DETAIL SPECIFICATION SHEET

CONNECTORS, ELECTRICAL, MODULAR, CONNECTOR, TYPE IV, 20 CONTACT, RIGHT ANGLE (FOR DIE CAST FRAME)

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-C-28754.

FIGURE 1. Dimensions and configurations.
FIGURE 1. Dimensions and configurations – Continued.
FIGURE 1. Dimensions and configurations – Continued.
NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Unless otherwise specified, tolerances are ±0.005 inch (0.125 mm) on three place decimals, ±0.01 inch (0.25 mm) on two place decimals and ±2° on angles.
4. The 0.006 inch (0.152 mm) diameter applies to the exposed portion of the contact tail only.
5. The flash around the blade contacts is not to exceed 0.010 inch (0.254 mm) from the body and shall be firmly attached.
6. Mark in this area on the opposite side shown in the figure in white characters, 0.06 inch (1.52 mm) high.
7. The letters CONN are to be marked in white characters, 0.060 inch (1.52 mm) high and are to precede the Part or Identifying Number (PIN), but are not to be included in the PIN.
8. The contacts shall be gold over nickel plated in accordance with MIL-C-28754 for a length of 0.170 inch (4.318 mm) minimum.
9. Break sharp edges 0.020 maximum unless otherwise specified.
10. Inside corners 0.020 maximum unless otherwise specified.
11. Contact must fall within this area. Dimensions given are taken about basic contact location.
12. Diameter for diagonal dimension configuration is optional within 0.016 inch (0.406 mm) plus or minus 0.003 inch (0.076 mm) before plating and 0.025 inch (0.635 mm) maximum after plating.
13. Tin lead solder shall completely cover the contact from the tip to the body of the connector from which the contact emerges.

FIGURE 1. Dimensions and configurations – Continued.

REQUIREMENTS:

Dimensions and configurations: See figure 1.

Contacts: See figure 1.

Plating: Contact plating shall be in accordance with MIL-C-28754. Solder coated contact tail shall be tinned (see detail C) with solder to a thickness of 0.0005 inch to 0.003 inch and solder shall cover tails. Solder used shall be in accordance with J-STD-006, type Sn60, form B, no-fluxed. A noncorrosive flux may be used in accordance with J-STD-004, flux designator R0M0 or R0M1.

Contact resistance: Voltage drop shall not exceed 20 millivolts.

Current rating: 3 amperes.

Solderability: In accordance with MIL-C-28754.

Temperature rating: -55° to +105°C.

Voltage rating: 300 volts, ac (rms) at sea level.

Durability: Voltage drop shall not exceed 20 millivolts.
Marking: In accordance with MIL-C-28754 and figure 1.

PIN: M28754/14-01.

First article testing: Perform the applicable tests as specified in MIL-C-28754 and the appendix thereto.

Changes from previous issue. The margins of this specification are marked with vertical lines to indicate where changes from the previous issue 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 and relationship to the previous issue.

Referenced documents. In addition to MIL-C-28754, this document references the following:

J-STD-004
J-STD-006

CONCLUDING MATERIAL

Custodians: Preparing activity:
Army – CR DLA - CC
Navy – AS
Air Force – 85 (Project 5935-2014-066)
DLA - CC

Review activities:
Army AR, MI
Navy – MC
Air Force – 99

NOTE: The activities 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.