MILITARY SPECIFICATION SHEET

CONNECTORS, PRINTED CIRCUIT SUBASSEMBLY AND ACCESSORIES, PIN RIGHT-ANGLE FOR MULTILAYERED PRINTED WIRING BOARDS (.100 SPACING)

Ⓒ This specification inactive for new design after 1 October 1986

This specification is approved for use within the Department of the Air Force and is available for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the connector described herein shall consist of this specification and the latest issue of MIL-C-55302.

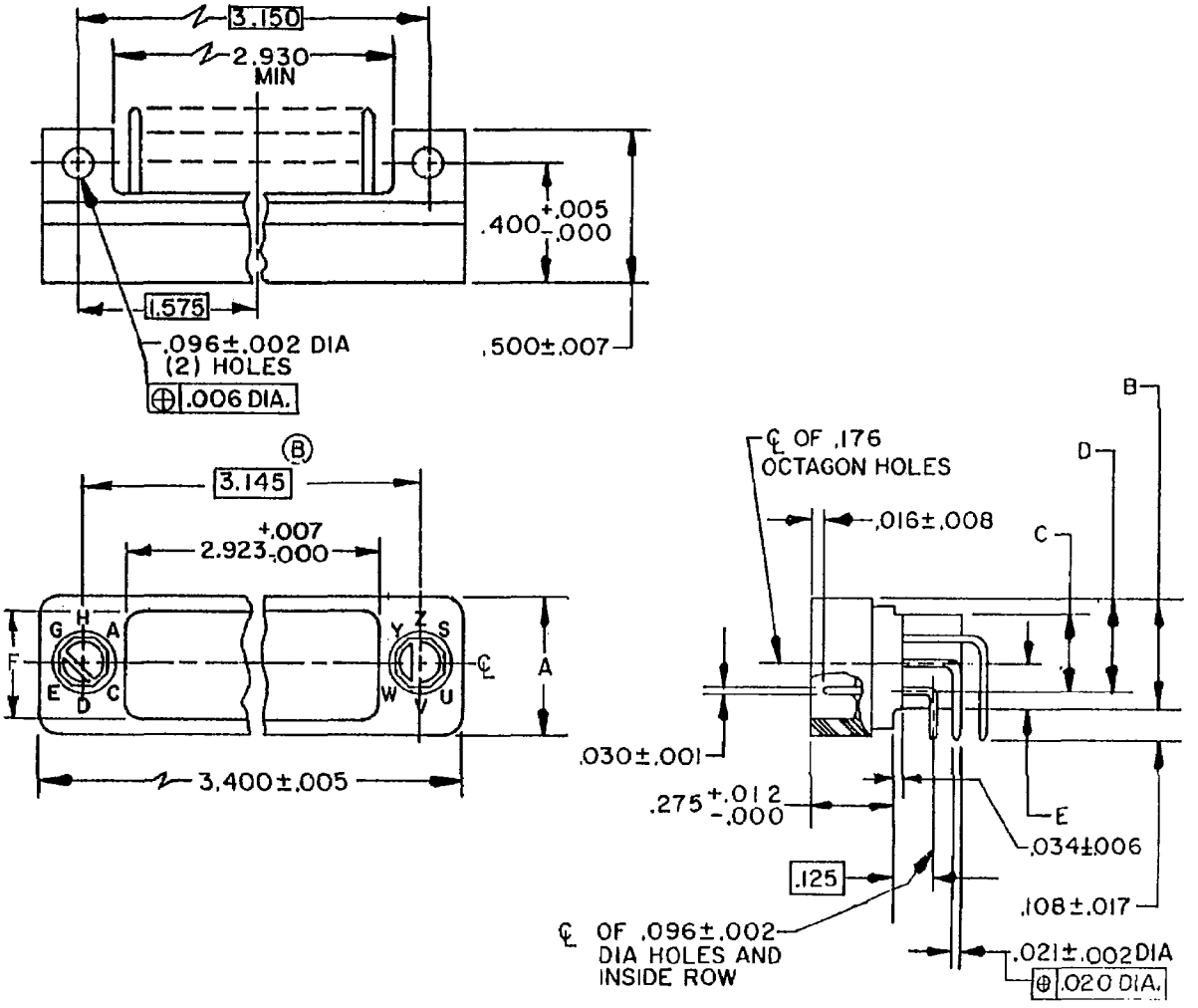

FIGURE 1. Connector, pin, right-angle, for multilayered printed wiring board .100 (2.54 mm) spacing.

