

PERFORMANCE SPECIFICATION SHEET

SWITCHES, PUSH, 2 CIRCUIT AND DPDT,
ALTERNATE AND MOMENTARY ACTION, 2 AMPERES, SPLASHPROOF

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 MIL-PRF-8805.

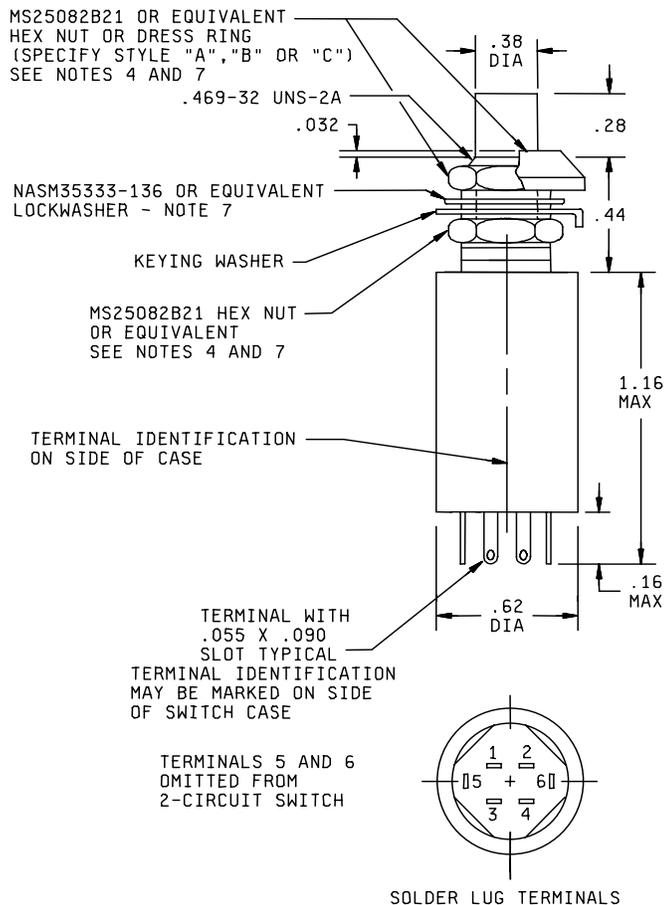


FIGURE 1. Dimensions and configurations.

