

INCH-POUND

MIL-DTL-55302/69D  
 24 March 2004  
 SUPERSEDING  
 MIL-C-55302/69C  
 17 October 1986

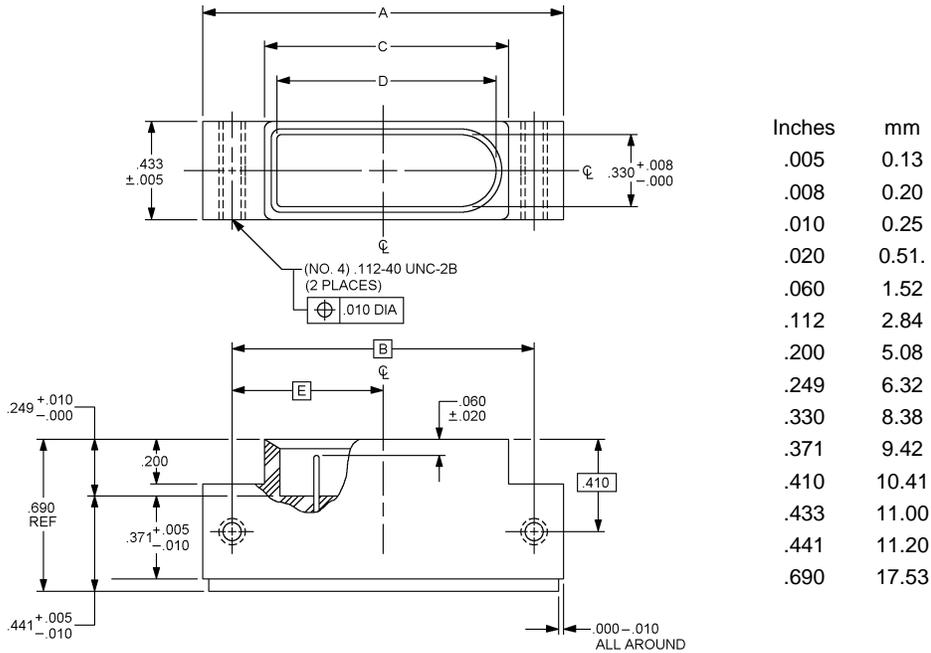
DETAIL SPECIFICATION SHEET

CONNECTORS, PRINTED CIRCUIT SUBASSEMBLY AND ACCESSORIES:  
 PIN PLUG, ELECTRICAL, POLARIZED  
 (.090 SPACING) REMOVABLE CRIMP CONTACTS

MIL-DTL-55302/69D is inactive for new design after 1 October 1986.

This specification is approved for used 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.

