

PI & PM SERIES SPST SEALED PIANO DIP SWITCHES

FEATURES

Built-in seal for process compatibility.
High reliability.
Splayed thru-hole or SMT terminals.
2, 4, 6, 8 & 10 positions.
Piano style actuators.
Dual in-line .100" x .300" term. spacing.

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

GENERAL SPECIFICATIONS

ELECTRICALS

| | |
|--------------------------------------|--|
| Electrical life | 200 cycles min. per switch @ 24 VDC, 25 mA |
| Contact rating, non-switching | 100 mA at 50 VDC |
| Contact rating, switching | 25 mA at 24 VDC |
| Contact resistance at current 100 mA | 50 m Ω max. initial - 100 m Ω max. after life test |
| Insulation resistance at 500 VDC | 100 M Ω minimum |
| Dielectric strength | 300 VAC for 1 minute |
| Capacitance | 5 pf. max. between adjacent terminals |

MECHANICALS, THERMALS

| | |
|-----------------------------|--|
| Mechanical life | 500 cycles min. per switch |
| Operating force | 800 grams max. |
| Vibration | 10-55 Hz.per MIL-STD-202F METHOD 201A |
| Shock | 50 G (peak value) for 11 msec. per MIL-STD-202F, METHOD 213B |
| Operating temperature range | -40°C to 85°C |

SOLDERING & CLEANING RECOMMENDATIONS*

| | |
|--|---|
| Hand soldering | 320°C max. for 2 seconds max.(30 watt iron max.) |
| Wave soldering | 260°C max. for 5 seconds max. Note PM Series is vapor phase or IR reflow solderable. |
| Force rinse, high agitation or triple bath cleaning method | Sealed construction permits washing with freons, alcohol, water and steam. When vapor methods are used, do not subject switch to solvents above 51°C. |

* Note: keep switches in "ON" position during soldering and cleaning for best results

MATERIALS

| | |
|---------------|--|
| Base & Cover | UL94V-O, high temperature thermoplastic, color black |
| Actuators | UL94V-O, high temperature thermoplastic, color .01*white |
| Contacts | Gold over nickel plated copper alloy or brass |
| Terminals | Tin/lead (90/10 solder) plated copper alloy or brass |
| Term. Sealing | Molded-in |
| Tape seal | High temperature modulus Teflon internal seal |

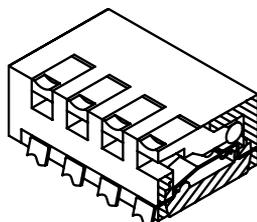
PI and PM models feature a uniquely designed internal seal!

PACKAGING

DIP switches are shipped in standard IC tubes with all actuators in the "ON" position.
Tape & reel packaging per EIA available for PM models - consult factory.

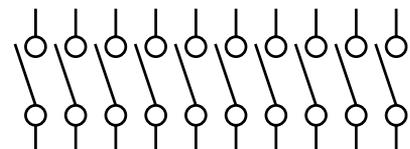
SWITCH CROSS SECTION

Double contact system



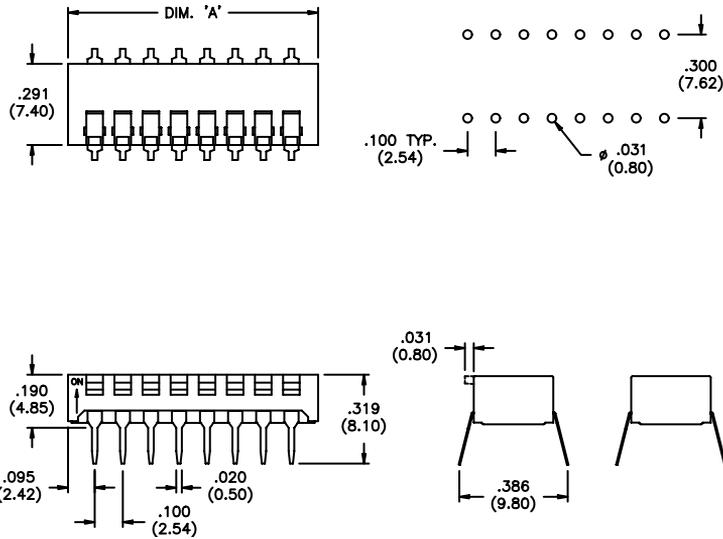
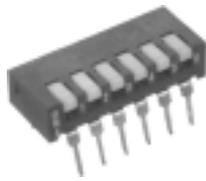
PI & PM

