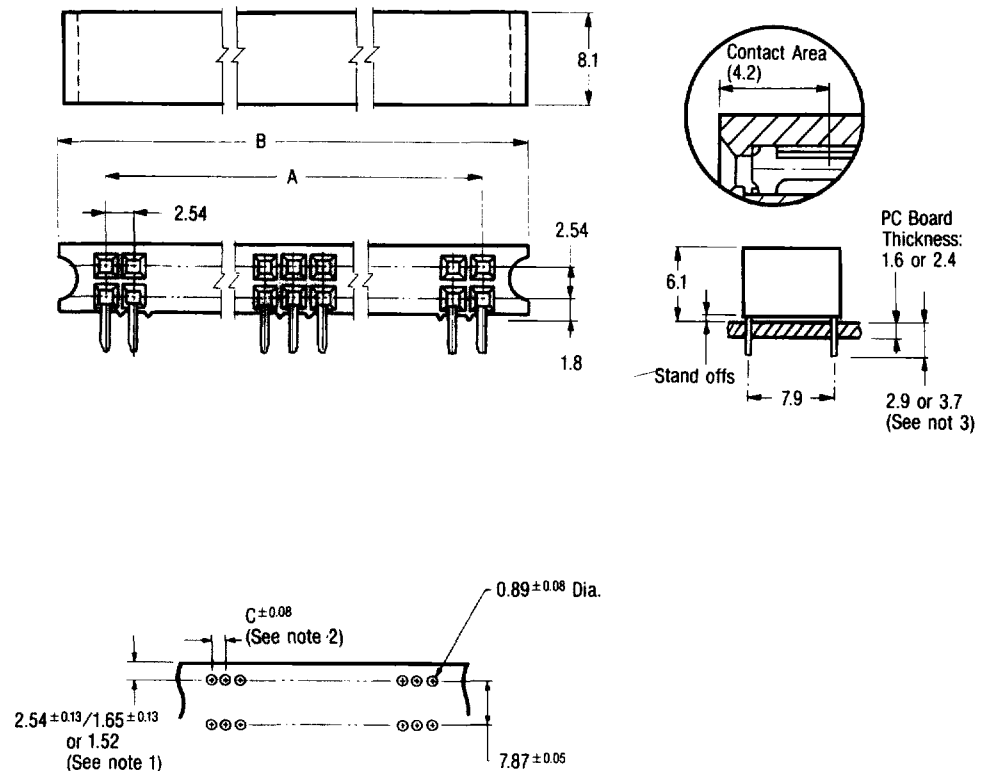
Part No.: 102824-9 Code⁽¹⁾

1-102824-0 Code⁽³⁾

For 12.2mm Post Length

Part No.: 102824-6 Code⁽¹⁾

102824-2 Code⁽³⁾



PC Board Layout

No. of Pos.	Dimensions		Receptacle Assembly Part No.				
	A	B	Solder Tail Length = 2.9mm			With ACTION PIN Post	
			Contact Plating (Sel. Gold)			Contact Plating (Sel. Gold)	
			Code ⁽¹⁾	Code ⁽²⁾	Code ⁽³⁾	Code ⁽¹⁾	Code ⁽²⁾
24	27.94 35.56	37.0	532955-4	1-173281-1(0.1 μ m)* 2-173281-1(0.38 μ m)* 173281-1(0.76 μ m)*	532956-4	532993-7	533009-4
50	60.96	70.1	532955-8	2-173281-2(0.38 μ m)*	1-532956-8	1-532993-0	533009-8
70	86.36	95.5	1-532955-0	1-173281-3(0.1 μ m)* 2-173281-3(0.38 μ m)* 173281-2(0.76 μ m)*	1-532956-0	1-532993-2	533009-0
80	99.06	118.2	1-532955-2	1-173281-4(0.1 μ m)* 2-173281-4(0.38 μ m)* 173281-3(0.76 μ m)*	1-532956-2	1-532993-3	533009-2
100	124.46	133.6	1-532955-6	2-173281-5(0.38 μ m)*	1-532956-6	1-532993-6	533009-6
120	149.86	159.0	1-532955-8	1-173281-6(0.1 μ m)* 2-173281-6(0.38 μ m)* 173281-5(0.76 μ m)*	1-532956-8	1-532993-8	533009-8

Note: 1. This dimension applies to housing Part Number 173281.

2. Holes are on 2.54mm centerline. Tolerance of ± 0.08 not to be accumulated within one connector pattern.

3. 2.9mm long solder tail is for use with 1.6mm thick pc board and 3.7mm long solder tail with 2.4mm thick pc board.