

INCH-POUND

MIL-PRF-8805/106B  
12 December 2006

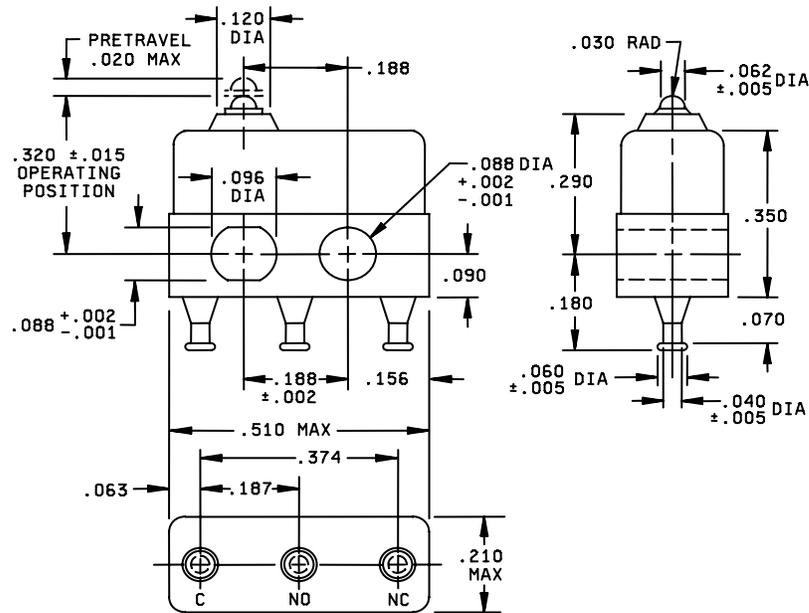
SUPERSEDING  
MIL-PRF-8805/106A  
31 October 2001

PERFORMANCE SPECIFICATION SHEET

SWITCHES, SENSITIVE, SPDT, LOW LEVEL TO 2 AMPERES, 400 DEG. F, UNSEALED

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.



Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
.001	.03	.030	.76	.070	1.78	.156	3.96	.290	7.37
.002	.05	.040	1.02	.088	2.24	.180	4.57	.320	8.13
.005	.13	.060	1.52	.090	2.29	.187	4.75	.350	8.89
.015	.38	.062	1.57	.096	2.44	.188	4.78	.374	9.50
.020	.51	.063	1.60	.120	3.05	.210	5.33	.510	12.95

FIGURE 1. Configuration and dimensions.

NOTES:

1. Dimensions are in inches.
2. Unless otherwise specified, tolerances are  $\pm .010$  (0.25 mm's).
3. Mounting holes will accept pins or screws of .087 maximum diameter on  $.188 \pm .002$  centers.
4. Metric equivalents (to the nearest .01 mm) are given for general information.

FIGURE 1. Configuration and dimensions - Continued

REQUIREMENTS:

Dimensions and configuration: See figure 1.

Enclosure design: 1 (unsealed).

Temperature characteristics: 1 (- 55°C to + 205°C).

Shock type: 100 g, in accordance with method 213, MIL-STD-202, test condition C.

Vibration grade: 2 (10-2,000 cps)

Weight: .003 pounds maximum.

Operating characteristics: 20 percent variation from specified values are acceptable after endurance test.

Actuating force: 5 ounces maximum.

Release force: 1 ounce minimum.

Pretravel: .020 inch maximum.

Overtravel: .004 inch minimum.

Movement differential: .002 inch maximum.

Terminals: Terminal finish may be .000050 inch maximum gold plate.

Dielectric withstanding voltage:

1,000 V rms at sea level.

400 V rms at 50,000 feet.

In the qualification inspection table after electrical endurance, the dielectric withstanding voltage points of application between all unconnected terminals of the same pole is not applicable. (See table II)

Mechanical endurance: 100,000 cycles.

Electrical endurance: 100,000 cycles.

Minimum current: Not applicable.

Low level circuit (M8805/106-02 only): 100,000 cycles.

Electrical ratings: See table I.

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

TABLE I. Electrical ratings and PIN's

Load	PIN M8805/106-	
	01	02
Sea level, 28 V dc		
	Amperes	Amperes
Resistive	2.0	1.0
Inductive	1.0	0.5
Lamp	0.25	-----

Qualification:

Group submission: See table II.

Group A inspection: Do not exceed low level electrical ratings during any testing of M8805/106-02.

TABLE II. Group submission qualification inspection.

PIN'S	Number of sample units	Examination or test
M8805/106-01	18	Qualification inspection table of MIL-PRF-8805
M8805/106-02	6	Group I, VII, and X of MIL-PRF-8805 qualification inspection table

Application note: Environmental contamination in the application can adversely affect the ability of the M8805/106 -02 switch to provide consistent performance on low level loads. Protection from environmental contamination can be accomplished by providing an appropriately sealed enclosure.

Referenced documents. In addition to MIL-PRF-8805, this document references the following:

MIL-STD-202

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  
Air Force – 11  
DLA – CC

Preparing activity  
DLA – CC  
  
(Project 5930-2006-072)

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/>