

SF Series

Sub-Miniature Slide Switches



SPECIFICATIONS

CONTACT RATING: Dependent upon contact material

MECHANICAL LIFE: 30,000 make-and-break cycles.

CONTACT RESISTANCE: 20 mΩ max. initial @ 2-4VDC
100mA for both silver and gold plated contacts.

INSULATION RESISTANCE: 1,000 MΩ min.

DIELECTRIC STRENGTH: 1,000 Vrms min.@sea level.

OPERATING TEMPERATURE: -30°C to 85°C.

MATERIALS

CASE: Diallyl phthalate (DAP) (UL94v-0).

HOUSING: Brass,tin plated.

ACTUATOR: Nylon,black std.

CONTACT: Brass,with silver or gold plated.

TERMINALS: Copper alloy,with silver and gold plated.



HOW TO ORDER

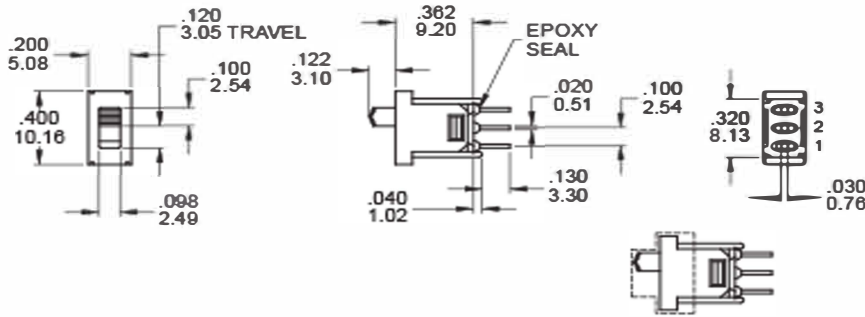
| MODEL NO. | ACTUATOR | TERMINATIONS | TERMINAL PLATING | SEAL | RoHS SOLDERING |
|---|--|---|--|--|---|
| <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div> <p>Model NO. 5FS1 SP On-None-On 5FS3 SP On-Off-On 5FD1 DP On-None-On 5FD3 DP On-Off-On</p> | <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div> <p>Actuator S102 3.10 high S202 5.00 high</p> | <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div> <p>Terminations M2 PC thru-hole M5 Wire wrap M6 Right angle, PC thru-hole M6N Right angle, snap-in, PC thru-hole M7N Vertical right angle, snap-in, PC thru-hole MZ Surface mount.</p> | <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <p>Terminal plating Q Silver R Gold G Gold,pure-tin S Silver,pure-tin C Gold over silver K Gold over silver,pure-tin</p> | <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <p>Seal E EPOXY (std) N NO EPOXY</p> | <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <p>RoHS soldering <input type="checkbox"/> RoHS Compliant <input type="checkbox"/> RoHS & Lead Free</p> |

SWITCH FUNCTION

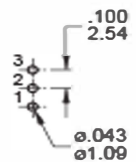
| NO. POLES | UL/CSA MODEL NO. | MODEL NO. | SWITCH FUNCTION | | | CONNECTED TERMINALS / SCHEMATIC | | |
|-----------|------------------|-----------|-----------------|-------|-------|---------------------------------|-------|------------------------------|
| | | | POS.1 | POS.2 | POS.3 | POS.1 | POS.2 | POS.3 |
| SP | Q2511 | 5FS1 | ON | NONE | ON | 2-1 | N/A | 2-3 |
| | Q2513 | 5FS3 | ON | OFF | ON | 1-2 (COMM) 1-3 | OPEN | 1-2 (COMM) 1-3 |
| DP | Q2521 | 5FD1 | ON | NONE | ON | 2-1,5-4 | N/A | 2-3,5-6 |
| | Q2523 | 5FD3 | ON | OFF | ON | 1-2 (COMM) 1-3 4-5 4-6 | OPEN | 1-2 (COMM) 1-3 4-5 4-6 |

