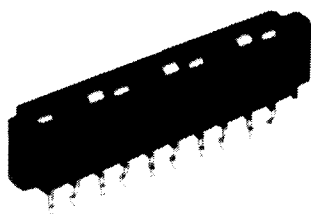


.100 [2.54] Centerline Trio-Mate Connectors



Material and Finish:

Housing—Black thermoplastic, glass reinforced, 94V-0 rated

Contacts—Phosphor bronze, tin plated

Related Product Data:

Cable with tin plated conductors with exposed ends

Technical Documents:

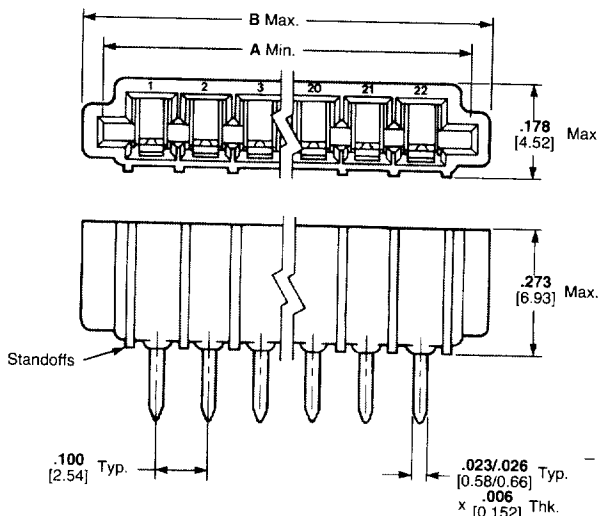
Product Specification

108-2038

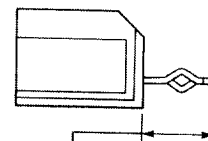
Application Specification

114-2052

Vertical Cable Entry for .062 [1.57] and .093 [2.36] Thick P.C. Boards

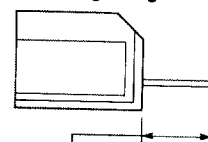


Z Bend Leg

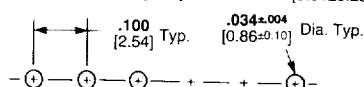


520315 .062 [1.57] PCB .140±.010 [3.56±0.254]
520316 .093 [2.36] PCB .160±.010 [4.06±0.254]

Straight Leg

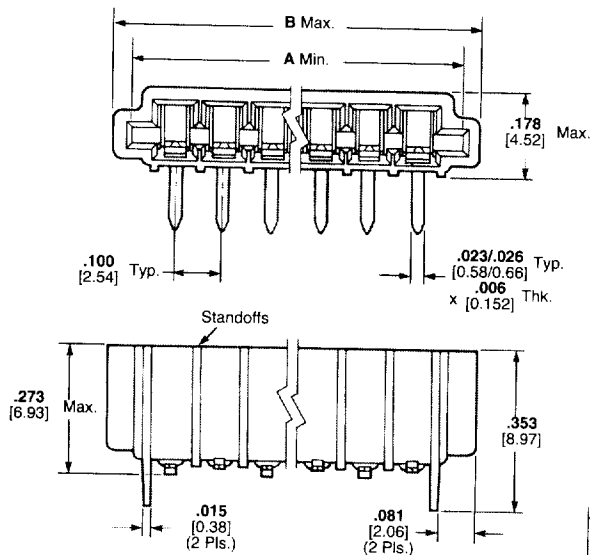


520415 .062 [1.57] PCB .110±.010 [2.79±0.254]
520355 .093 [2.36] PCB .150±.010 [3.81±0.254]

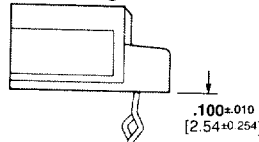


Recommended Mounting Hole Pattern

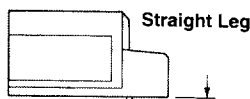
Horizontal Cable Entry for .062 [1.57] Thick P.C. Boards



