

DETAIL SPECIFICATION SHEET

CONNECTORS, PRINTED CIRCUIT SUBASSEMBLY AND ACCESSORIES:
PLUG, PIN CONTACTS, DECADE INCREMENTS 10 THRU 70 CONTACT POSITIONS AND
INTERMEDIATE POSITIONS OF 14, 24, 44, 54 AND 26, 36, 56, AND 66 FOR
PRINTED WIRING BOARDS (.100 SPACING)

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

The requirements for acquiring the product described herein shall consist of this specification sheet and MIL-DTL-55302.

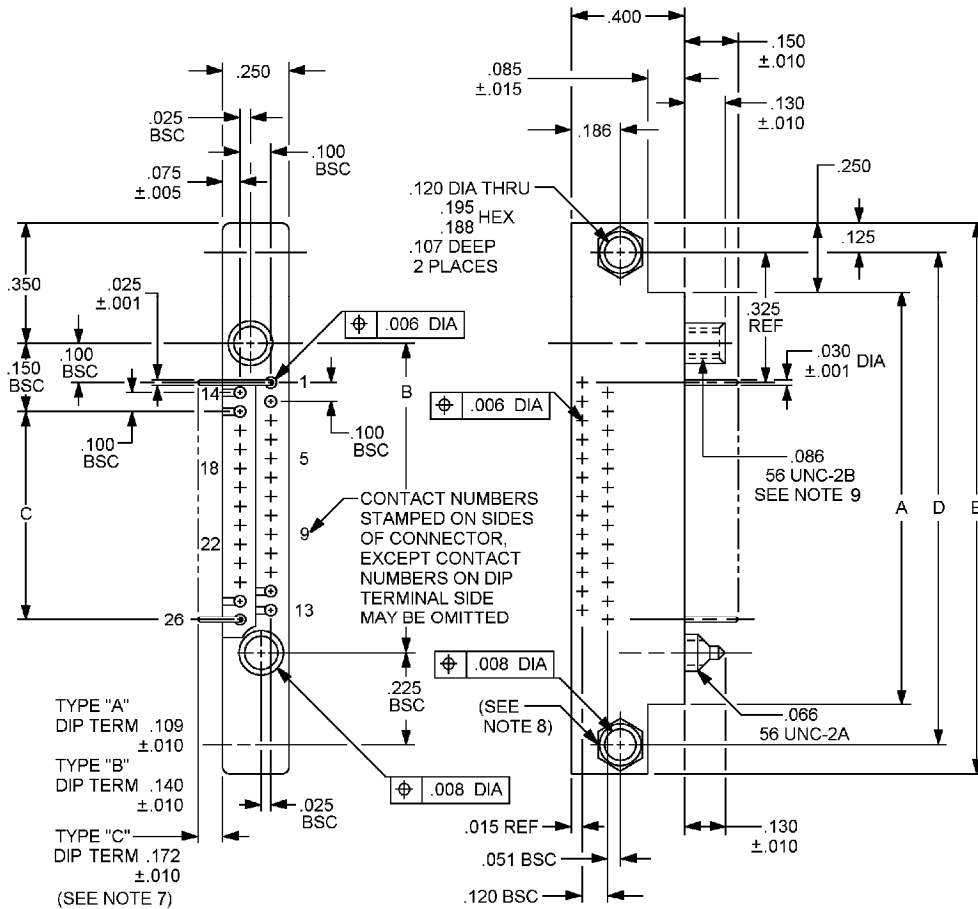
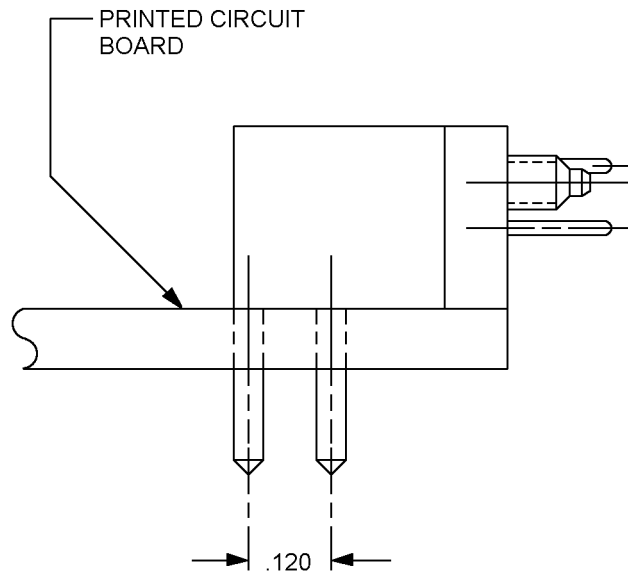


FIGURE 1. Connectors, plug, .100 (2.54 mm) spacing.

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Inches	mm	Inches	mm	Inches	mm
.001	0.03	.066	1.68	.130	3.30
.005	0.13	.075	1.91	.140	3.56
.006	0.15	.078	1.98	.150	3.81
.008	0.20	.085	2.16	.172	4.37
.010	0.25	.086	2.18	.186	4.72
.015	0.38	.094	2.39	.190	4.83
.017	0.43	.100	2.54	.195	4.95
.025	0.64	.107	2.72	.225	5.72
.030	0.76	.109	2.77	.250	6.35
.051	1.30	.120	3.05	.325	8.26
.058	1.47	.125	3.18	.350	8.89
				.400	10.16

FIGURE 1. Connectors, plug, .100 (2.54 mm) spacing - Continued.

