

INCH-POUND

MIL-DTL-55302/22F  
w/AMENDMENT 1  
24 October 2013  
SUPERSEDING  
MIL-DTL-55302/F  
24 March 2004

DETAIL SPECIFICATION SHEET

CONNECTORS, PRINTED CIRCUIT SUBASSEMBLY AND ACCESSORIES:  
RECEPTACLE, SOCKET CONTACTS, STRAIGHT-THRU,  
FOR MULTILAYERED 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.

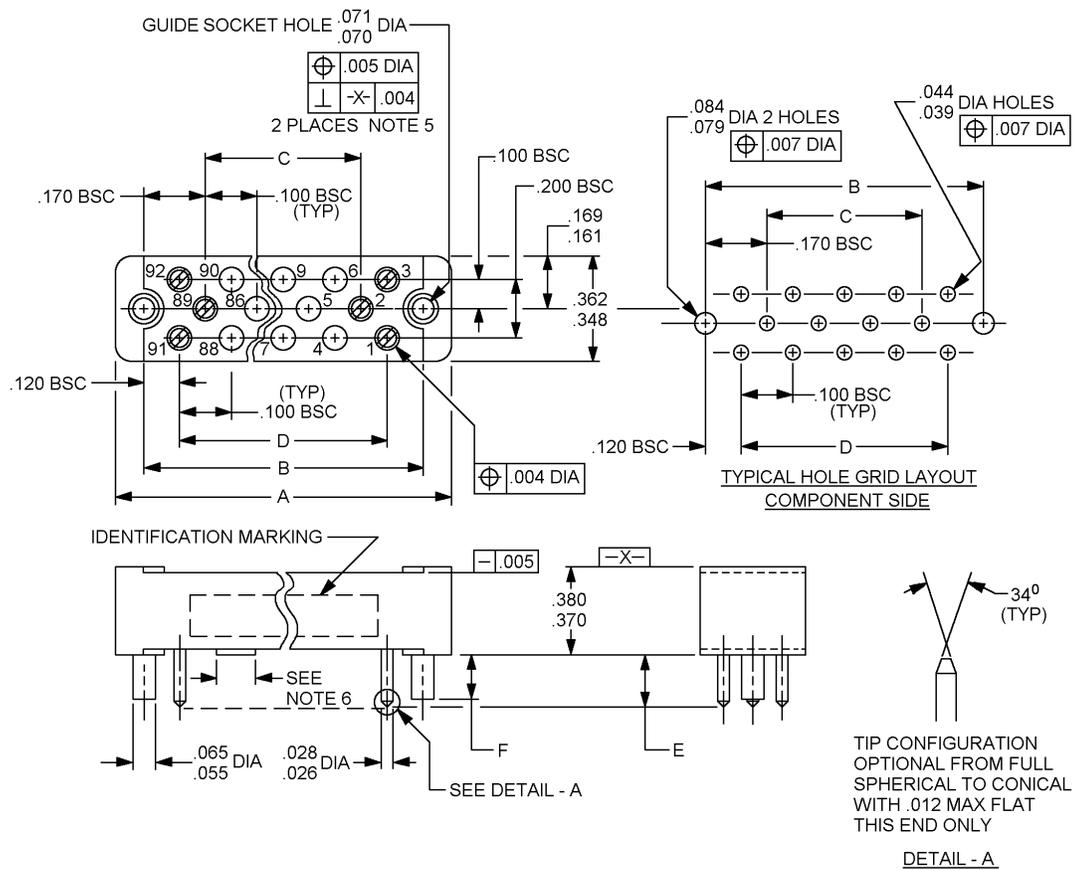


FIGURE 1. Connectors, receptacle (.100 spacing).

MIL-DTL-55302/22F  
w/AMENDMENT 1

Part or Identifying Number (PIN)	Number of contacts	A ±.010	B Basic	C Ref	D Ref	E ±.015	F ±.008
M55302/22-01	92	3.426	3.240	2.900	3.000	.390	.112
M55302/22-02	92	3.426	3.240	2.900	3.000	.158	.145
M55302/22-03	92	3.426	3.240	2.900	3.000	.1465	.154

Inches	mm	Inches	mm	Inches	mm
.004	0.10	.065	1.65	.169	4.29
.005	0.13	.070	1.78	.170	4.32
.007	0.18	.071	1.80	.200	5.08
.008	0.20	.079	2.01	.348	8.84
.010	0.25	.084	2.13	.362	9.19
.012	0.30	.100	2.54	.370	9.40
.015	0.38	.120	3.05	.380	9.65
.026	0.66	.112	2.84	.390	9.91
.028	0.71	.145	3.68	2.400	60.96
.039	0.99	.154	3.91	2.900	73.66
.044	1.12	.158	4.01	3.000	76.20
.055	1.40	.161	4.09	3.240	82.30
				3.426	87.02

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Unless otherwise specified, tolerances are ±.005 (0.13 mm) on three place decimals and . ±.2° on angles.
4. These connectors mate with connectors specified in MIL-DTL-55302/21 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.

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

MIL-DTL-55302/22F  
w/AMENDMENT 1

REQUIREMENTS:

Design and construction:

Dimensions and configuration: See figure 1.

Material:

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

Plating:

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

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.

Contact engagement and separation force:

The individual contact withdrawal force shall be .5-ounce minimum diameter test pin in accordance with SAE-AS31971-23X1.

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 Hz, ac.

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

PIN: M55302/22-(dash number from figure 1).

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-55302/21  
MIL-DTL-45204  
ASTM B16/B16M  
ASTM B134/B134M  
SAE-AMS-QQ-N-290

MIL-DTL-55302/22F  
w/AMENDMENT 1

CONCLUDING MATERIAL

Custodians:

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

Preparing activity:

DLA - CC

(Project 5935-2013-176)

Review activities:

Army - AR, AT, AV, CR4, MI  
Navy - AS, MC, OS, SH  
Air Force - 19, 99  
NSA - NS

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/>.