Z Bend Leg

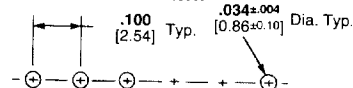


520314 .062 [1.57] PCB



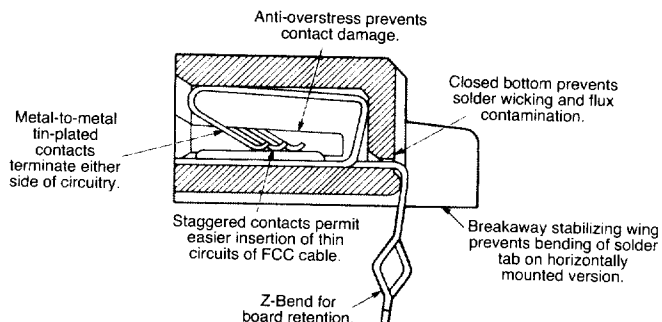
520353 .062 [1.57] PCB .100±.010 [2.54±0.254]
176982 .062 [1.57] PCB .120±.005 [3.05±.127]
-.004 -.102

Recommended Mounting Hole Pattern



Product Facts

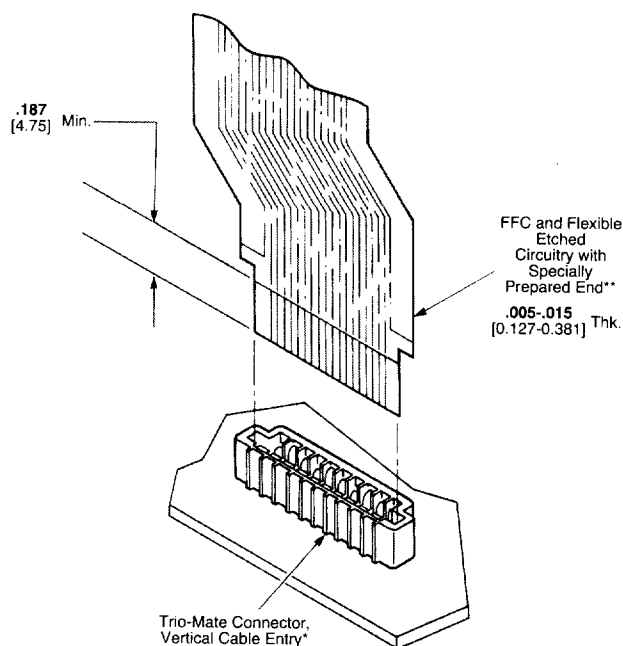
- Accepts FFC cable, flexible etched circuitry or membrane switch circuitry .005 to .015 [0.13 to 0.38] thick in contact area
- High extraction force
- Reusable 25 times with same cable thickness
- Certified by Canadian Standards Association, File No. LR 53951-10



