

INCH - POUND

MIL-DTL-39024/4D
w/AMENDMENT 2
3 June 2020
SUPERSEDING
w/AMENDMENT 1
12 December 2017

DETAIL SPECIFICATION SHEET

CONNECTORS, ELECTRICAL, TEST POINT TYPE, PRINTED WIRING TYPE;
SINGLE TEST POINT (RIGHT ANGLE, 3-LEG MOUNTING), LOW VOLTAGE

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 and MIL-DTL-39024.

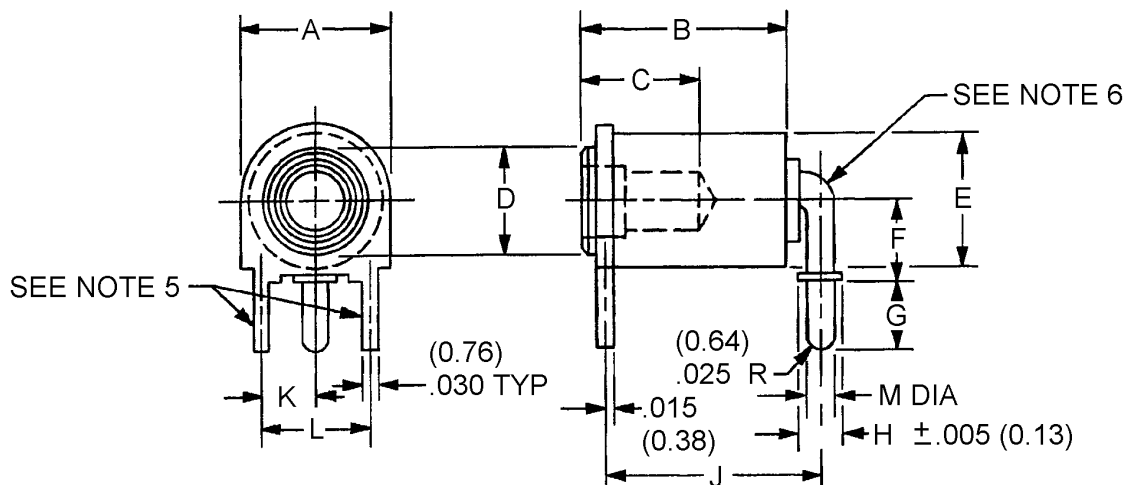


FIGURE 1. Configuration and dimensions.



Test probe	Dimensions					
	A max	B	C min	D dia	E	F
.080	.270 (6.86)	.38 (9.65)	.250 (6.35)	.188 (4.78)	.219 (5.56)	.140 (3.56)
.040	.156 (3.96)	.23 (5.84)	.171 (4.34)	.092 (2.34)	.125 (3.18)	.085 (2.16)
	G	H dia	J	K	L	M
.080	.125 (3.18)	.080 (2.03)	.400 (10.16)	.100 (2.54)	.200 (5.08)	.050 (1.27)
.040	.100 (2.54)	.050 (1.27)	.300 (7.62)	.050 (1.27)	.100 (2.54)	.030 (0.76)

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerances are $\pm .010$ (0.25 mm) for three place decimals and $\pm .02$ (0.51 mm) for two place decimals.
4. Metric equivalents are in parentheses.
5. Mounting legs. Not electrical terminal.
6. Contact terminal.

FIGURE 1. Configuration and dimensions – Continued.

TABLE I. Dash number, color and test probe.

Dash number	Color	Number in accordance with SAE-AMS-STD-595	Test probe
-01	White	17875	.080
-02	Red	11105	"
-03	Black	17038	"
-04	Brown	10075	"
-05	Green	14110	"
-06	Orange	12246	"
-07	Blue	15123	"
-08	Yellow	13655	"
-09	Gray	16187	"
-10	Purple	27144	"
-11	Natural	---	.080
-21	White	17875	.040
-22	Red	11105	"
-23	Black	17038	"
-24	Brown	10075	"
-25	Green	14110	"
-26	Orange	12246	"
-27	Blue	15123	"
-28	Yellow	13655	"
-29	Gray	16187	"
-30	Purple	27144	"
-31	Natural	---	.040

REQUIREMENTS:

Design and construction:

Dimensions and configuration: See figure 1.

Insulation: Material shall be polytetrafluoroethylene in accordance with ASTM D1710.

Operating temperature: -65°C to +200°C.

Test probe: See table I.

Contact current rating: 5 amperes (max).

Insulation resistance: Test circuit figure in MIL-DTL-39024 shall be used.

Dielectric withstanding voltage (at sea level): Test circuit figure in MIL-DTL-39024 shall be used.

Test voltage:

.080 test probe: 3,000 volts rms, 60 hertz.

.040 test probe: 1,500 volts rms, 60 hertz.

Insertion and withdrawal forces:

.080 test probe:

Insertion force: 4.5 pounds (max).

Withdrawal force: 0.4 pound (min).

.040 test probe:

Insertion force: 3 pounds (max).

Withdrawal force: 0.4 pound (min).

Thermal shock: Shall be in accordance with MIL-STD-202-107, condition C.

Marking:

Part or Identifying Number (PIN): M39024/4-(dash number from table I).

Operating conditions:

Operating voltage is as follows:

For .080 test probe:

Sea level: 1,500 volts rms, 60 hertz.

50,000 feet: 350 volts rms, 60 hertz.

For .040 test probe:

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

50,000 feet: 350 volts rms, 60 hertz.

These connectors are designed for .062 inch nominal thickness printed wiring board.

Qualification: Not applicable.

First article inspection. First article inspection shall consist of Group A and B inspections. MIL-DTL-39024 paragraph 4.5 through 4.5.3.1.3 and Tables III through VII as applicable.

Conformance inspection. Inspection of successive lots for delivery shall consist of Group A inspections. MIL-DTL-39024 paragraph 4.5 through 4.5.3.1.3 and Tables III through VII as applicable.

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.

Referenced documents. In addition to MIL-DTL-39024, this document references the following:

ASTM D1710	SAE-AMS-STD-595/15123
SAE-AMS-STD-595/10075	SAE-AMS-STD-595/16187
SAE-AMS-STD-595/11105	SAE-AMS-STD-595/17038
SAE-AMS-STD-595/12246	SAE-AMS-STD-595/17875
SAE-AMS-STD-595/13655	SAE-AMS-STD-595/27144
SAE-AMS-STD-595/14110	MIL-STD-202-107

CONCLUDING MATERIAL

Custodians:

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

Preparing activity:
DLA - CC

(Project 5935-2020-076)

Review activities:

Army - AR, CR4, MI
Navy - AS, MC, OS
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 <https://assist.dla.mil/>