

INCH-POUND

MIL-DTL-55302/133C
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SUPERSEDING
MIL-C-55302/133B
1 MAY 1992

DETAIL SPECIFICATION SHEET

CONNECTORS, PLUG, ELECTRICAL, PRINTED CIRCUIT SUBASSEMBLY AND ACCESSORIES: RIGHT ANGLE, PIN CONTACTS, 32 OR 64 CONTACT POSITION 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.

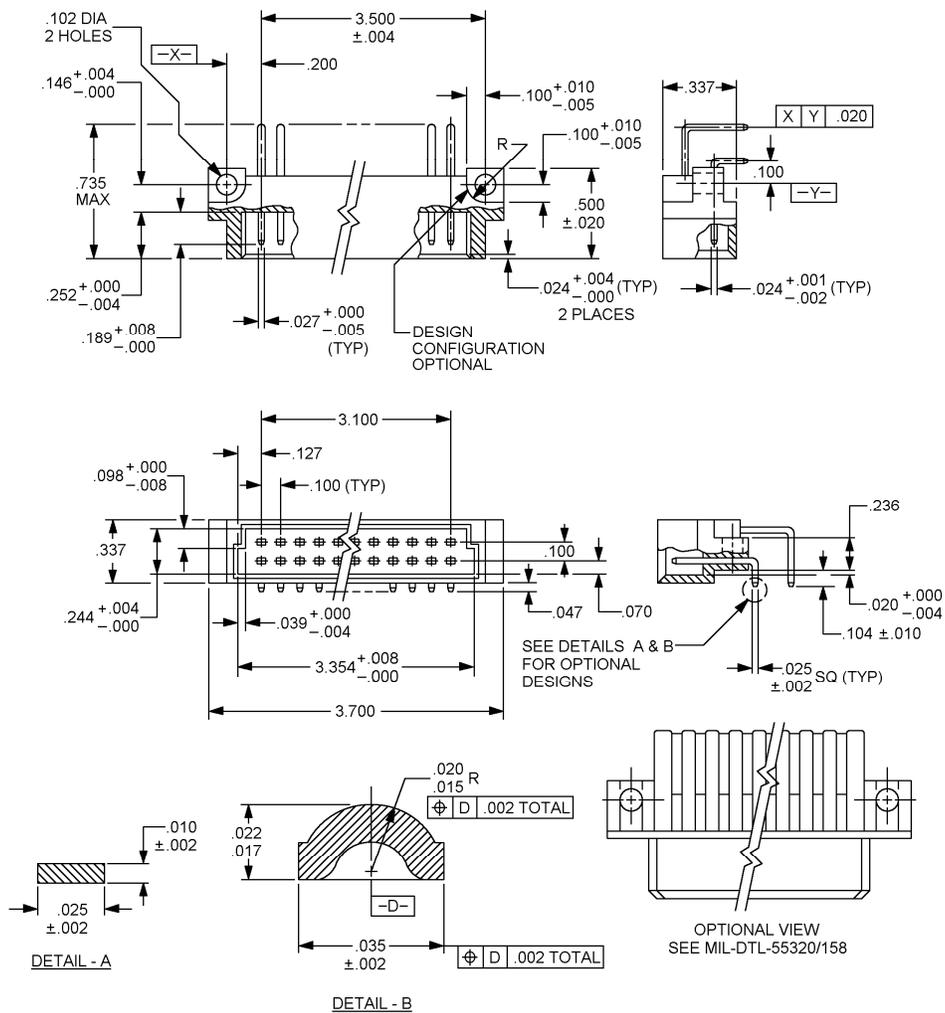


FIGURE 1. Connector, plug, .100 (2.54 mm) spacing.

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Part or Identifying Number (PIN)	Number of Contacts	Type of termination
M55302/133-01	64	Printed circuit tails
M55302/133-02 <u>1/</u>	32	Printed circuit tails
M55302/133-03 <u>2/</u>	32	Printed circuit tails

1/ These connectors have the row A contacts excluded.

2/ These connectors have the row B contacts excluded.

Inches	mm	Inches	mm	Inches	mm	Inches	mm
.001	0.03	.024	0.61	.102	2.59	.343	8.71
.002	0.05	.025	0.64	.104	2.64	.433	11.00
.004	0.10	.027	0.69	.110	2.79	.500	12.70
.005	0.13	.035	0.89	.127	3.23	.735	18.67
.008	0.20	.039	0.99	.146	3.71	3.100	78.74
.010	0.25	.040	1.02	.189	4.80	3.354	85.19
.015	0.38	.047	1.19	.200	5.08	3.500	88.90
.017	0.43	.070	1.78	.209	5.31	3.700	93.98
.020	0.51	.098	2.49	.236	5.99		
.022	0.56	.100	2.54	.252	6.40		

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerance is $\pm .010$ (0.25 mm).
4. These connectors mate with connectors specified in MIL-DTL-55302/134.

FIGURE 1. Connector, plug, .100 (2.54 mm) spacing – Continued.

REQUIREMENTS:

Design and construction:

Dimensions and configurations: See figure 1.

Plating:

Contact plating: The plating in the engagement area for .170 inch minimum length from the tip of the contact shall be gold in accordance with ASTM B488, type II, code C or D, class 1.27, over nickel plating in accordance with SAE-AMS-QQ-N-290, class 2, 30 to 150 microinches. The plating on the contact termination end for .170 inch minimum length from the end of the contact shall be tin lead in accordance with MIL-DTL-55302.

Nonfunctional areas: Any portion of the contact other than the contact mating area or termination area can be plated in accordance with MIL-DTL-55302.

Contact identification: See figure 1.

Contact separation forces:

Mating and unmating: The maximum mating force, in pounds, shall not exceed a value equal to .25 times the number of contacts, and the withdrawal force, in pounds, shall be a minimum of .025 times the number of contacts and shall exceed the measured insertion force, when the housing is loaded with contacts and mating with connector in accordance with MIL-DTL-55302/134.

Contact rating: 3 amperes maximum per contact.

Contact resistance: No individual contact pair shall have a resistance exceeded .020 ohm.

Contact retention: 3 pounds minimum per contact.

Dielectric withstanding voltage:

Sea level: 1,000 volts rms, 50 or 60 hertz.

High altitude: 300 volts rms, 50 or 60 hertz.

Oversize pin exclusion: Not applicable.

PIN: See figure 1.

Previous note: Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

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

MIL-DTL-55302/134
MIL-DTL-55302/158
ASTM B488
SAE-AMS-QQ-N-290

MIL-DTL-55302/133C

CONCLUDING MATERIAL

Custodians:

Army – CR
Navy – EC
Air Force – 11
DLA – CC

Preparing activity:

DLA - CC

(Project 5935-4482-000)

Review activities:

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

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 <http://assist.daps.dla.mil>.