For complete product information, order Catalog 82007

.100 [2.54] Centerline Trio-Mate Connectors

No. of Positions	Dimensions		Part Numbers								
			Vertical Cable Entry				Horizontal Cable Entry				
	A	B	For .062 [1.57] Thk. Pc Board		For .093 [2.36] Thk. Pc Board		For .062 [1.57] Thk. Pc Board				
			Str.	Z Bend	Str.	Z Bend	Str.	Str.	Z Bend		
2	.306	7.77	.383	9.73	520415-2	520315-2	520355-2	520316-2	176982-2	520353-2	520314-2
3	.406	10.31	.483	12.27	520415-3	520315-3	520355-3	520316-3	176982-3	520353-3	520314-3
4	.506	12.85	.583	14.81	520415-4	520315-4	520355-4	520316-4	176982-4	520353-4	520314-4
5	.606	15.39	.683	17.35	520415-5	520315-5	520355-5	520316-5	176982-5	520353-5	520314-5
6	.706	17.93	.783	19.89	520415-6	520315-6	520355-6	520316-6	176982-6	520353-6	520314-6
7	.806	20.47	.883	22.43	520415-7	520315-7	520355-7	520316-7	176982-7	520353-7	520314-7
8	.906	23.01	.983	24.97	520415-8	520315-8	520355-8	520316-8	176982-8	520353-8	520314-8
9	1.006	25.55	1.083	27.51	520415-9	520315-9	520355-9	520316-9	176982-9	520353-9	520314-9
10	1.106	28.09	1.183	30.5	1-520415-0	1-520315-0	1-520355-0	1-520316-0	1-176982-0	1-520353-0	1-520314-0
11	1.206	30.63	1.283	32.59	1-520415-1	1-520315-1	1-520355-1	1-520316-1	1-176982-1	1-520353-1	1-520314-1
12	1.306	33.17	1.383	35.13	1-520415-2	1-520315-2	1-520355-2	1-520316-2	1-176982-2	1-520353-2	1-520314-2
13	1.406	35.71	1.483	37.67	1-520415-3	1-520315-3	1-520355-3	1-520316-3	1-176982-3	1-520353-3	1-520314-3
14	1.506	38.25	1.583	40.21	1-520415-4	1-520315-4	1-520355-4	1-520316-4	1-176982-4	1-520353-4	1-520314-4
15	1.606	40.79	1.683	42.75	1-520415-5	1-520315-5	1-520355-5	1-520316-5	1-176982-5	1-520353-5	1-520314-5
16	1.706	43.33	1.783	45.29	1-520415-6	1-520315-6	1-520355-6	1-520316-6	1-176982-6	1-520353-6	1-520314-6
17	1.806	45.87	1.883	47.83	1-520415-7	1-520315-7	1-520355-7	1-520316-7	1-176982-7	1-520353-7	1-520314-7
18	1.906	48.41	1.983	50.37	1-520415-8	1-520315-8	1-520355-8	1-520316-8	1-176982-8	1-520353-8	1-520314-8
19	2.006	50.95	2.083	52.91	1-520415-9	1-520315-9	1-520355-9	1-520316-9	1-176982-9	1-520353-9	1-520314-9
20	2.106	53.49	2.183	55.45	2-520415-0	2-520315-0	2-520355-0	2-520316-0	2-176982-0	2-520353-0	2-520314-0
21	2.206	56.03	2.283	57.99	2-520415-1	2-520315-1	2-520355-1	2-520316-1	2-176982-1	2-520353-1	2-520314-1
22	2.306	58.57	2.383	60.53	2-520415-2	2-520315-2	2-520355-2	2-520316-2	2-176982-2	2-520353-2	2-520314-2

**Electrical Characteristics:****Dielectric Withstanding Voltage**—

1.4 KVAC, one minute hold (AMP Specification No. 109-29-1)

Insulation Resistance—

5000 megohms (min.), initial (AMP Specification No. 109-28-4)

Capacitance—1.0 pF (max.)

(AMP Specification No. 109-47, Condition C)

Current/Voltage—250 VAC @

1 ampere max.

Mechanical Characteristics:**Vibration**—10-55-10 Hz traversed in

one minute at .06 [1.52] total excursion (AMP Specification No. 109-21-1, Condition A)

Physical Shock—100 G.s sawtooth in

6 milliseconds (AMP Specification No. 109-26-9, Condition I)

Environmental Characteristics:**Thermal Shock**—25 cycles between

-55°C and +105°C for tin; between -55°C and +85°C for conductive ink (AMP Specification No. 109-22)

Temperature/Humidity Cycling—

10 cycles between +25°C and +65°C at 95% RH (AMP Specification No. 109-23, Method III, Condition B, less Step 7a)

Industrial Gas—96 hours of 200 ppb each of nitrogen dioxide, sulfur dioxide and hydrogen sulfide**Operating Temperature**—-55°C

to 105°C for tin plated circuitry -55°C to 85°C for conductive ink

*Vertical cable entry configuration shown for reference only. Termination of either configuration is completed by simply inserting flexible etched circuitry into housing (prepared end on either side).

**Consult Tyco Electronics for additional information.

Note: Special preparation of flexible etched circuitry is required, refer to AMP Application Specification No. 114-2062.

Typical Flexible Etched Circuitry-to-Board Application

For complete product information, order Catalog 82007