

INCH-POUND

MIL-DTL-83503/22C
w/AMENDMENT 1
10 January 2014
SUPERSEDING
MIL-DTL-83503/22C
20 July 1998

DETAIL SPECIFICATION SHEET

CONNECTORS, ELECTRICAL, FLAT CABLE, NONENVIRONMENTAL
SOCKET INSULATION DISPLACEMENT

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-83503.

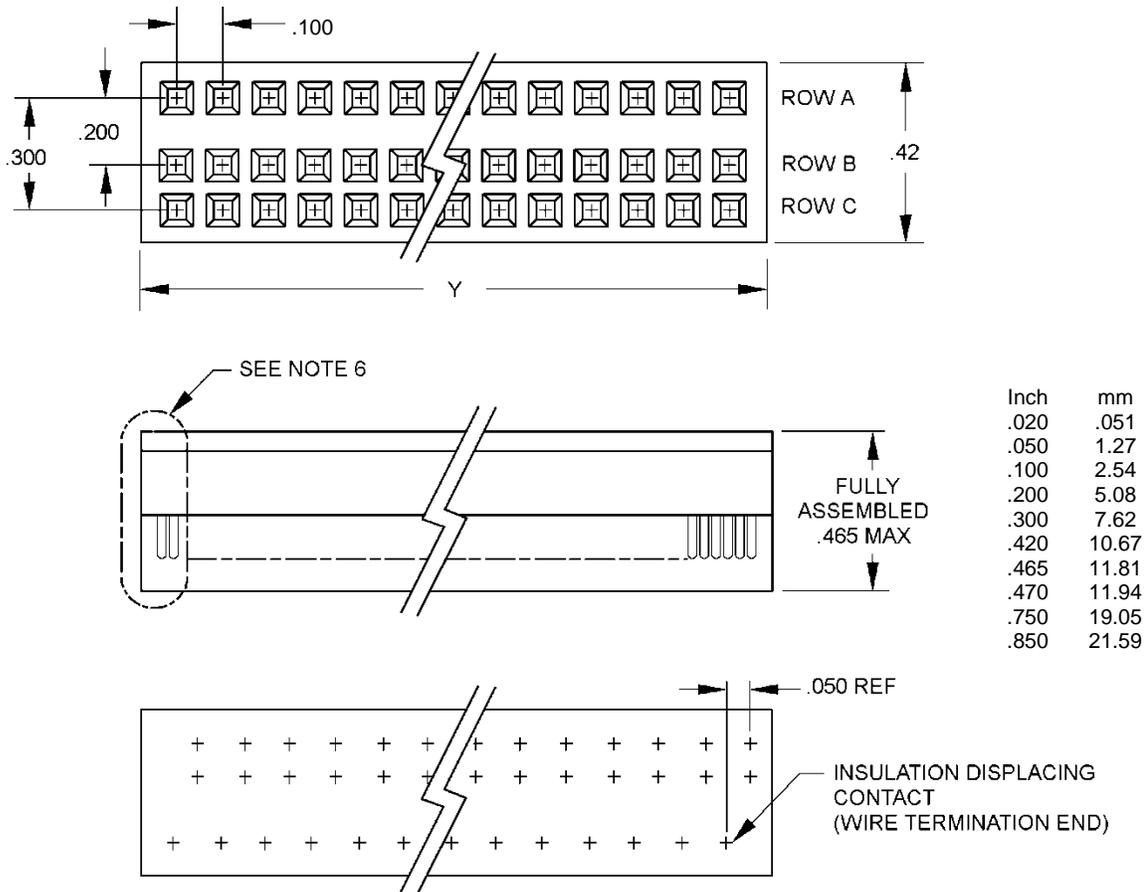
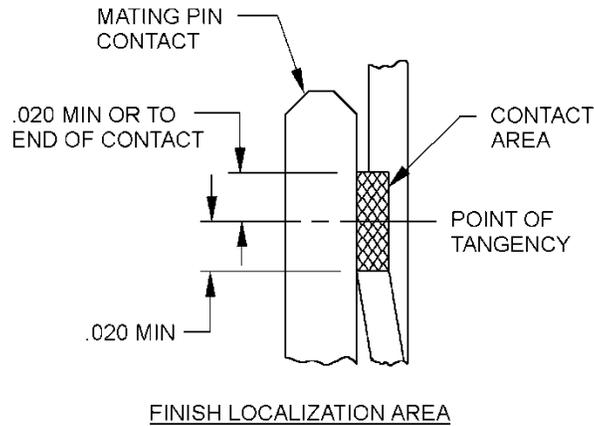


