

INCH-POUND

MIL-DTL-55302/19E
w/AMENDMENT 1
24 October 2013
SUPERSEDING
MIL-DTL-55302/19E
24 March 2004

DETAIL SPECIFICATION SHEET

CONNECTORS, PRINTED CIRCUIT SUBASSEMBLY AND ACCESSORIES:
PLUG, PIN CONTACTS RIGHT-ANGLE, 41 COMPOSITE CONTACT,
FOR PRINTED WIRING BOARDS (.150 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.

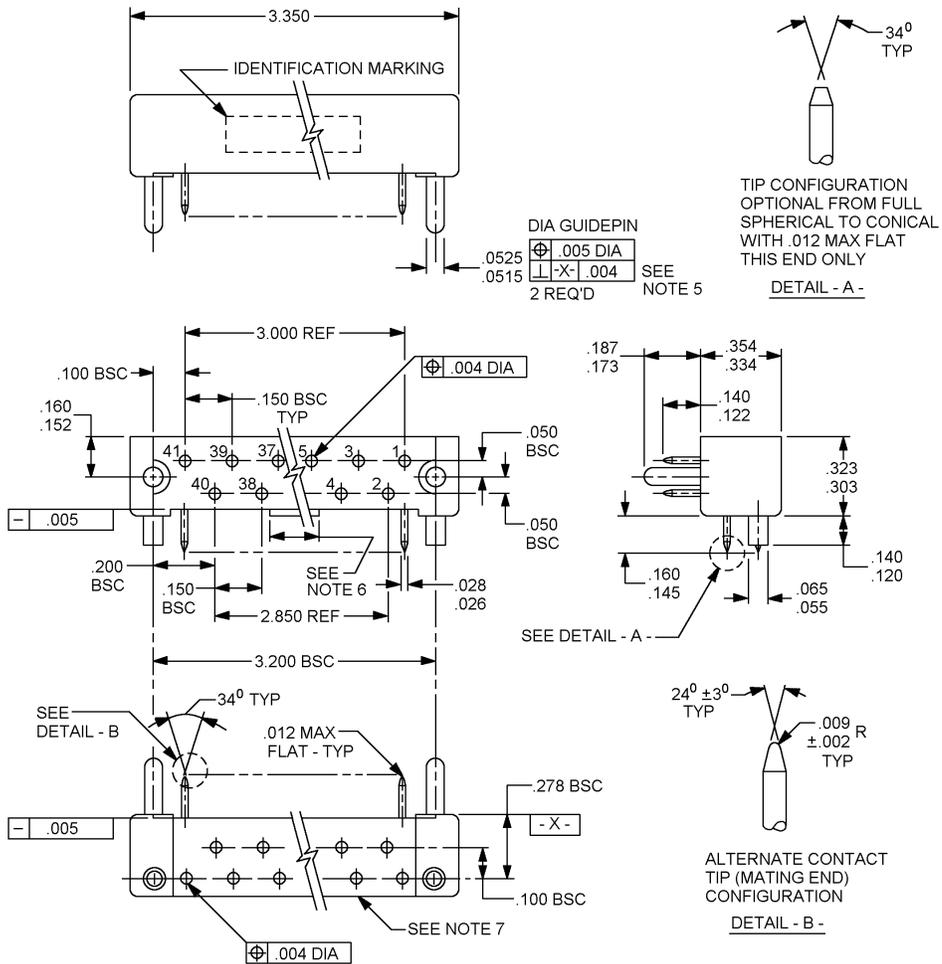
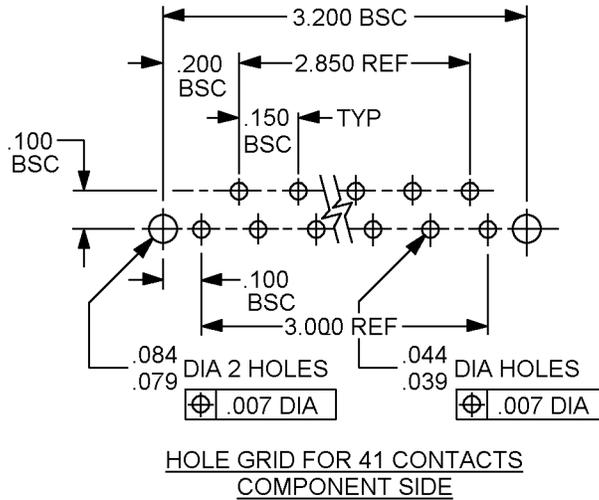


FIGURE 1. Connectors, plug (.100 spacing).

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Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
.002	0.05	.028	0.71	.065	1.65	.150	3.81	.303	7.70
.004	0.10	.039	0.99	.079	2.01	.152	3.86	.323	8.20
.005	0.13	.044	1.12	.084	2.13	.160	4.06	.334	8.48
.007	0.18	.050	1.27	.100	2.54	.173	4.39	.354	8.99
.009	0.23	.0515	1.308	.120	3.05	.187	4.75	2.850	72.39
.012	0.30	.0525	1.334	.122	3.10	.200	5.08	3.000	76.20
.026	0.66	.055	1.40	.140	3.56	.278	7.06	3.200	81.28
								3.350	85.09

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Unless otherwise specified, tolerances are ± 0.005 (0.13 mm).
4. These connectors mate with connectors specified in MIL-DTL-55302/20 and are primarily for use with single-sided, double-sided, or multilayered printed wiring board.
5. Positional tolerances of guide pins shall apply at datum plane X.
6. Pad(s) suitable for printed circuit boards support are optional. Dimensions and location(s) are optional.
7. The terminating side and the side opposite mating face of the plug may be open or solid construction.

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

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REQUIREMENTS:

Design and construction:

Dimensions and configuration: See figure 1.

Material:

Guide pins and guide bushing: Brass C21000, as specified in ASTM B134/B134M, or free cutting brass as specified in ASTM B16/B16M.

Plating:

Guide pins and guide bushing: Gold over copper, in accordance with MIL-DTL-45204, type II, grade C, class 1 or equivalent.

Contact:

Gold in accordance with MIL-DTL-45204, type II, grade C, class 1 or equivalent, over nickel plating in accordance with SAE-AMS-QQ-N-290, class 2, 50 to 150 microinches.

Contact identification: Shall be numerical and sequential in the pattern indicated.

Pin size: 23

Wire size: 22

Current rating: 5 amperes, maximum

Mating and unmating:

The maximum insertion force, in pounds, shall not exceed a value equal to .5 times the number of contacts, and the withdrawal force, in pounds, shall be a minimum of .11 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 .010 ohm, and no individual contact pair shall have a resistance exceeding .020 ohm.

Dielectric withstanding voltage:

Sea level: 1,000 volts rms, 60 cycles, ac.

High altitude: 500 volts rms, 60 cycles, ac.

Part or Identifying Number (PIN): M55302/19-01.

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.

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

MIL-DTL-55302/20
MIL-DTL-45204
ASTM B16/B16M
ASTM B134/B134M
SAE-AMS-QQ-N-290

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CONCLUDING MATERIAL

Custodians:

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

Preparing activity:
DLA - CC

(Project 5935-2013-174)

Review activities:

Army - AT, CR4, MI
Navy - AS, MC
Air Force - 19

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <https://assist.dla.mil/>.