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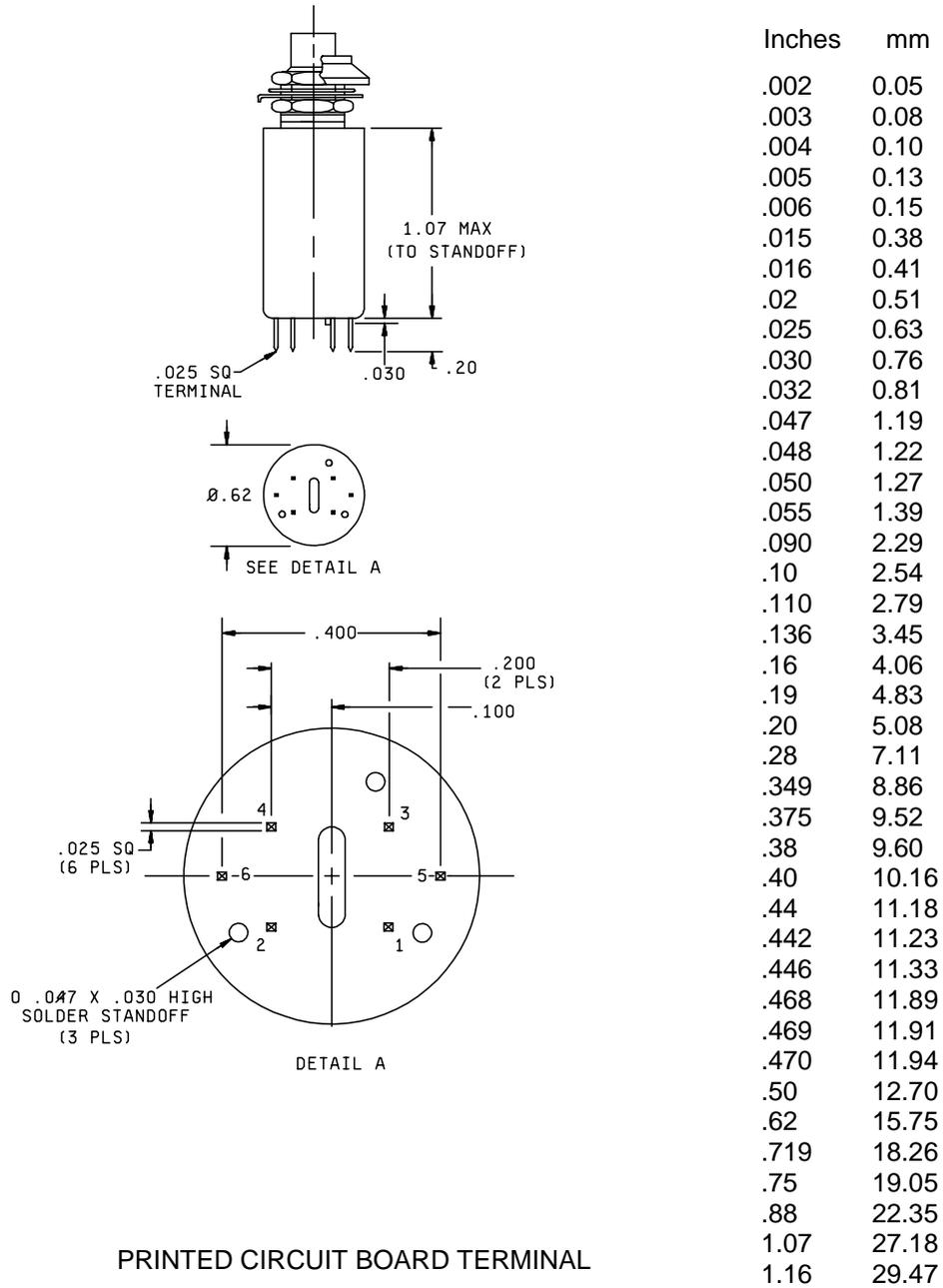
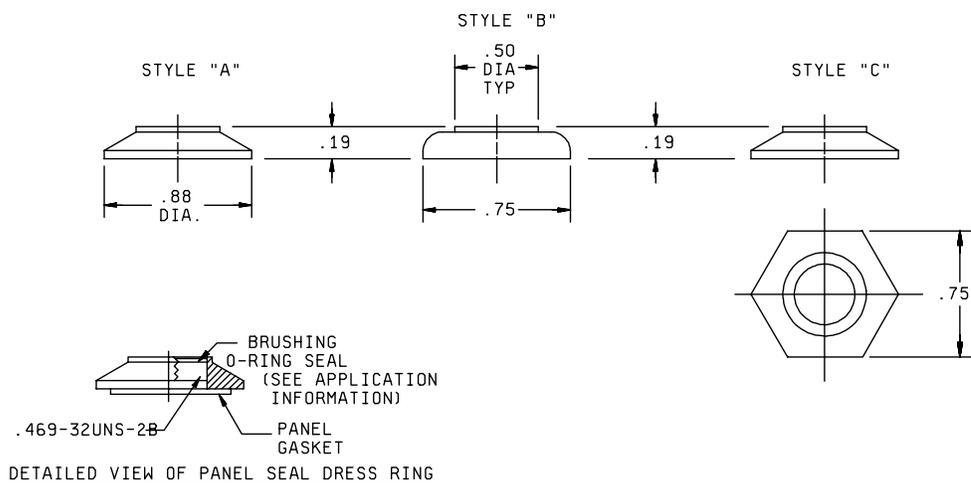


FIGURE 1. Dimensions and configurations - Continued.

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PANEL SEAL DRESS RING

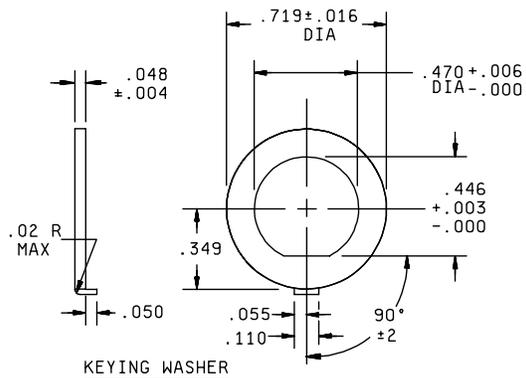
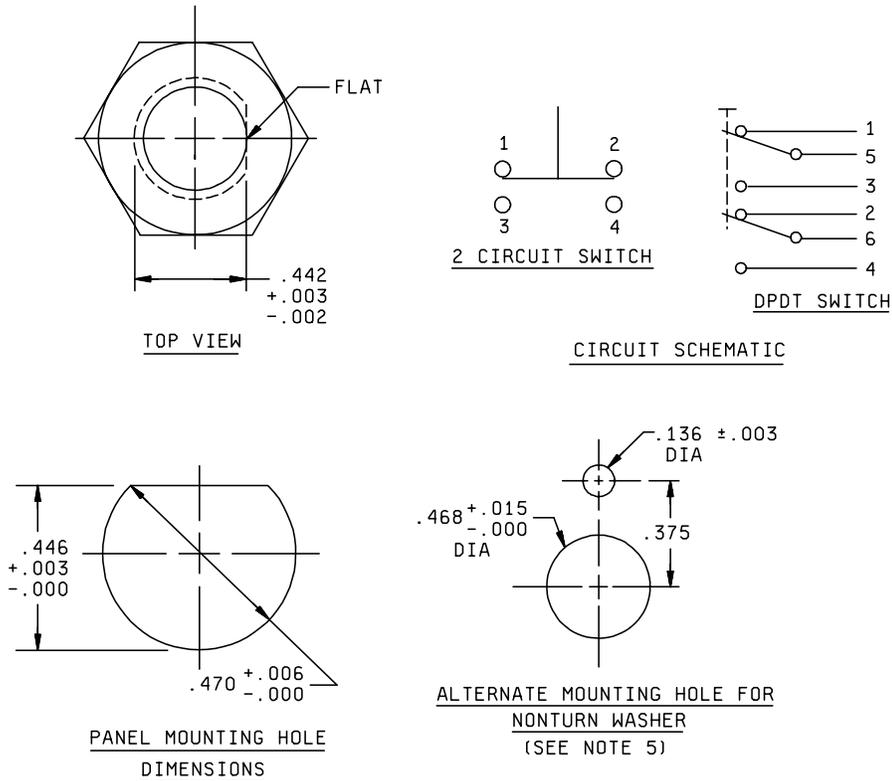