Ⓒ denotes changes

Inches	mm	Inches	mm
.001	0.03	.034	0.86
.002	0.05	.096	2.44
.005	0.13	.108	2.74
.006	0.15	.125	3.18
.007	0.18	.275	6.99
.008	0.20	.400	10.16
.012	0.30	.500	12.70
.016	0.41	1.575	40.01
.017	0.43	2.923	74.24
.020	0.51	2.930	74.42
.021	0.52	3.145	79.88
.030	0.76	3.150	80.01
		3.400	86.36

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerance is ±.010 (.25 mm).
4. These connectors mate with connectors specified in MIL-C-55302/76 and are primarily for use with single-sided, double-sided, or multilayered printed wiring boards. When mated, connectors will allow .010 min. total diametrical float between mating dielectirc surfaces.
5. Mating connectors provide a total of 64 different polarization positions. Polarization components conforming to MIL-C-55302/78-03 are supplied uninstalled with the connector.
6. For dimensions A through F see table I.
7. All contacts are on .100 spacing between contacts and between contact rows, square grid, 29 contacts in a row.

FIGURE 1. Connector, pin, right-angle, for multilayered printed wiring board .100 (2.54 mm) spacing -Continued.

REQUIREMENTS:

Dimensions and configuration: See figure 1 and table I.

Material: In accordance with MIL-C-55302.

© Plating: The contact plating shall be gold in accordance with MIL-G-45024, type II, class 1, grade C over copper in accordance with MIL-C-14550, class 4.

Contact identification: Numerals shall be molded as follows, front face: End of contact rows, 1, 29, 30, 58 on -01 and 1, 29, 58, 87 on -02.

Mating and unmating: The maximum insertion force, in pounds, shall not exceed a value equal to 0.5 times the number of contacts, and the withdrawal force, in pounds, shall be a minimum of 0.08 times the number of contacts, and shall not exceed the measured insertion force.

Contact resistance: The average resistance of all contact pairs measured shall not exceed 0.010 ohm, and no individual contact pair shall have a resistance exceeding 0.020 ohm.

Dielectric withstanding voltage:

Sea level: 1,300 V rms, 60 Hz, ac.

High altitude: 325 V rms, 60 Hz, ac.

Pin size: 22.

Mating connectors: See MIL-C-55302/76.

Contact current rating: 3 amperes maximum.

Part number: M55302/77-(dash number from table I).

TABLE I. Dash number and dimensions.

Dash number	No. of contacts	Dimensions 1/						Weight lbs. max
		A	B	C	D	E	F	
		±.005 (.13)	+.004(.10) -.005(.13)	+.005(.13) -.000	+.004(.10) -.005(.13)	±.004 (.10)	+.000 -.005 (.13)	
01	58	.355 (9.02)	.266 (6.76)	.153 (3.89)	.246 (6.25)	.092 (2.34)	.250 (6.60)	.020
02	87	.455 (11.56)	.366 (9.30)	.253 (6.43)	.346 (8.79)	.142 (3.61)	.356 (9.04)	.028

1/ Metric equivalent are given for general information only. Millimeters are in parentheses.

Custodian:
Air Force - 17

Review activities:
Air Force - 11, 17, 85
DLA - ES

User activity:
Air Force - 19

Preparing activity:
Air Force - 17

Agent:
DLA - ES

(Project 5935-F294-11)