

PERFORMANCE SPECIFICATION SHEET

SWITCHES, PUSH, MOMENTARY, 2 CIRCUIT OR SPST (10 AMPERES) OR LOW LEVEL
FORM X, FORM Y, FORM C, OR FORM Z, UNSEALED

This specification is approved for use by all Departments and Agencies of the Department of Defense. The complete requirements for acquiring the switch described herein shall consist of this specification and the latest issue of [MIL-PRF-8805](#).

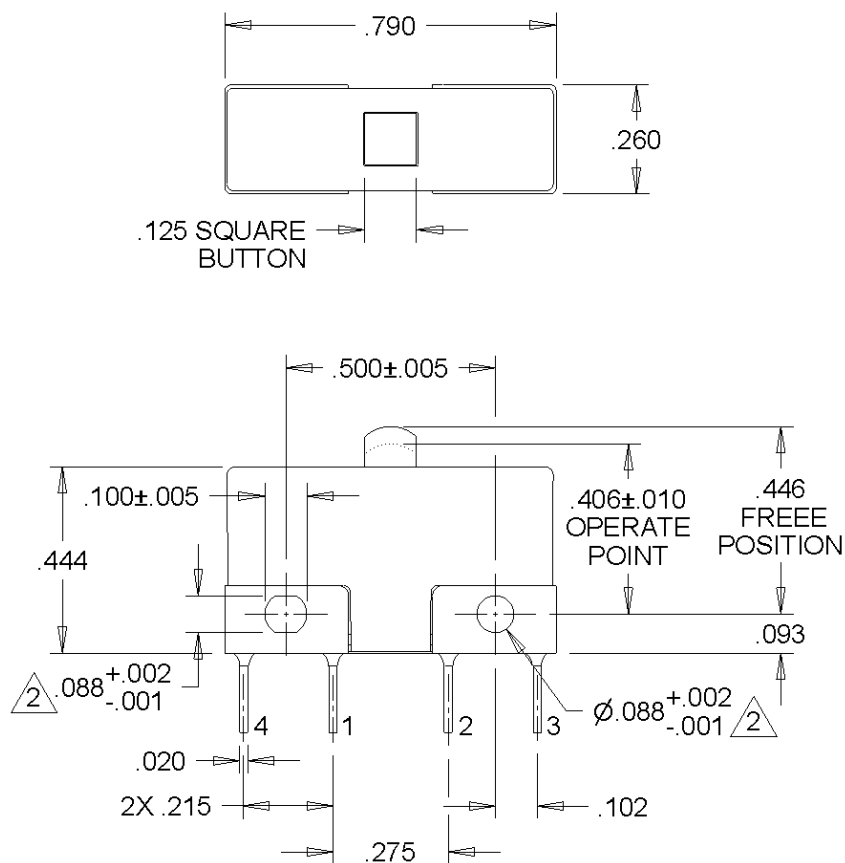


FIGURE 1. Dimensions and configurations.



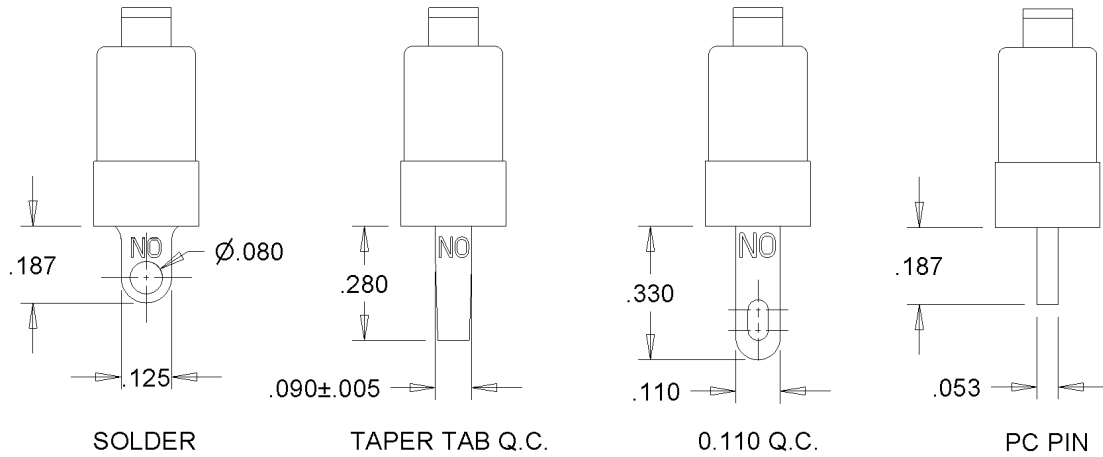


FIGURE 1. Dimensions and configurations – Continued.

