

PERFORMANCE SPECIFICATION SHEET

SWITCHES, PUSHBUTTON, MOMENTARY, 5 AMPERES
AND LOW LEVEL, MINIATURE, DUSTTIGHT OR WATERTIGHT

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The complete requirements for acquiring the switches described herein shall consist of this specification and the latest issue of [MIL-PRF-8805](#).

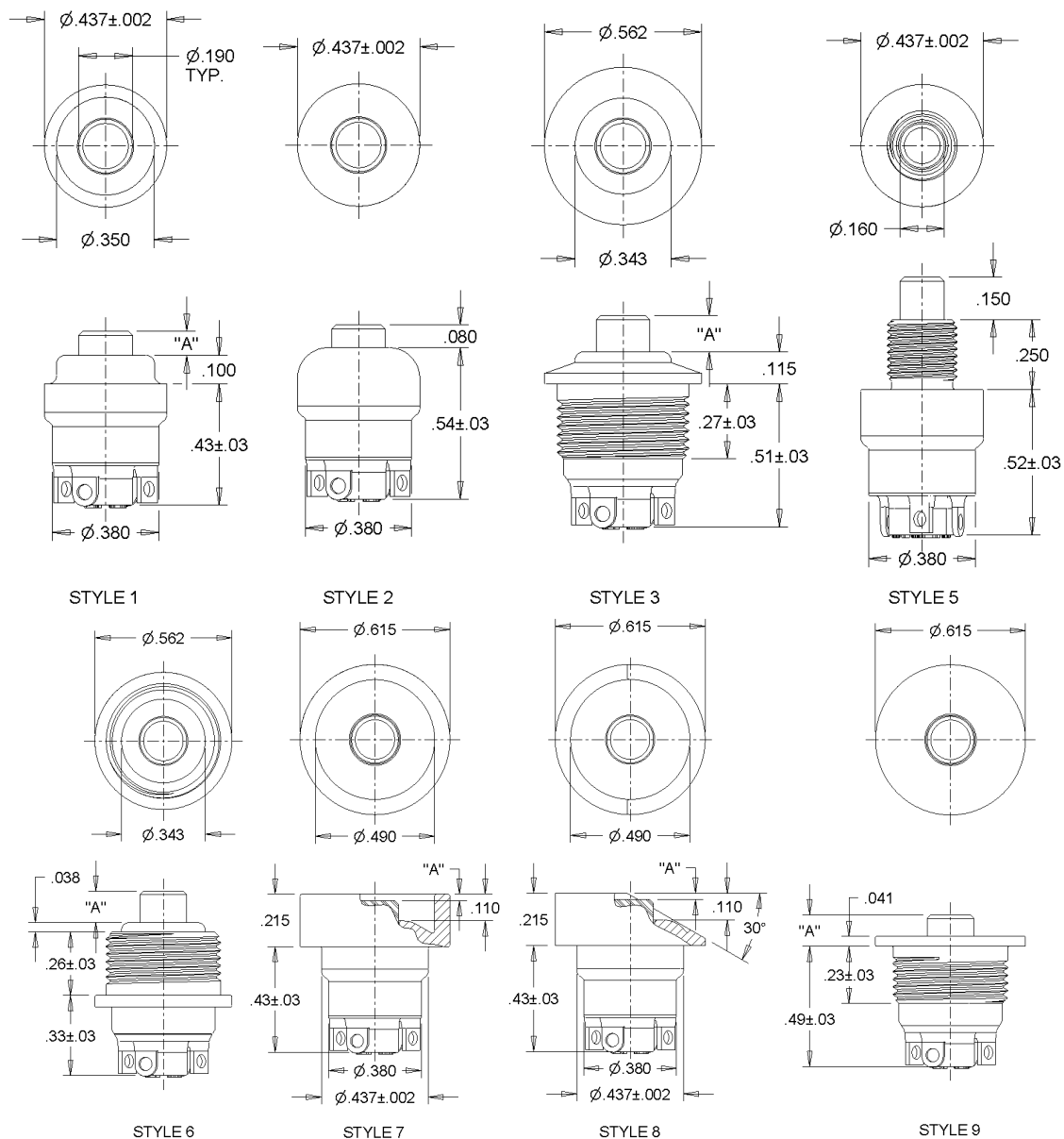
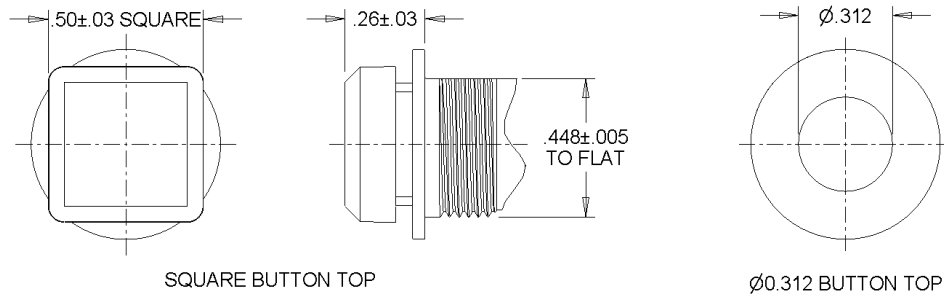