FIGURE 1. Dimensions and configurations - Continued.

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NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerances are $\pm .03$ (0.8 mm) for two place decimals and $\pm .005$ (0.13 mm) for three place decimals.
4. Panel dress ring replaces one hex nut.
5. Alternate mounting hole (2 hole) should not be used for panel seal applications.
6. Terminals 5 and 6 omitted from 2-circuit switch.
7. Alternative base metals and protective finishes as approved by the qualifying activity, may be utilized for hardware material. Dimensions shall be in accordance with the referenced hardware specification.

FIGURE 1. Dimensions and configurations - Continued.

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REQUIREMENTS:

Dimensions and configurations: See figure 1.

Enclosure design: 6 (splashproof) when panel seal dress ring is specified.

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

Shock type:

M, except 50 g's, test condition A, method 213 of MIL-STD-202: Applicable to all switches.

Type H (high impact), in accordance with MIL-S-901, Grade A, Class II. except maximum allowable opening of closed contacts or closing of open contacts is 39 milliseconds. Applicable to momentary action switches only.

Sinusoidal vibration grade: 2 (10 to 2,000 Hz).

Weight: .10 ounce maximum.

Operating characteristics:

Actuating force:..... 3 pounds to 6 pounds.

Plunger travel:..... .176 inch maximum.

Dielectric withstanding voltage:

Sea level: 1,000 V rms.

Altitude: 500 V rms.

Terminal strength:

Printed circuit board compatible pin terminals: Applied force shall be 3 pounds minimum.

Mechanical endurance: 50,000 cycles.

Low temperature: Cycling rate of 30 to 65 cycles per minute.

Electrical endurance: 25,000 cycles.

Electrical ratings: See table I.

Qualification: inspection (group submission): See table II.

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Part or Identifying number (PIN): See tables III and IV.

Application information: Bushing O-ring seal (applicable to units with panel seal) has the potential of stretching and rolling-over onto the flat "D" section of the threaded mounting bushing as the dress bezel ring is installed, causing an improper seating of the O-ring. It is recommended that silicone grease be applied to the O-ring seal in the dress bezel prior to installation to prevent this problem.

TABLE I. Electrical ratings.

Load	Sea level	70,000
	28 V dc 115 V ac, 400 Hz (amperes)	feet 28 V dc (amperes)
Resistive	2.0	2.0
Inductive	1.5	1.5
Lamp	0.5	0.5

TABLE II. Qualification inspection (group submission).

Inspection	Basic Switch	Other switch Samples	Extent of approval
Qualification Inspection Table of MIL-PRF-8805 groups 1 through VIII inclusive	M8805/99-029 (All sample units)	Two sample units each of M8805/99-006, and -015: Visual and mechanical Vibration Shock Operating characteristics Two sample units each of M8805/99-061: Visual and mechanical Solderability Terminal strength Operating characteristics	All

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TABLE III. PIN and characteristics