MOM=MOMENTARY

POLE OPTIONS



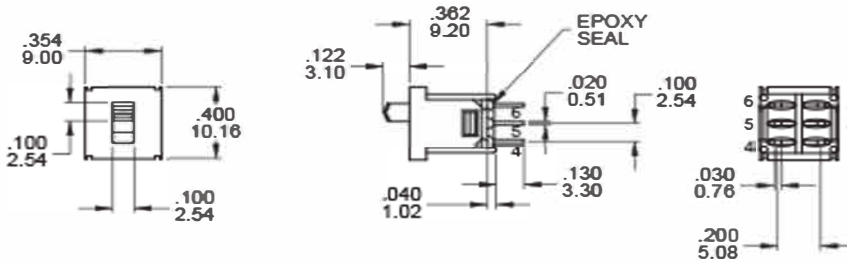
P.C. MOUNTING



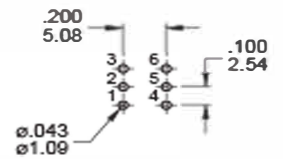
SPDT

Waterproof transparent cover

Part No. Shown : 5FS1S102M2QE



P.C. MOUNTING

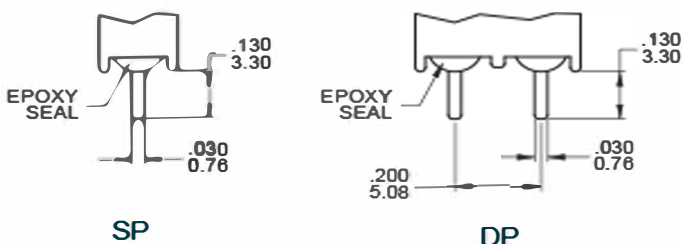


DPDT

Part No. Shown : 5FD1S102M2QE

TERMINATION OPTIONS

M2 PC Thru-hole

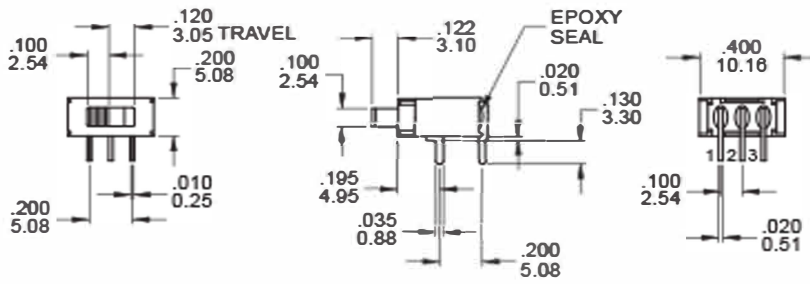


OTHER TERMINATION OPTIONS

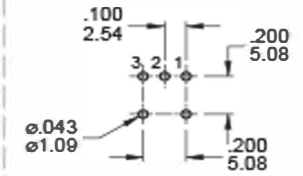
- M6 Right angle P.C. Mount
- M6N Snap-in, Right angle P.C. Mount