FIGURE 1. Configuration and dimensions



TABLE I. Button Height Dimensions

DIMENSION "A"		
CASE STYLE	Ø0.190	Ø0.312
1	0.085	.20±.03
3	0.125	0.080
6	0.125	.20±.03
7	0.030 BELOW SHROUD	.08±.03 ABOVE SHROUD
8	0.030 BELOW SHROUD	.08±.03 ABOVE SHROUD
9	0.013	.24±.03



NOTES:

1. Unless otherwise specified, dimensions are in inches, tolerances are $\pm.015$.
2. Styles 3, 5, and 6 are panel mounted.
3. Mounting thread 15/32-32 UNS-2A applies to case styles 3, 6 and 9 and shall be furnished with one each mounting nut MS25082-B21 per [MS25082](#) or equivalent and lockwasher MS35333-126 per [NASM 35333](#) or equivalent. Alternative base metals and protective finishes, as approved by the qualifying activity, may be utilized for hardware material.
4. Mounting thread 1/4-40 UNS-2A applies to case style 5 and shall be furnished with one each mounting nut MS25082-B14 per [MS25082](#) or equivalent and lockwasher MS35333-135 per [NASM 35333](#) or equivalent. Alternative base metals and protective finishes, as approved by the qualifying activity, may be utilized for hardware material.
5. Surface finish of square button top for case style 9 is lusterless (matte).

FIGURE 1. Configuration and dimensions - Continued

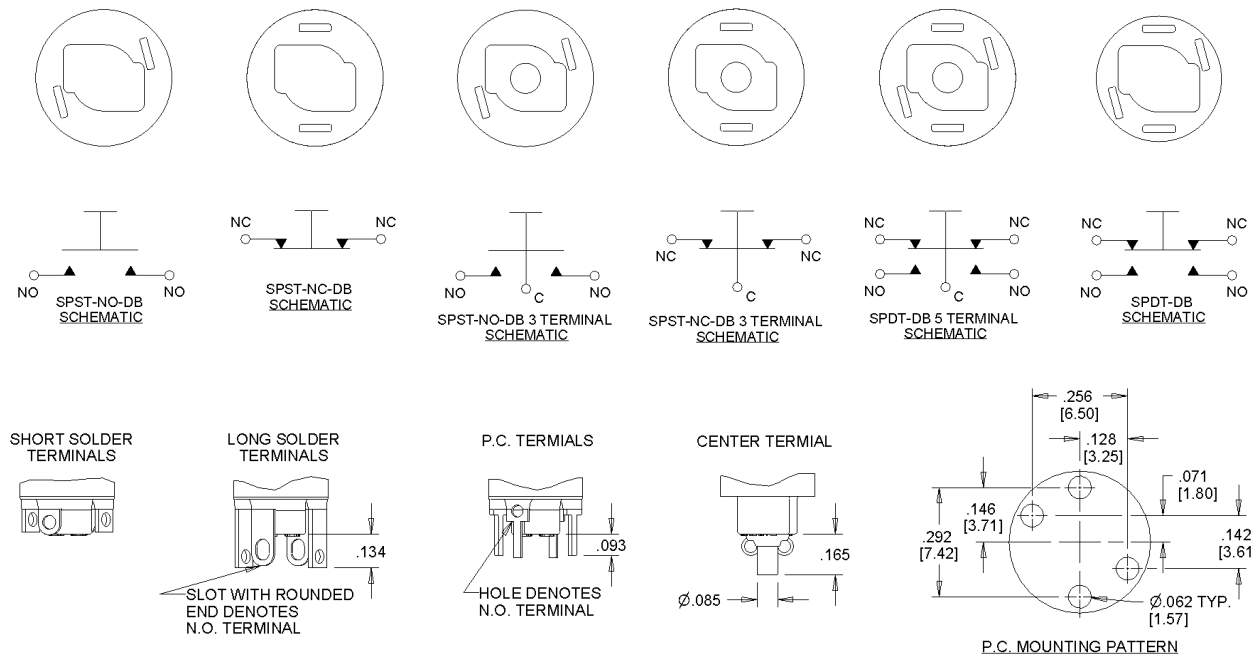


FIGURE 2. Terminal configuration.

NOTES:

1. Dimensions are in inches, tolerances are ± 0.015 .
2. For both solder terminations, all circuit schematics are available.
3. For PC termination, circuit schematics 1, 2, and 6 are available.

REQUIREMENTS:

Dimensions and configurations: See figures 1 and 2.

Enclosure design: 2 (dusttight) or 3 (watertight).

Temperature characteristic: 1 (-55° to $+85^{\circ}\text{C}$).

Shock type: M (100 g's).

Vibration grade: 2 (10 Hz to 2,000 Hz).

Weight: .030 pound maximum.

Dielectric withstanding voltage: 1,050 V rms.

After electrical endurance: Between all terminals and mounting plate only.