PIN M8805/99-	Dress ring	Switch action	Switch circuit	Button color	Terminals
001	A	Alternate action	2 circuit	Black	Solder lug
002	B	Alternate action	2 circuit	Black	Solder lug
003	C	Alternate action	2 circuit	Black	Solder lug
005	A	Alternate action	2 circuit	Red	Solder lug
006	B	Alternate action	2 circuit	Red	Solder lug
007	C	Alternate action	2 circuit	Red	Solder lug
033	A	Alternate action	2 circuit	White	Solder lug
034	B	Alternate action	2 circuit	White	Solder lug
035	C	Alternate action	2 circuit	White	Solder lug
009	A	Momentary	2 circuit	Black	Solder lug
010	B	Momentary	2 circuit	Black	Solder lug
011	C	Momentary	2 circuit	Black	Solder lug
013	A	Momentary	2 circuit	Red	Solder lug
014	B	Momentary	2 circuit	Red	Solder lug
015	C	Momentary	2 circuit	Red	Solder lug
037	A	Momentary	2 circuit	White	Solder lug
038	B	Momentary	2 circuit	White	Solder lug
039	C	Momentary	2 circuit	White	Solder lug
017	A	Alternate action	DPDT	Black	Solder lug
018	B	Alternate action	DPDT	Black	Solder lug
019	C	Alternate action	DPDT	Black	Solder lug
021	A	Alternate action	DPDT	Red	Solder lug
022	B	Alternate action	DPDT	Red	Solder lug
023	C	Alternate action	DPDT	Red	Solder lug
041	A	Alternate action	DPDT	White	Solder lug
042	B	Alternate action	DPDT	White	Solder lug
043	C	Alternate action	DPDT	White	Solder lug
025	A	Momentary	DPDT	Black	Solder lug
026	B	Momentary	DPDT	Black	Solder lug
027	C	Momentary	DPDT	Black	Solder lug
029	A	Momentary	DPDT	Red	Solder lug
030	B	Momentary	DPDT	Red	Solder lug
031	C	Momentary	DPDT	Red	Solder lug
045	A	Momentary	DPDT	White	Solder lug
046	B	Momentary	DPDT	White	Solder lug
047	C	Momentary	DPDT	White	Solder lug

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TABLE III. PIN and characteristics - Continued.

PIN M8805/99-	Dress ring	Switch action	Switch circuit	Button color	Terminals
049	A	Alternate action	2 circuit	Black	Printed circuit
050	B	Alternate action	2 circuit	Black	Printed circuit
051	C	Alternate action	2 circuit	Black	Printed circuit
053	A	Alternate action	2 circuit	Red	Printed circuit
054	B	Alternate action	2 circuit	Red	Printed circuit
055	C	Alternate action	2 circuit	Red	Printed circuit
057	A	Alternate action	2 circuit	White	Printed circuit
058	B	Alternate action	2 circuit	White	Printed circuit
059	C	Alternate action	2 circuit	White	Printed circuit
061	A	Momentary	2 circuit	Black	Printed circuit
062	B	Momentary	2 circuit	Black	Printed circuit
063	C	Momentary	2 circuit	Black	Printed circuit
065	A	Momentary	2 circuit	Red	Printed circuit
066	B	Momentary	2 circuit	Red	Printed circuit
067	C	Momentary	2 circuit	Red	Printed circuit
069	A	Momentary	2 circuit	White	Printed circuit
070	B	Momentary	2 circuit	White	Printed circuit
071	C	Momentary	2 circuit	White	Printed circuit
073	A	Alternate action	DPDT	Black	Printed circuit
074	B	Alternate action	DPDT	Black	Printed circuit
075	C	Alternate action	DPDT	Black	Printed circuit
077	A	Alternate action	DPDT	Red	Printed circuit
078	B	Alternate action	DPDT	Red	Printed circuit
079	C	Alternate action	DPDT	Red	Printed circuit
081	A	Alternate action	DPDT	White	Printed circuit
082	B	Alternate action	DPDT	White	Printed circuit
083	C	Alternate action	DPDT	White	Printed circuit
085	A	Momentary	DPDT	Black	Printed circuit
086	B	Momentary	DPDT	Black	Printed circuit
087	C	Momentary	DPDT	Black	Printed circuit
089	A	Momentary	DPDT	Red	Printed circuit
090	B	Momentary	DPDT	Red	Printed circuit
091	C	Momentary	DPDT	Red	Printed circuit
093	A	Momentary	DPDT	White	Printed circuit
094	B	Momentary	DPDT	White	Printed circuit
095	C	Momentary	DPDT	White	Printed circuit

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Table IV. Cancelled PIN's.

M8805/99-	M8805/99-	M8805/99-	M8805/99-
004	028	052	076
008	032	056	080
012	036	060	084
016	040	064	088
020	044	068	092
024	048	072	096

Reference Documents

MIL-PRF-8805
MS25082
MIL-STD-202
NASM35333

The margins of this specification are marked with vertical lines to indicate where modifications from this amendment were made. 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.

Custodians:
Air Force - 11
DLA - CC

Preparing activity:
DLA - CC

(Project 5930-1794)

Review activities:
Air Force – 99

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 www.dodssp.daps.mil/.