

INCH - POUND

MIL-DTL-39024/11G
w/AMENDMENT 3
10 January 2023
SUPERSEDING
MIL-DTL-39024/11G
w/AMENDMENT 2
3 June 2020

DETAIL SPECIFICATION SHEET

JACK, TIP, TEST POINT TYPE, PRINTED WIRING TYPE,
SINGLE TEST POINT, RIGHT ANGLE, 2-LEG MOUNTING, LOW VOLTAGE, .080

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-39024.

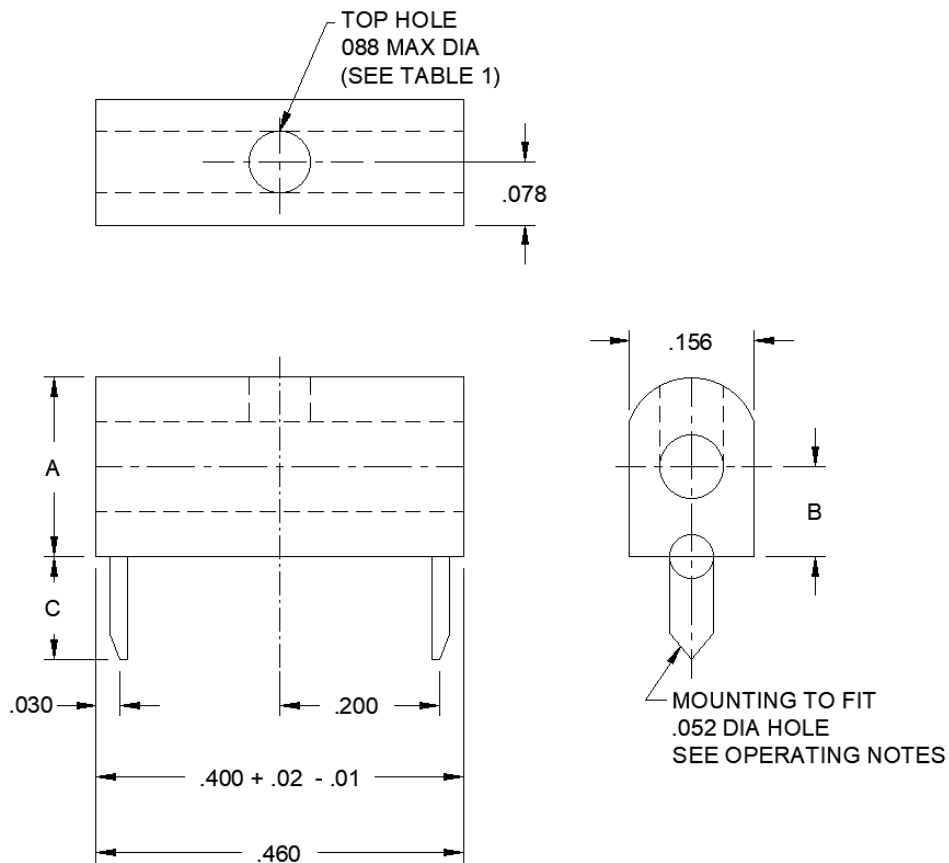


FIGURE 1. Configuration and dimensions.

NOTES:

1. Dimensions are in inches. (See table I for dimensions not shown on figure 1).
2. Unless otherwise specified, tolerances are $\pm .010$ (0.25 mm).
3. Terminal contour is optional provided that mounting hole and mounting center requirement are set. Also see terminal bendability requirements.
4. Top hole provides access to the electrical contact for a hand held probe. There is no spring contact retention.
5. All un-dimensioned pictorial configurations are for reference purposes only.

FIGURE 1. Configuration and dimensions – Continued.

TABLE I. Design and identification data.

Dash number <u>2/ 3/</u>	Dimensions (inches) <u>1/</u>			Insulation		Hole Configuration
	A $\pm$.010 (0.25)	B $\pm$.015 (0.38)	C $\pm$.015 (0.38)	Color	Number in accordance with SAE AMS-STD-595	
-01X <u>4/</u>	.220	0.130 (3.30)	0.130	White	17875	Side holes only
-02X	(5.59)	"	(3.30)	Red	11105	
-03X	"	"	"	Black	17038	
-04X	"	"	"	Brown	10075	
-05X	"	"	"	Green	14110	
-06X	"	"	"	Orange	12246	
-07X	"	"	"	Blue	15123	
-08X	"	"	"	Yellow	13655	
-09X	"	"	"	Gray	16187	
-10X	"	"	"	Purple	27144	

