

INCH-POUND

MIL-PRF-83504/2D
23 February 2001
SUPERSEDING
MIL-PRF-83504/2C
27 October 1993

PERFORMANCE SPECIFICATION SHEET

SWITCHES, DUAL IN-LINE PACKAGE (DIP), ROCKER ACTUATOR, LOW PROFILE,
SINGLE POLE, SINGLE THROW STATIONS, SEALED 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 sheet and the issue of the following specification listed in that issue of the Department of Defense Index of Specifications and Standards (DODISS) specified in the solicitation: MIL-PRF-83504.

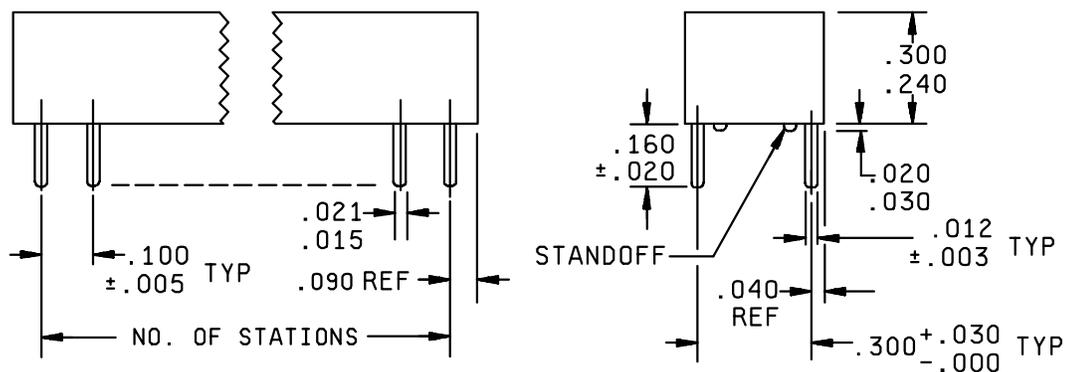
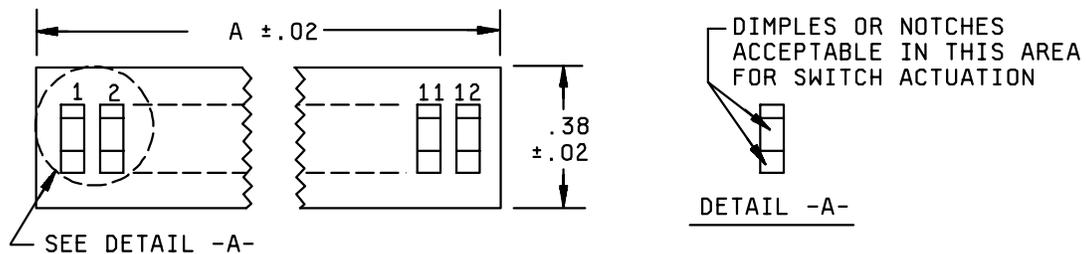
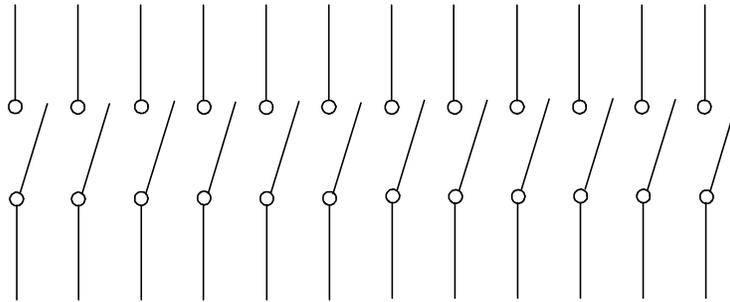


FIGURE 1. Dimensions and configuration.

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Typical contacts circuit arrangement 12 station switch.
(Contacts shown in open position)

| Inches | mm | Inches | mm |
|--------|------|--------|------|
| .003 | 0.08 | .040 | 1.02 |
| .005 | 0.13 | .090 | 2.29 |
| .012 | 0.30 | .100 | 2.54 |
| .015 | 0.38 | .160 | 4.06 |
| .020 | 0.51 | .240 | 6.10 |
| .021 | 0.53 | .300 | 7.62 |
| .030 | 0.76 | .380 | 9.65 |

NOTES

1. Dimensions are in inches. Metric equivalents are given for information only.
2. Each switch station is shown in the "OFF" position. Continuity is established (switch is turned "ON") when the rocker extension nearer the number is depressed.
3. Each switch position shall be numbered as shown.
4. Exact shape of switch is optional, provided outline dimensions are not exceeded.
5. Design of terminals and standoffs are optional

FIGURE 1. Dimensions and configuration - Continued.

REQUIREMENTS:

Material:

Body and actuator rocker: Molded plastic.

Terminals: Plug-in or solderable. See table I. The solderable terminals shall be equivalent to or better than solder over nickel over copper over brass. Both plug-in and solderable must meet solderability requirements.

Terminal sealing and solderability: The terminal potting material meniscus may extend to .030 inch maximum beyond the solder standoff.

Dimensions and configuration: See figure 1 and table I.

Seal: Sealed base. Temporary tape top seal.

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Switch position and setting identification: See figure 1.

Orientation: See figure 1.

Operating force: 6-32 ounces.

Electrical ratings:

- 10 mA maximum at 50 mV, switching (resistive load)
- 100 mA maximum at 6 V dc, switching (resistive load)
- 25 mA maximum at 24 V dc, switching (resistive load).

Application note: In applications where the switch will mate with sockets or with panel boards, the user should consider the compatibility of the mating terminals with respect to finished and mechanical configurations.

Part or Identifying Number (PIN): M83504/02- (and dash number from table I).

TABLE I. Dash numbers and characteristics

| Dash number | | Number of stations | Dimension "A" inches (mm) | |
|------------------------------|------------|--------------------|---------------------------|---------|
| Terminal finish | | | | |
| Gold ^{1/} (Plug-in) | Solderable | | | |
| 001 | 021 | 1 | .280 | (7.11) |
| 002 | 022 | 2 | .280 | (7.11) |
| 003 | 023 | 3 | .380 | (9.65) |
| 004 | 024 | 4 | .480 | (12.19) |
| 005 | 025 | 5 | .580 | (14.73) |
| 006 | 026 | 6 | .680 | (17.27) |
| 007 | 027 | 7 | .780 | (19.81) |
| 008 | 028 | 8 | .880 | (22.35) |
| 009 | 029 | 9 | .980 | (24.89) |
| 010 | 030 | 10 | 1.080 | (27.43) |
| 011 | 031 | 11 | 1.180 | (29.97) |
| 012 | 032 | 12 | 1.280 | (32.51) |

^{1/} PIN's for switches equipped with gold terminations are inactive for new design.

Custodians:
 Army - CR
 Navy - EC
 Air Force - 11

Preparing activity:
 DLA - CC
 (Project 5930-1128-02)

Review activities:
 Army - AV, MI
 Navy - AS
 Air Force - 99