Operating characteristics:

Actuating force: 12 ± 4 ounces, 27 ± 8 ounces, or 64 ± 16 ounces

Total travel: .080 inch maximum.

Strength of actuator: 10 pounds.

Sand and dust: Applicable.

Terminal strength: 5 pounds, all directions.

Mechanical endurance: 2,000,000 cycles.

Electrical endurance: 50,000 cycles. Electrical ratings, see table II.

TABLE II. Electrical ratings - Circuit schematics 1, 2, and 6

Load	Sea level				50,000 feet			
	28 V dc		115 V ac, 60 Hz		28 V dc		115 V ac, 60 Hz	
	NO or NC (amperes)	2 circuit 1/ (amperes)	NO or NC (amperes)	2 circuit 1/ (amperes)	NO or NC (amperes)	2 circuit 1/ (amperes)	NO or NC (amperes)	2 circuit 1/ (amperes)
Resistive	5	4	5	4	5	4	5	4
Inductive	3	2	3	2	3	2	3	2
Motor	3	---	3	---	---	---	---	---
Lamp 2/	1	---	1	---	---	---	---	---

1/ Independent loads connected to each throw.

2/ Lamp loads apply to legacy designs only and should not be used in new design activity.

TABLE III. Electrical ratings - Circuit schematics 3, 4, and 5

Load	Sea level				50,000 feet			
	28 V dc		115 V ac, 60 Hz		28 V dc		115 V ac, 60 Hz	
	NO or NC (amperes)	2 circuit 1/ (amperes)	NO or NC (amperes)	2 circuit 1/ (amperes)	NO or NC (amperes)	2 circuit 1/ (amperes)	NO or NC (amperes)	2 circuit 1/ (amperes)
Resistive	2.5	2	2.5	2	2.5	2	2.5	2
Inductive	1.5	1	1.5	1	1.5	1	1.5	1
Motor	1.5	---	1.5	---	---	---	---	---
Lamp 2/	.5	---	.5	---	---	---	---	---

1/ Independent loads connected to each throw.

2/ Lamp loads apply to legacy designs only and should not be used in new design activity.

Intermediate current: Applicable 50,000 cycles.

Qualification: Switches are qualified by similarity to [MIL-PRF-8805/110](#)

Part or Identifying Number (PIN) and characteristics.

M8805/ 122 -	_____	_____	_____	_____	_____	_____
	Case Style <u>1/</u>	Terminal Style/ Construction Grade <u>3/</u>	Circuit Form <u>3/</u>	Contact Rating/ Operate Force	Case Color/ Button Diameter	Button Color
	1. Style 1	1. Short solder/ dusttight	1. N.O.	1. Standard current/ 28 oz	1. Clear/ Standard	1. Red
	2. Style 2	2. Short solder/ watertight	2. N.C.	2. Low Level/ 28 oz <u>2/</u>	2. Black/ Standard	2. Black
	3. Style 3	3. PC Pin/ dusttight <u>5/</u>	3. N.C. 3 Term	3. Standard current/ 64 oz	3. Clear/ Ø0.312 <u>6/</u>	3. Orange
	5. Style 5	4. PC Pin/ watertight <u>5/</u>	4. N.O. 3 Term	4. Low Level/ 64 oz <u>2/</u>	4. Black/ Ø0.312 <u>6/</u>	4. Yellow
	6. Style 6	5. Long solder/ dusttight	5. 5 Terminal Two Circuit	5. Standard current/ 12 oz	5. Clear/ Square 0.50" Matte finish <u>7/</u>	5. Green
	7. Style 7	6. Long solder/ watertight	6. 4 Terminal Two Circuit	6. Low Level/ 12 oz <u>2/</u>	6. Black/ Square 0.50" Matte finish <u>7/</u>	6. Blue
	8. Style 8					7. Purple
	9. Style 9					8. Gray
						9. White

1/ See figure 1 for case styles.

2/ For group A and incoming inspection, low level switches shall not be subjected to loads greater than 10 milliamperes at an open circuit voltage of 30 millivolts maximum dc or peak ac.

3/ See figure 2 for circuit form and terminal style.

4/ Printed circuit board termination applies to circuit schematics 1, 2, and 6 only.

5/ Not available in circuit form 3, 4, and 5.

6/ Not available in Case Style 2 and 5.

7/ Available with Case Style 9 only.

Example: M8805/122-326241 designates a switch of case style 3, with short solder termination, a watertight seal rating, of two circuit configuration, low level electrical rating, with a 28 oz actuation force, that has a black case, with a Ø0.312 red button.

Not all combinations of part numbers and characteristics are applicable to this slash sheet. See [MIL-PRF-8805/110](#) and [MIL-PRF-8805/123](#) for additional MIL part numbers.

Referenced Documents:

[MIL-PRF-8805](#)
[MS25082](#)
[NASM 35333](#)
[MIL-PRF-8805/110](#)
[MIL-PRF-8805/123](#)

Custodian:

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

Preparing activity:

DLA - CC

(Project 5930-2025-024)

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/>.