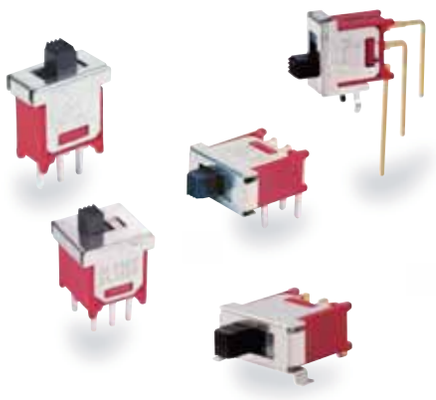
Sub-Miniature Slide Switches 5F Series



SPECIFICATIONS

CONTACT RATING: Dependent upon contact material.
MECHANICAL LIFE: 30,000 make-and-break cycles.
CONTACT RESISTANCE: 20mΩ max. initial @ 2-4VDC
100mA for both silver and gold plated contacts.
INSULATION RESISTANCE: 1,000MΩ min.
DIELECTRIC STRENGTH: 1,000 V RMS@sea level.
OPERATING TEMPERATURE: -30°C to 85°C.

MATERIALS

CASE: Diallyl phthalate (DAP) (UL94v-0).
HOUSING: Brass,tin plated.
ACTUATOR: Nylon,black.
CONTACT: Silver or gold plated.
TERMINAL SEAL: Copper alloy,with silver and gold plated .
(See Page 97)

HOW TO ORDER

MODEL NO. | ACTUATOR | TERMINATIONS | CONTACT MATERIAL | SEAL | ROHS SOLDERING

MODEL NO.
5FS1 SP On-None-On
5FS2 SP On-None-Mom
5FS3 SP On-Off-On
5FD1 DP On-None-On
5FD3 DP On-Off -On

ACTUATOR
S1 3.10 high

TERMINATIONS
M2 PC thru-hole
M5 Wire wrap
M6 Right angle, PC thru-hole
M6N Right angle, snap-in, PC thru-hole
M7 Vertical right angle, PC thru-hole
MT (STD) Right angle, surface mount.

CONTACT MATERIAL
Q Silver
R Gold
G Gold,pure-tin
S Silver,pure-tin
C Gold over silver
K Gold over silver,pure-tin

SEAL
E EPOXY (std)
N NO EPOXY

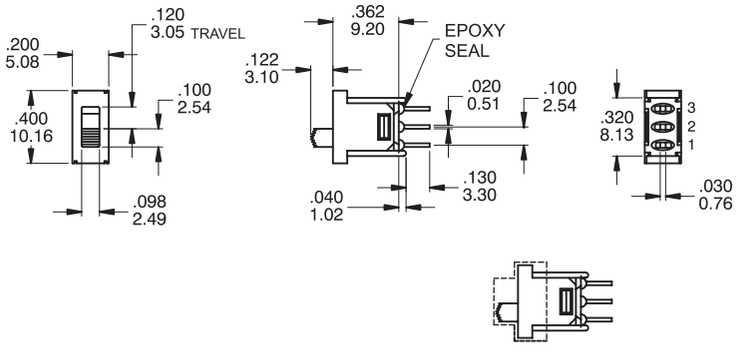
☐ Rohs Compliant
S Rohs & Lead Free

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	2 (COMM) 1 3	OPEN	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	2 (COMM) 5 1 3 4 6	OPEN	2(COMM) 5 1 3 4 6

