

INCH-POUND

MIL-PRF-8805/109C  
12 December 2006

SUPERSEDING  
MIL-PRF-8805/109B  
31 October 2001

PERFORMANCE SPECIFICATION SHEET

SWITCH, SENSITIVE, SPDT, UNSEALED, 7 AMPERES, 0.156 WIDTH BASE

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 the latest issue of MIL-PRF-8805.

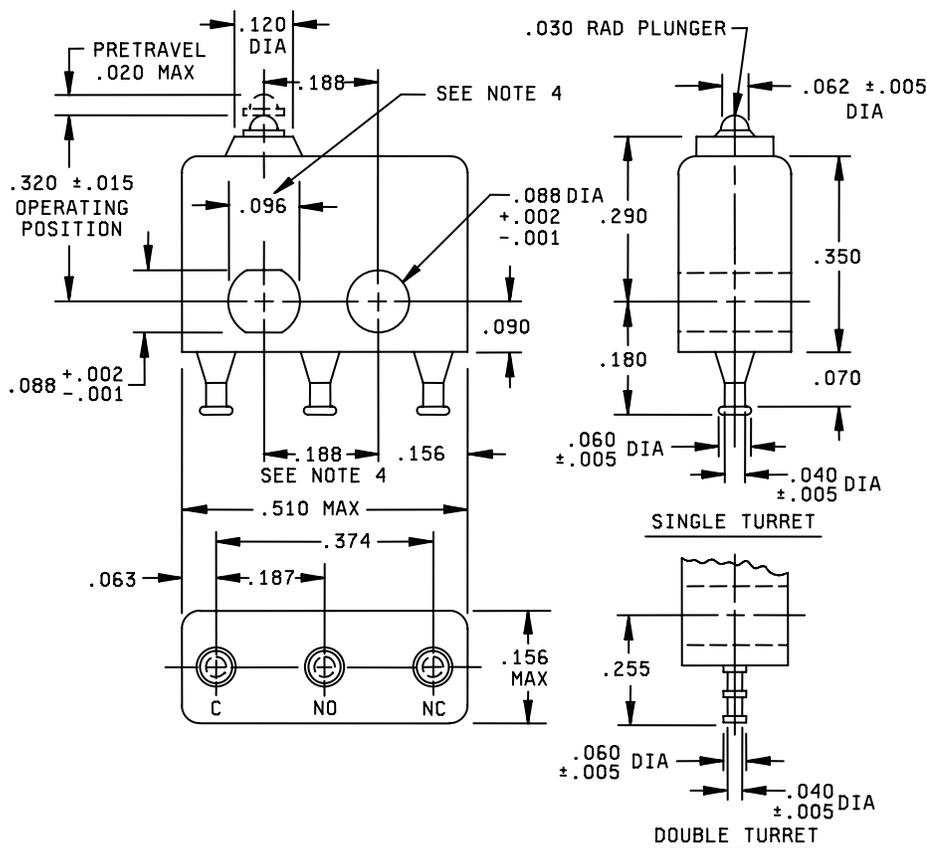


FIGURE 1. Configuration and dimensions.

Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
.001	.03	.020	.51	.063	1.60	.096	2.44	.188	4.78	.374	9.50
.002	.05	.030	.76	.070	1.78	.120	3.05	.255	6.48	.510	12.95
.005	.13	.040	1.02	.087	2.21	.156	3.96	.290	7.37		
.010	.25	.060	1.52	.088	2.24	.180	4.57	.320	8.13		
.015	.38	.062	1.57	.090	2.29	.187	4.75	.350	8.89		

## NOTES:

1. Dimensions are in inches.
2. Unless otherwise specifies, tolerances are  $\pm .010$  (.25 mm).
3. Metric equivalents are given for general information only.
4. Mounting holes will accept pins or screws of .087 maximum diameter on  $.188 \pm .002$  centers.
5. Double turret terminals shall accept two AN-20 wires or equivalent.

FIGURE 1. Configuration and dimensions.

## REQUIREMENTS:

Dimensions and configuration: See figure 1.

Enclosure design: 1 (unsealed)

Temperature characteristics: 1 (- 55°C to + 85°C).

Shock type: M (100 g).

Vibration grade: 1 (10 to 500 Hz).

Weight: .003 pounds maximum.

Operating characteristics:

Actuating force: 5 ounces maximum.

Release force: 1 ounce minimum.

Movement differential: .005 inch maximum.

Pretravel: .020 inch maximum.

Overtravel: .004 inch minimum.

Terminals: Terminal finish may be .000030 inch minimum to .000100 inch maximum thick gold plate or equivalent.

Terminal strength: 5 pounds, all directions.

Mechanical endurance: 50,000 cycles at .004 + .001, -.000 inch overtravel.

Dielectric withstanding voltage:

Sea level: 1050 V rms.

Altitude (50,000 ft); 400 V rms.

Electrical endurance: 25,000 cycles.

Electrical ratings: See tables I and II.

Part or Identifying Number (PIN): See table III.

Low level circuit: 25,000 cycles, applicable to switches with gold contacts (PIN's M8805/109-03 and M8805/109-04).

Intermediate current: 25,000 cycles.

Qualification:

Group submission: See table IV.

TABLE I. Electrical ratings: silver contacts.

Load	Sea level		50,000 feet
	28 V dc	115 V ac, 60 Hz	28 V dc
	Amperes	Amperes	Amperes
Resistive	7.0	7.0	4.0
Inductive	4.0	7.0	2.5
Lamp	2.5	2.0	2.5

TABLE I. Electrical ratings: gold contacts.

Load	Sea level 28 V dc	50, 000 feet 28 V dc
	amperes	amperes
Resistive	1	1
Inductive	.5	.5

TABLE III. PIN's and characteristics.

PIN's	Contact material	Terminals
M8805/109-01	Silver	Single turret
M8805/109-02	Silver	Double turret
M8805/109-03	Gold	Single turret
M8805/109-04	Gold	Double turret

TABLE IV. Qualification inspection.

PIN's	Inspection	Extent of approval
M8805/109-02	Qualification inspection table of MIL-PRF-8805	ALL
M8805/109-03 (10 sample units)	Groups I, VII, and X of qualification inspection table	

Referenced document

MIL-PRF-8805

Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

Custodians:

Navy – EC  
DLA – CC

Preparing activity

DLA – CC

(Project 5930-2006-073)

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 <http://assist.daps.dla.mil/>