SCHEMATIC (TYPICAL)



See tabulations on following page for number of positions available (10 shown)

PI Series Piano ρ



| Actuator Style | MODEL NO. (internally sealed) | No. of Pos. | 'A' Dimension ± 0.12 (0,30mm) |
|----------------|-------------------------------|-------------|-----------------------------------|
| Flush | PI02090 | 2 | .290 (7,37) |
| | PI04090 | 4 | .490 (12,45) |
| | PI06090 | 6 | .690 (17,53) |
| | PI08090 | 8 | .890 (22,61) |
| Extended | PI10090 | 10 | 1.090 (27,69) |
| | PI02190 | 2 | .290 (7,37) |
| | PI04190 | 4 | .490 (12,45) |
| | PI06190 | 6 | .690 (17,53) |
| Extended | PI08190 | 8 | .890 (22,61) |
| | PI10190 | 10 | 1.090 (27,69) |

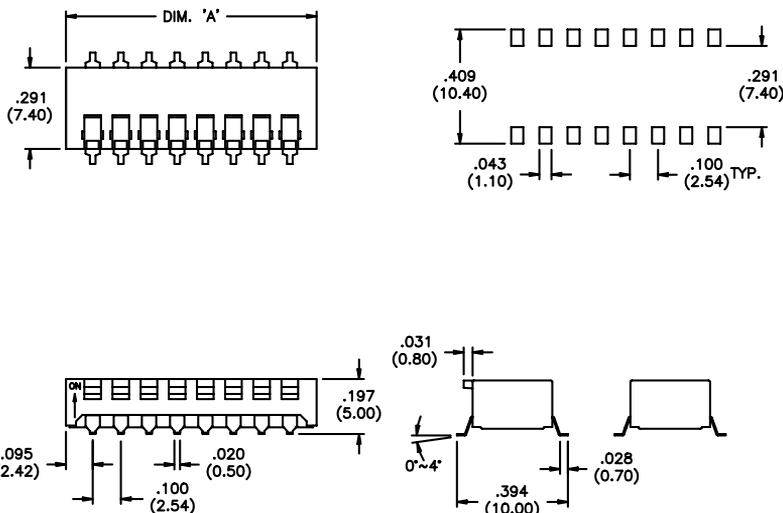
ρ Auto-insertable using equipment from Amistar, Dynapert, Panasert, Northeastern Tool, Universal and others.

PI and PM models listed feature a uniquely designed internal seal!

Non-sealed versions are also available. To order the non-sealed model, replace the '0' at the end of the model number with '1'.

P

PM Series Piano ρ



| Actuator Style | MODEL NO. (internally sealed) | No. of Pos. | 'A' Dimension ± 0.12 (0,30mm) |
|----------------|-------------------------------|-------------|-----------------------------------|
| Flush | PM02090 | 2 | .290 (7,37) |
| | PM04090 | 4 | .490 (12,45) |
| | PM06090 | 6 | .690 (17,53) |
| | PM08090 | 8 | .890 (22,61) |
| Extended | PM10090 | 10 | 1.090 (27,69) |
| | PM02190 | 2 | .290 (7,37) |
| | PM04190 | 4 | .490 (12,45) |
| | PM06190 | 6 | .690 (17,53) |
| Extended | PM08190 | 8 | .890 (22,61) |
| | PM10190 | 10 | 1.090 (27,69) |

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