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Number of contacts	Dimensions				
	A ±.010	BSC B	REF C	BSC D	E ±.010
10	.850 (21.59)	.650 (16.51)	.400 (10.16)	1.100 (27.94)	1.350 (34.29)
14	1.050 (26.67)	.850 (21.59)	.600 (15.24)	1.300 (33.02)	1.550 (39.37)
20	1.350 (34.29)	1.150 (29.21)	.900 (22.86)	1.600 (40.64)	1.850 (46.99)
24	1.550 (39.37)	1.350 (34.29)	1.100 (27.94)	1.800 (45.72)	2.050 (52.07)
26	1.650 (41.91)	1.450 (36.83)	1.200 (30.48)	1.900 (48.26)	2.150 (54.61)
30	1.850 (46.99)	1.650 (41.91)	1.400 (35.56)	2.100 (53.34)	2.350 (56.69)
36	2.150 (54.61)	1.950 (49.53)	1.700 (43.18)	2.400 (60.96)	2.650 (67.31)
40	2.350 (56.69)	2.150 (54.61)	1.900 (48.26)	2.600 (66.04)	2.850 (72.39)
44	2.550 (64.77)	2.350 (56.69)	2.100 (53.35)	2.800 (71.12)	3.050 (77.47)
50	2.850 (72.39)	2.650 (67.31)	2.400 (60.96)	3.100 (78.74)	3.350 (85.09)
54	3.050 (77.47)	2.850 (72.39)	2.600 (66.04)	3.300 (83.82)	3.550 (90.17)
56	3.150 (80.01)	2.950 (74.93)	2.700 (68.58)	3.400 (86.36)	3.650 (92.71)
60	3.350 (85.09)	3.150 (80.01)	2.900 (73.66)	3.600 (91.44)	3.850 (97.79)
66	3.650 (92.71)	3.450 (87.63)	3.200 (81.28)	3.900 (99.06)	4.150 (105.41)
70	3.850 (97.79)	3.650 (92.71)	3.400 (86.36)	4.100 (104.14)	4.350 (110.49)

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Unless otherwise specified, tolerances are ±.005 (0.13 mm).
4. These connectors mate with connectors specified in MIL-DTL-55302/62, MIL-DTL-55302/65, MIL-DTL-55302/66 and MIL-DTL-55302/58 using appropriate hardware.
5. Numbers indicating the first and last position in each row and every fourth contact position in between shall be marked on the side(s) of the connector. As an option to the above, numbers indicating every fourth cavity may be stamped on the side of the connector, with the exception that the number one contact shall be marked.
6. Termination layout on .020 (0.51 mm) modular grid.
7. Optional undercut .050 (1.27 mm) maximum, on PCB side for cleaning purposes.
8. Position of the hex orientation is optional. Hex shall not break through the side of the insulator.
9. Hole depth to female guide hardware is .282 min (7.16 mm). Full thread depth to female threaded hardware is .240 min (6.1 mm).

FIGURE 1. Connectors, plug, .100 (2.54 mm) spacing - Continued.

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Requirements:

Dimensions and configuration: See figure 1.

Material: Jackscrews and jack sockets shall be made of corrosion resisting stainless steel in accordance with ASTM A581/A581M or ASTM A582/ A582M passivated in accordance with SAE-AMS2700, type 2 or shall be corrosion resistant copper nickel alloy (61 ±2% nickel, 2.5% max. other, and the balance zinc and shall have a brinell hardness of 145 to 175.

Plating: The contact plating shall be in accordance with MIL-DTL-55302 or gold in accordance with ASTM B488 type II, code C, class 1.27, over nickel plating in accordance with SAE-AMS-QQ-N-290, class 2, 50 to 150 microinches in the engaging area and gold in accordance with ASTM B488 type II, code C, class 0.51, or type III, code A, 0.051 over nickel plating in accordance with SAE-AMS-QQ-N-290, class 2, 50 to 150 microinches in the termination.

Contact identification: See figure 1.

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

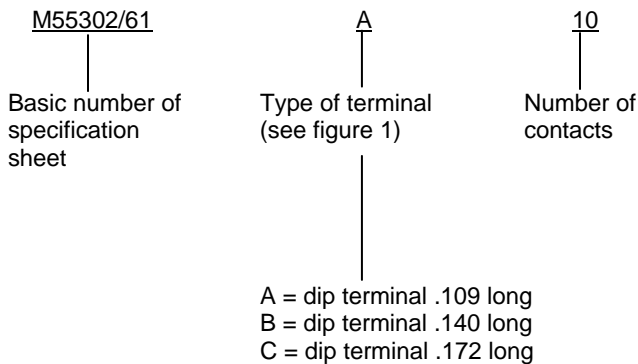
Dielectric withstanding voltage:

Sea level: 1,000 volts rms.

High altitude: 300 volts rms.

Current rating: 5.0 amperes maximum in accordance with contact.

Example of Part or Identifying Number (PIN):



Amendment notations. The margins of this specification are marked with vertical lines to indicate modifications generated by this amendment. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations.

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Referenced documents. In addition to MIL-DTL-55302, this document references the following:

MIL-DTL-55302/58	ASTM A581/A581M
MIL-DTL-55302/62	ASTM A582/A582M
MIL-DTL-55302/65	ASTM B488
MIL-DTL-55302/66	SAE-AMS2700
	SAE-AMS-QQ-N-290

CONCLUDING MATERIAL

Custodians:
Army - CR
Navy - EC
Air Force - 85
DLA - CC

Preparing activity:
DLA - CC

(Project 5935-2008-146)

Review activities:
Army - AR, AT, AV, CR4, MI
Navy - AS, MC, OS,
Air Force - 19, 99

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