-41X	.220	.130 (3.30)	.130	White	17875	Top and side holes
-42X	(5.59)	"	(3.30)	Red	11105	
-43X	"	"	"	Black	17038	
-44X	"	"	"	Brown	10075	
-45X	"	"	"	Green	14110	
-46X	"	"	"	Orange	12246	
-47X	"	"	"	Blue	15123	
-48X	"	"	"	Yellow	13655	
-49X	"	"	"	Gray	16187	
-50X	"	"	"	Purple	27144	

-71X <u>5/</u>	.220	.130 (3.30)	.130	White	17875	Side holes only
-72X	(5.59)	"	(3.30)	Red	11105	
-73X	"	"	"	Black	17038	
-74X	"	"	"	Brown	10075	
-75X	"	"	"	Green	14110	
-76X	"	"	"	Orange	12246	
-77X	"	"	"	Blue	15123	
-78X	"	"	"	Yellow	13655	
-79X	"	"	"	Gray	16187	
-80X	"	"	"	Purple	27144	

See footnotes on next page.

TABLE I. Design and identification data – Continued.

1/ Dimensions are in inches.

2/ Dash numbers -21 through -30 have been deleted. See Table II for recommended substitutes. Dash numbers -51 through -70 have been canceled without replacement.

3/ X = G For parts with gold plated terminals. (OEMs may order parts with gold plated terminals, marked with the suffix "G", and request that the terminals be solder dipped as a post manufacturing operation.) X = blank for parts with any of the specified terminal finishes. (OEMs may identify a specific terminal finish in their purchase order.)

4/ Dash numbers -01X through -10X are for use by OEMs. When a qualified products list source is available for dash number -71X through -80X, only they will be acquired by the government for stock and issue in place of dash numbers -01X through -10X, respectively.

5/ Clinchable terminals. See terminal bendability requirements.

REQUIREMENTS:

Design and construction:

Dimensions and configuration: See figure 1 and table I.

Insulation: Material shall be polyamide in accordance with L-P-410 or ASTM D4066.

Test probe: 0.080 ± 0.001 inch (2.03 ± 0.03 mm) in diameter (connector shall accept test probe from either end). Test probe shall be engaged a minimum of .450 inches. Test probe shall be fully inserted.

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.

The applicable voltage shall be applied for 15 seconds.

For -01X through -10X, 2000 volts rms, 60Hz, -41X through -50X, 500 volts rms, 60Hz, -71X through -80X, 2000 volts rms, 60 Hz.

Insulation and withdrawal forces

Insertion force: 5.0 pounds (maximum)

Withdrawal force: 0.5 pounds (minimum)

Terminal bendability: for -71X through -80X, when the part is seated on a .0625 inch (1.588mm) nominal thickness printed wiring board there shall be no breakage or visible fracture of the terminals when they are clinched parallel to the board surface.

Identification marking:

The marking shall be located on the immediate container.

Part or Identifying Number (PIN): M39024/11-(dash number from table I). G on parts furnished to the government. The suffix "G" shall be used to identify parts with gold plated terminals. OEMs may order parts with or without gold plated terminals and mark them according to footnote 3 in table I. Effective date of this revision, all parts furnished to the government for stock and issue shall have gold plated terminals. Existing government stocks of non-gold terminal items shall be issued until exhausted. However, only "G" suffix items will be purchased. "G" suffix may be added to existing M39024/11-XX PIN's Lacking "G" suffix. New NSNs will not be assigned.

MIL-DTL-39024/11G
w/AMENDMENT 3

Operating conditions:

Operating voltage: 1,500 volts rms, 60 hertz at sea level; 350 volts rms, 60 hertz at 50,000 feet.

Maximum thickness of unsupported printed wiring board on which the connector may be used is .0625 inch (1.588mm). Maximum thickness of printed wiring board with plated through hole is .0930 inch (2.352mm).

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.

Substitution data. See table II.

TABLE II. Substitution data.

Deleted dash numbers	Recommended substitute (dash numbers)
-21	-01
-22	-02
-23	-03
-24	-04
-25	-05
-26	-06
-27	-07
-28	-08
-29	-09
-30	-10

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 D4066 L-P-410 SAE AMS-STD-595

CONCLUDING MATERIAL

Custodians:

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

Preparing activity:
DLA - CC

(Project 5935-2023-010)

Review activities:

Army - AR, CR4
Navy - AS, CG, MC, YD
Air Force - 19

NOTE: The activities listed above were interested in this document as 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>.