MOM=MOMENTARY

POLE OPTIONS

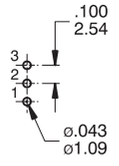


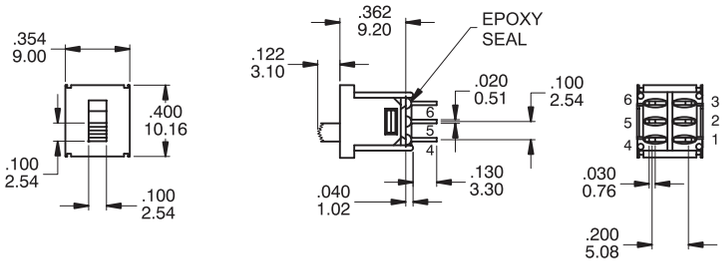
Waterproof transparent cover

SPDT

Part No. Shown : 5FS1S102M2QE

P.C. MOUNTING





DPDT

Part No. Shown : 5FD1S102M2QE

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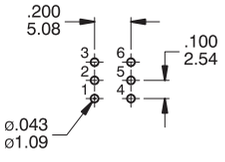
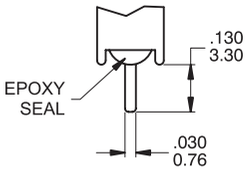
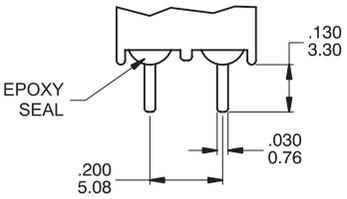


TERMINATION OPTIONS

M2 PC THRU-HOLE



SP

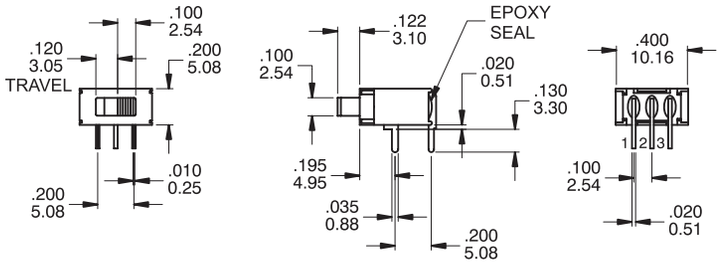


DP

OTHER TERMINATION OPTIONS	
M6	RIGHT ANGLE P.C. MOUNT
M6N	SNAP - IN RIGHT ANGLE P.C. MOUNT

Slide Switches

M6



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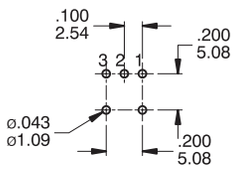
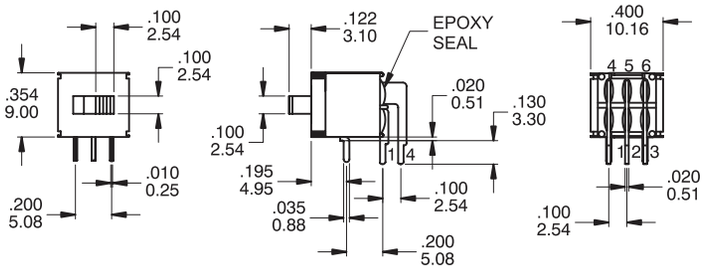


SPDT

Part No. Shown : 5FS1S102M6QE

M6



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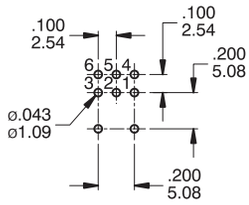
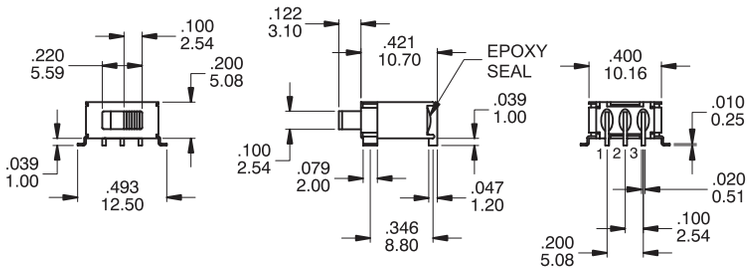