SF Series

M6



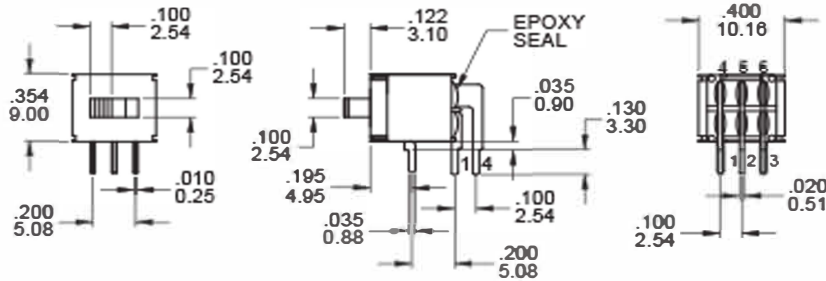
P.C. MOUNTING



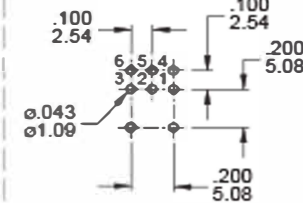
SPDT

Part No. Shown : 5FS1S102M6QE

M6



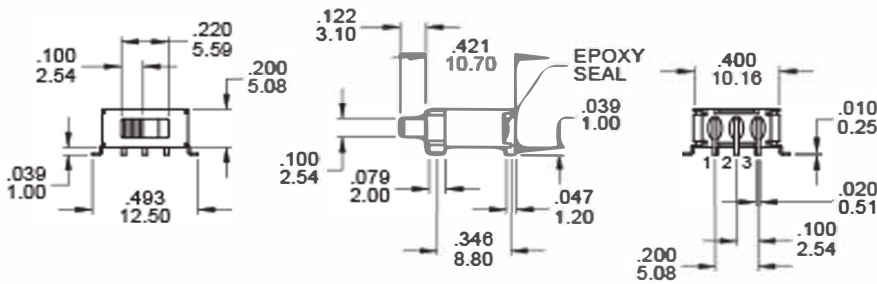
P.C. MOUNTING



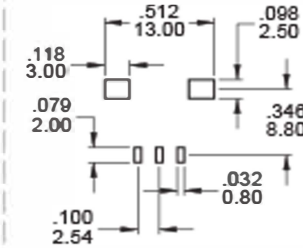
DPDT

Part No. Shown : 5FD1S102M6RE

MZ



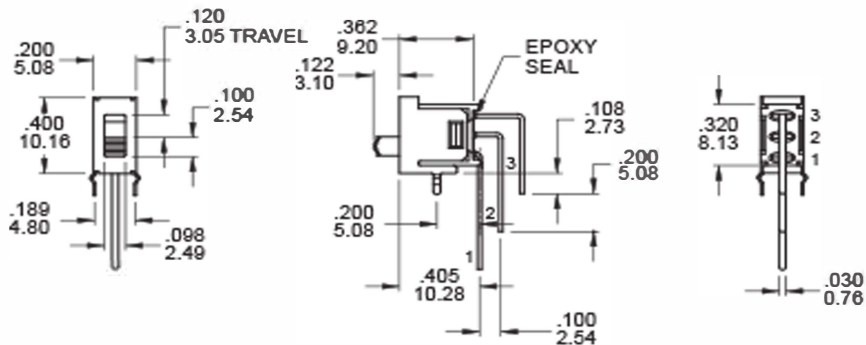
P.C. MOUNTING



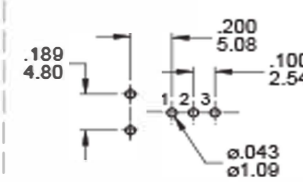
SPDT

Part No. Shown : 5FS1S102MZRE

M7N (SP only)



P.C. MOUNTING

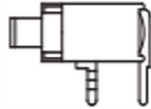


SPDT

Part No. Shown : 5FS1S102M7NRE

SNAP-IN TERMINATION OPTIONS

M6N



CONTACT MATERIAL OPTIONS

| | CONTACT PLATING | TERMINAL PLATING Q | RATINGS |
|---|------------------|---------------------------------|---|
| Q | Silver | = Silver | 3 Amps with resistant load @ 120VAC or 28VDC 1 Amps with resistant load @ 250VAC |
| S | | S = Silver,pure - tin | |
| C | Gold over Silver | C = Gold over silver | 0.4 Volt - Amps (VA) max. @ 20V max. (AC or DC) |
| K | | K = Gold over silver,pure - tin | |
| R | Gold | R = Gold | |
| G | | G = Gold,pure - tin | |

SOLDERING PROCESSES

MANUAL SOLDERING: Use soldering iron of 30 watts, controlled at 350°C approximately 5 seconds while applying solder.

WAVE SOLDERING: Recommended Soldering Temperature: 260 ± 5°C

Duration of Solder Immersion: Max 5 sec. (PCB is 1.6mm in thickness)