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INCH-POUND

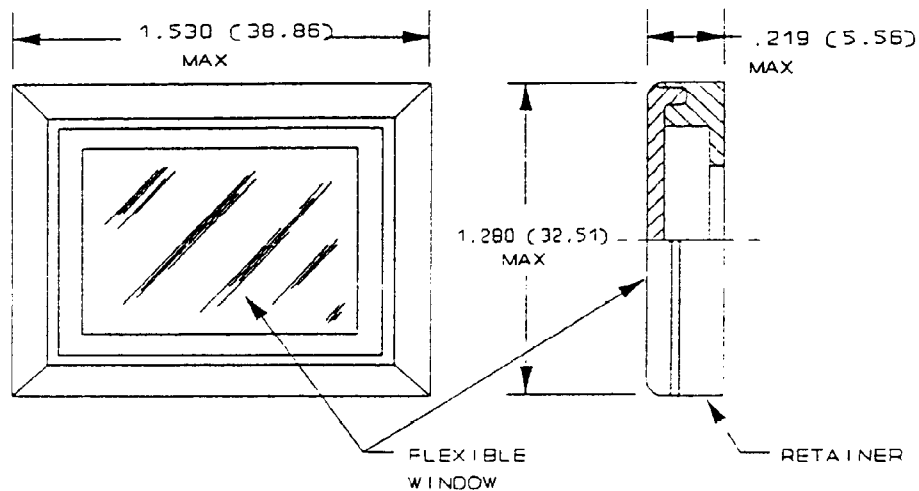
MIL-PRF-22885/13J
17 MARCH 1999
SUPERSEDING
MIL-S-22885/13H
28 January 1994

PERFORMANCE SPECIFICATION SHEET

SWITCH, SUBASSEMBLY, BOOT, DRIPPROOF PANEL SEAL (FOR ILLUMINATED PUSH BUTTON SWITCH)

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

The requirements for acquiring the switch described herein shall consist of this specification sheet and MIL-PRF-22885.



NOTES:

1. Dimensions are in inches.
2. Millimeters are in parentheses.
3. Metric equivalents are given for general information only.

FIGURE 1. Boot.

MIL-PRF-22885/13J

REQUIREMENTS:

Dimensions and configuration: See figure 1.

Classification: See MIL-PRF-22885/9.

Weight: .15 ounce maximum.

Seal: Drip-proof (enclosure design 2).

Sunshine test: With the boot properly assembled to the 4-lamp modular indicator light (or to the 4-lamp illuminated push switch) the boot shall be subjected to the solar radiation (sunshine test), MIL-STD-810, method 505, procedure I, using the basic hot diurnal cycle. At the completion of the test the boot shall be compared to untested boots. There shall be no more than 10 percent change in window transmittance after the completion of the test; nor shall there be any crazing or cracking.

Mechanical endurance: 5,000 cycles at -55°C; 10,000 cycles at +71°C ±2°C; 35,000 cycles at +25°C ±2°C. All four lamps shall be continuously energized at their maximum rated voltage during cycling at the +71°C ±2°C and +25°C ±2°C conditions. MS25237-327 lamps (or industry equivalent) shall be used. Following this test, the legends shall be legible and there shall be no cracking or crazing of the boot.

Marking: Identification marking shall be on unit package or tag.

Part or Identifying Number (PIN): M22885/13-02. PIN M22885/13-01 (with polyvinyl chloride window and stainless steel mounting adapter) has been canceled and replaced by M22885/13-02.

Group A inspection: Shall be in accordance with table I. The sampling plan shall be in accordance with MIL-PRF-22885.

Qualification and group B inspection: Required as part of the 4-lamp illuminated push button switch MIL-PRF-22885/9). Qualification and group B inspections shall consist of the inspections specified in table II.

Intended use: As drip-proof panel seal boot for 4-lamp illuminated push switch, MIL-PRF-22885/9 or for 4-lamp modular indicator light, MIL-PRF-22885/10.

TABLE I. Group A inspection.

<u>Subgroup 1</u>
Visual and mechanical examination <u>1/</u>
<u>Subgroup 2</u>
Seal <u>2/</u>
Luminance <u>3/</u>

1/ Only one sample boot per lot needs to be inspected for compliance to physical dimensions.

2/ The boots shall be examined for pinholes and other surface defects using a lighted 3 diopter inspection equipment.

3/ The luminance inspection requirement may be satisfied with a visual comparison of the transparency of production boots to a conforming standard.

TABLE II. Qualification and group B inspection.

Boot assembled to switch assembly specified below <u>1/</u>	Group	Tests to be performed
M22885/9-02 (4 sample units)	I	Visual and mechanical examination <u>2/</u> Luminance Sunshine Seal
M22885/9-02 (2 sample units from group I)	II	Mechanical endurance Seal Visual and mechanical examination
M22885/9-02 (2 sample units from group I)	III	Shock Vibration Visual and mechanical examination

1/ Switch samples subjected to the mechanical endurance test shall have reverse engraved legend. The legend characters shall be .120 inch high with .020 inch stroke, black filled, and utilizing at least three-fourths of the maximum legend area.

2/ 25 cycles of removal and reinstallation of the boot shall be made during visual examination.

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

Preparing activity:
 DLA - CC
 (Project 5930-1669-03)

Review activities:
 Army - AT, AV, CR4, MI
 Navy - AS, MC, OS
 Air Force - 99