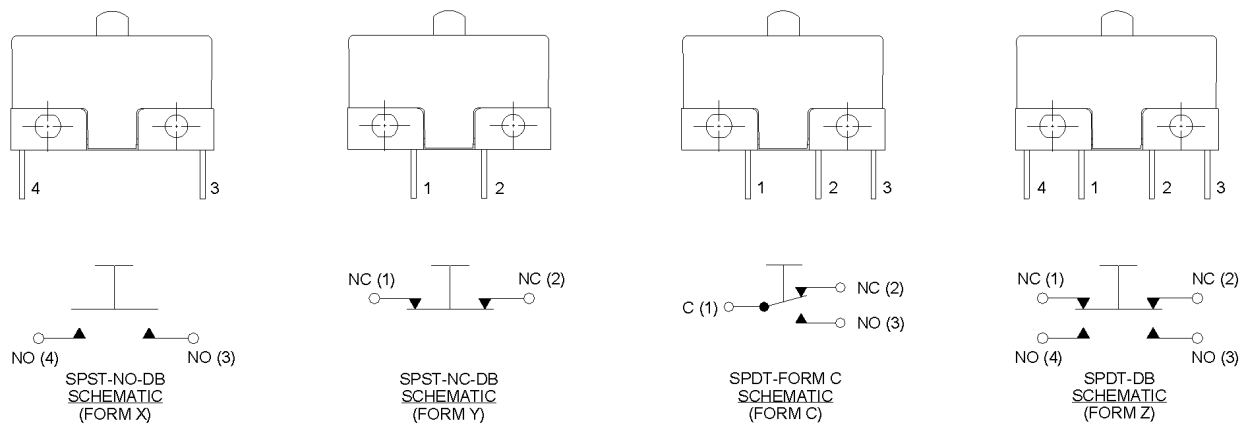


FIGURE 2. Circuit style

NOTES:

1. Unless otherwise specified, dimensions are in inches, tolerances are $\pm .015$.
2. Mounting holes will accept pins or screws of .087 maximum diameter on $.188 \pm .002$ centers.
3. Terminal pattern is the same on all circuit styles, but only Form Z has all 4 terminals.
4. Terminal marking may be on the bottom of the switch.
5. Quick connect taper tabs mate with series 78 AMP receptacles.
6. 0.110 Quick connect terminals mate with series 110 AMP receptacles.

REQUIREMENTS:

Dimensions and configurations: See figure 1.

Enclosure design: 1 (unsealed).

Temperature characteristic: 2 (-65°C to +125°C).

Shock type: M (100 g, test condition I, [MIL-STD-202-213](#)).

Vibration grade: 2 (10 to 2,000 Hz swept sinusoidal, 15 g peak).

Weight: .10 ounce maximum.

Operating characteristics:

Actuating force	8 ounces maximum	} ±20 percent variation from specified values specified after test.
Overtravel.....	.012 inch minimum.	
Movement differential.....	.020 ±.005 inch.	

Strength of actuator: 25 pounds.

Terminal strength: 5 pounds when applied perpendicular to the longitudinal axis of the terminals; 9 pounds when applied in other directions.

Dielectric withstanding voltage:

Sea level: 1,000 V rms between all terminals and ground.

Altitude: 400 V rms.

Mechanical endurance: 1,000,000 cycles at .016 ± .001 inch overtravel.

Electrical endurance: 100,000 cycles.

Electrical ratings: See table I.

QUALIFICATION:

Switches are qualified by similarity to [MIL-PRF-8805/7](#).

TABLE I. Electrical ratings.

Rating		Sea Level				70,000 Feet	
		28 VDC		115 VAC, 60 Hz.		28 VDC	
Standard ratings (2 or 4 terminal switch)	Load	NC or NO (Form Z)	SPDT-DB Form Z	NC or NO (Form Z)	SPDT-DB Form Z	NC or NO (Form Z)	SPDT-DB Form Z
	Resistive	10 amps	10 amps	7.5 amps	5 amps	10 amps	10 amps
	Inductive <u>1/</u>	7.5 amps	5 amps	5 amps	5 amps	3.5 amps	2 amps
	Lamp <u>2/</u>	4 amps	3 amps	3 amps	1.5 amps	---	---

Rating		Sea Level		70,000 Feet
		28 VDC	115 VAC, 60 Hz.	28 VDC
Standard ratings (3 terminal switch)	Load	SPDT-DB Form C	SPDT-DB Form C	SPDT-DB Form C
	Resistive	10 amps	5 amps	10 amps
	Inductive <u>1/</u>	3 amps	---	1.5 amps
	Lamp <u>2/</u>	3 amps	---	---

Low Level <u>3/</u>	Load Resistive	30 mV 10 mA	Per MIL-PRF-8805 , section 4.7.33
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1/ Inductive time constant L/R = 0.026.

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

3/ Low level ratings void if low level loads exceeded at any time.

Part or Identifying Number (PIN) and terminal configurations.

M8805/119-

<u>Terminal Style</u>	<u>Operate Force</u>	<u>Circuitry</u>	<u>Contact material</u>
1: Solder	1: 5 ⁺³ ₋₂ oz.	1: SPNO-DB Form X	1: Silver/Gold High Current
2: Taper Tab Q.C.	2: 5 oz min.	2: SPNC-DB Form Y	2: Silver/Gold Low Current
3: 0.110 Quick Connect	3: 6 oz max.	3: SPDT Form C	
4: PC Pin		4: SPDT-DB Form Z	

Example switch: M8805/119-1212

Solder terminals, 5 oz min. operate force, NO (Form X) circuit, low level current rating

Not all combinations of part numbers and characteristics are applicable to this slash sheet. See [MIL-PRF-8805/7](#) for additional MIL part numbers.

Reference documents:

[MIL-PRF-8805](#)
[MIL-PRF-8805/7](#)
[MIL-STD-202-213](#)

Custodians:

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

Preparing activity:
DLA - CC

(Project 5930-2024-064)

Review activities:

Army - AR, AV
Navy - AS, MC, OS, SH
Air Force - 19
NASA – NA

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/>.