DPDT

Part No. Shown : 5FD1S102M6QE

MZ



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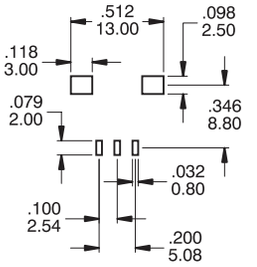
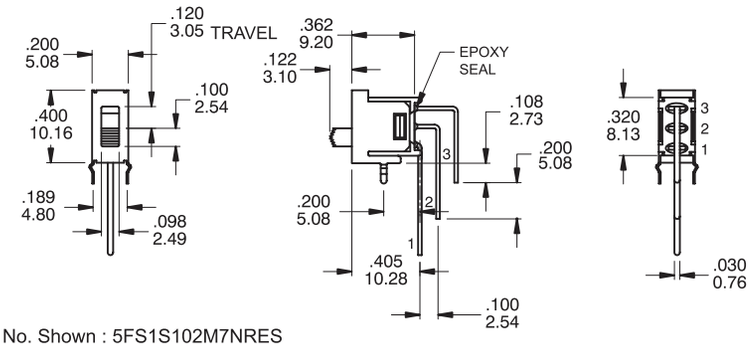


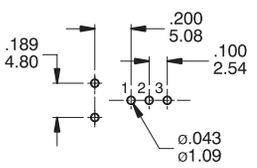
SPDT

Part No. Shown : 5FS1S102MZRES

M7N



P.C. MOUNTING



SPDT

Part No. Shown : 5FS1S102M7NRES

SNAP-IN TERMINATION OPTIONS

M6N

Slide Switches

CONTACT MATERIAL OPTIONS

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

RoHS compliant

Pb lead-free

c UL us

SOLDERING PROCESSES

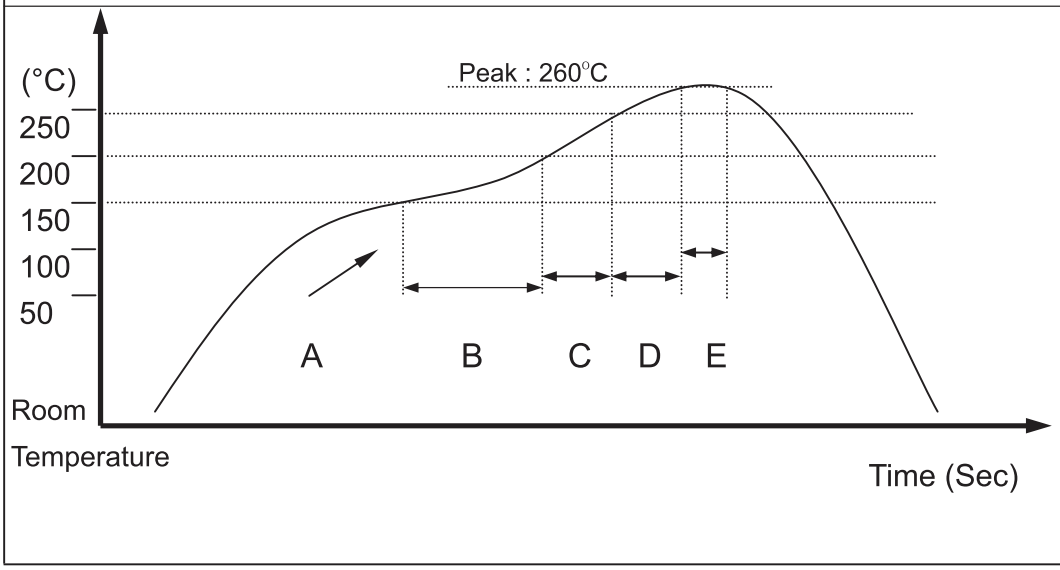
MANUAL SOLDERING : Use soldering iron of 30 watts, controlled st 350°C approximately 5 seconds while applying solder.

WAVE SOLDERING : Recommended Soldering Temperature : 260 ± 5°C
Duration of Solder Immersion : 5 ± 1 seconds
(PCB is 1.6mm in thickness)

SOLDERING : Vapor phase

Temperature Profile

Zone	Room Temperature	Time (Sec)
Pre-heat (A)	150°C	Min 120s
Soak (B)	180°C ~ 200°C	Min 150s
Peak (C)	200°C ~ 235°C	Min 30s
Peak (D)	235°C ~ 260°C	Min 40s
Peak (E)	260°C	Max 10s



Slide Switches