FIGURE 1. Dimensions and configuration.

MIL-DTL-83503/22C
w/AMENDMENT 1



Part or Identifying Number (PIN)	Y	Size	Loaded rows	Number of contacts
M83503/22-01 M83503/22-02	.750 (19.05)	2 X 7	A and C A and B	14
M83503/22-03 M83503/22-04	.850 (21.59)	2 X 8	A and C A and B	16
M83503/22-05 M83503/22-06	.750 (19.05) .850 (21.59)	3 X 7 3 X 8	A, B and C	21 24

NOTES

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Unless otherwise specified, tolerances are $+.005$ (0.13 mm) for three place decimals and $+.01$ (0.3 mm) for two place decimals.
4. Rows B and C have a common conductor.
5. Interface minimum post .21 inch (5.3 mm) engagement length, interface: Round conductor flat cable to .100 inch x .100 inch (2.54 x 2.54 mm) spaced; .025 inch (0.64 mm) square post, .240 inch (6.10 mm) minimum.
6. Method of connection of cover to body optional but shall meet the requirements of MIL-DTL-83503 and this specification sheet.
7. Unused (unloaded) holes optional.

FIGURE 1. Dimensions and configuration - Continued.

MIL-DTL-83503/22C
w/AMENDMENT 1

REQUIREMENTS:

Design and construction:

Dimensions and configuration: See figure 1.

Temperature range: -55°C to +120°C.

Current rating: 1 ampere.

Materials:

Contacts: Beryllium copper ASTM B196/B196M or, phosphor bronze in accordance with ASTM B139/B139M with gold plating in contact area.

Housing: Glass filled nylon in accordance with ASTM D6779; diallyl phthalate, type SDG-F; or glass filled polyester in accordance with ASTM D5948.

Wire accommodation: 28 AWG stranded, .050 inch (1.27 mm) spacing between conductor centers. Voltage rating: 300 V rms.

Dielectric withstanding voltage (at sea level): 500 V rms, minimum.

Test wire size: 28 AWG stranded.

Contact retention: Not applicable.

Contact resistance: Initial 50 milliohms; after testing 50 milliohms in accordance with test procedure EIA-364-06.

Part number: M83503/22-(dash number from figure 1).

Interface: Round conductor flat cable, .050 inch (1.27 mm) centers, to .025 inch (0.64 mm) round or square posts.

Assembly tool: M22520/32.

Polarization: Not required.

Marking: Part number shall be marked on connector with an ink stamp or molded raised letters (see figure 1).

Accessories: 301 stainless steel or other materials per MIL-DTL-83503.

MIL-DTL-83503/22C
w/AMENDMENT 1

Amendment notations. The margins of this specification are marked with vertical lines to indicate where modifications from this amendment were made. 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.

Referenced documents: In addition to MIL-DTL-83503, this document references the following:

ASTM B139/B139M
ASTM B196/B196M
ASTM D5948
ASTM D6779
EIA-364-06

CONCLUDING MATERIAL

Custodians:
Air Force - 85
DLA - CC

Preparing activity:
DLA - CC

(Project 5935-2013-183)

Review activity:
Air Force – 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 <https://assist.dla.mil/>