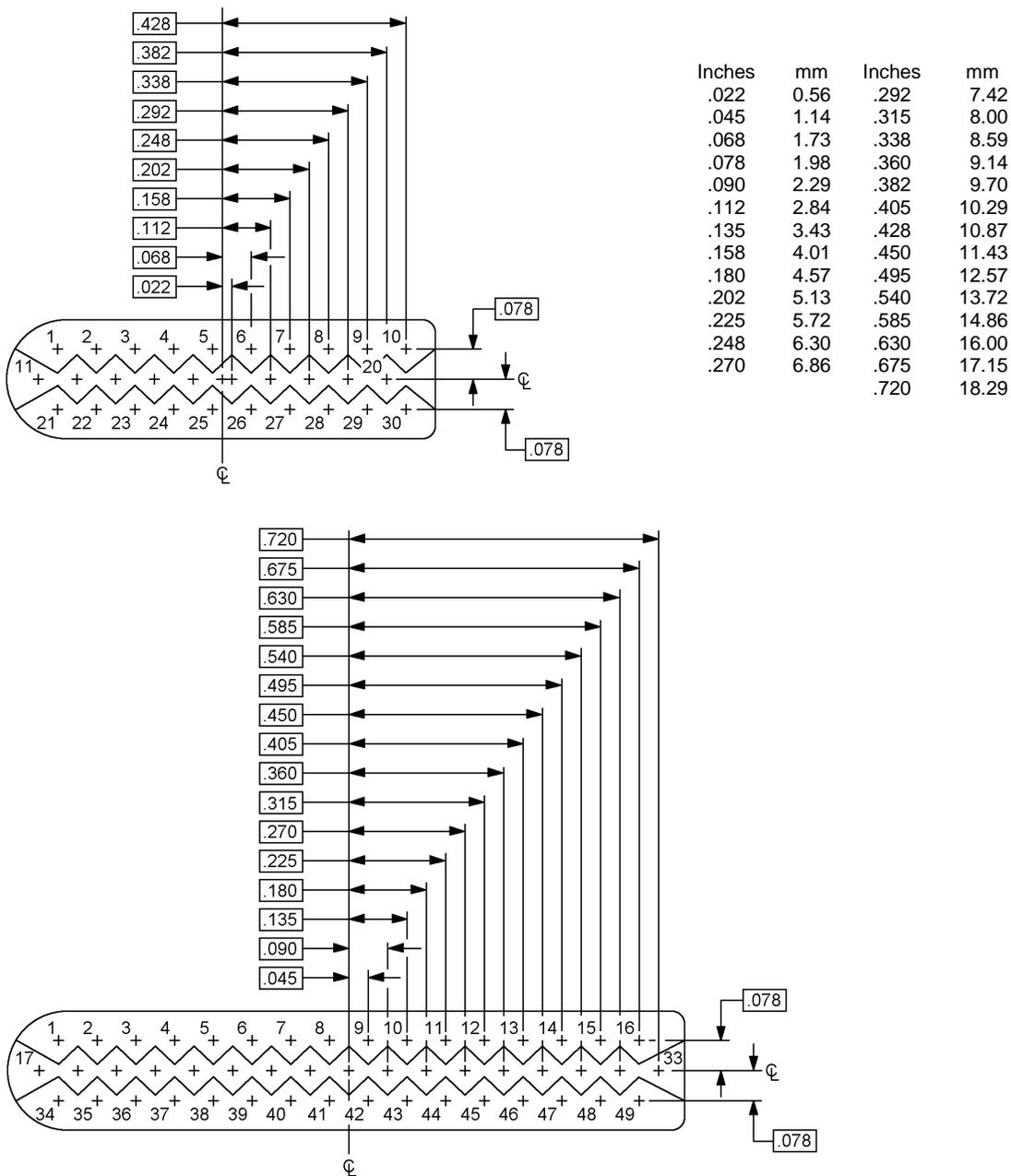


NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Nominal spacing between any two adjacent pin contacts shall be  $.090 \pm .003$  (2.29 ± .08 mm).
4. Unless otherwise specified, tolerances are  $\pm .010$  (0.25 mm).
5. For dimensions A through E see table I.
6. A quantity of M39029/58-354 socket crimp contacts consisting of the normal complement plus one spare contact for connector arrangements having 26 contacts or less and two spare for arrangements having over 26 contacts shall be supplied with each connector.

FIGURE 1. Connectors, plug, .090 (2.29 mm) contact spacing removable crimp pin.

MIL-DTL-55302/69D



NOTES:

1. Contacts 1, 20 and 21 (top of page) are identified on the front face of the connector and contacts 1, 10, 11, 20, 21 and 30 are identified on the rear face per the insert arrangement.
2. Contacts 1, 16 and 49 (bottom of page) are identified on the front face of the connector and contacts 1, 16, 17, 33, 34 and 49 are identified on the rear face per the insert arrangement.

FIGURE 2. Insert arrangement for .090 (2.29 mm) contact spacing connector (male engaging face).

MIL-DTL-55302/69D

Requirements:

Dimensions and configuration: See figure 1 and table I.

Material: In accordance with MIL-DTL-55302, except:

Body - reinforced epoxy resin or equivalent.

Bushing - monel, QQ-N-281, class B, cold drawn.

Plating: In accordance with MIL-C-39029/58.

Contact identification: Contact locations are identified numerically as shown on figure 2.

Mating and unmating: The maximum mating force, in pounds, shall be 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: With a test current of 3 A dc, 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: 1,000 volts rms, 60 Hz, ac.

High altitude: 275 volts rms, 60 Hz, ac.

Current rating: 3.0 amperes.

Insert arrangement: See figure 2.

Mating connectors: See MIL-DTL-55302/68.

Contact insertion and removal tool: See MIL-I-81969/8.

Quality conformance inspection:

Group A inspection: Delete mating and unmating.

Group B inspection: Add mating and unmating.

Part or identification number (PIN): M55302/69-(dash number from table I).

TABLE I Dash number and dimensions.

Dash number	Dimensions <sup>1/</sup>				
	+0.010 A (.25) -0.000	<span style="border: 1px solid black; padding: 2px;">B</span>	+0.010 C (.25) -0.000	+0.008 D (.20) -0.000	<span style="border: 1px solid black; padding: 2px;">E</span>
01	1.665 (42.19)	1.376 (34.95)	1.096 (27.84)	.996 (25.30)	.688 (17.48)
02	2.246 (57.05)	1.960 (49.78)	1.686 (42.82)	1.581 (40.16)	.980 (24.89)

<sup>1/</sup> Metric equivalent are given for information only. Millimeters are in parentheses.

MIL-DTL-55302/69D

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

In addition to MIL-DTL-55302, this specification sheet references the following documents.

MIL-C-39029/58  
MIL-DTL-55302/68  
MIL-I-81969/8  
QQ-N-281

CONCLUDING MATERIAL

Custodians:  
Air Force - 11  
DLA - CC

Preparing activity:  
DLA - CC  
(Project 5935-4425-003)

Review activities:  
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 <http://www.dodssp.daps.mil>.