

SPECIFICATIONS

CONTACT RATING:Q: 1A @120 VAC or 28 VDC
 ELECTRICAL LIFE: 50,000 make-and-break cycles at full load
 CONTACT RESISTANCE: 20 m Ω max. initial @2-4 VDC,100 mA
 INSULATION RESISTANCE: 1,000 M Ω min.
 DIELECTRIC STRENGTH: 1,500 V RMS @ sea level.
 OPERATING TEMPERATURE: -30 $^{\circ}$ C to 85 $^{\circ}$ C

MATERIALS

CASE - diallyl phthalate (DAP)
 PLUNGER - thermoplastic polyester
 BUSHING - Brass , nickel plated
 HOUSING - Stainless Steel
 CONTACT AND TERMINAL - Copper alloy , silver plated
 SWITCH SUPPORT - Brass , tin-lead

How do you build the switches you need!!

The TS-21 / TS-22 , please see the (A) ;

The TS-21A/TS-21B/TS-22A/TS-22B, please see the (B)

(A) T S - 2 1 - C V - 2 - S B Q - E - A 5

Switches Function		Cap	Cap color	Bushing	Epoxy seal	Vertical support Bracket
TS-21	SPST off-mon.	(none) none	1 white	S 10-48 thd.(FLAT) 5.59	(none) none seal	(none)
TS-22	SPDT on-mon.	CV 5.08	2 black	U none thd.(FLAT) 5.59	E epoxy seal	A5 (std)straight type
		CV1 7.62	3 red	T none thd.(ROUND) 5.59		A5S snap-in type
		F22A With frame	4 orange	V 1/4-40 thd. 7.87		
			5 yellow	S9 flush		
			6 green			
			7 Blue			
			8 Brown			
			9 Gray			

Termination	
B	solder lug
C	P.C
D	wire wrap

Contact Material	
Q	silver plated
R	gold plated
G	gold over silver
K	gold / tin-lead

*The "F22A" only apply for "TS-21".

(B) T S - 2 1 A - C V 1 - 2 - U Q - E -

Horizon Right Angle	Vertical Right Angle	Switches Function	Cap	Bushing	Epoxy seal
TS-21A	TS-21B	SPST off-mom.	(none) none	S 10-48 thd.(FLAT) 5.59	(none) none seal
TS-22A	TS-22B	SPDT on-mom.	CV 5.08	U none thd.(FLAT) 5.59	E epoxy seal
			CV1 7.62	T none thd.(ROUND) 5.59	
				S9 flush	

Cap color	
1	white
2	black
3	red
4	orange
5	yellow
6	green
7	Blue
8	Brown
9	Gray

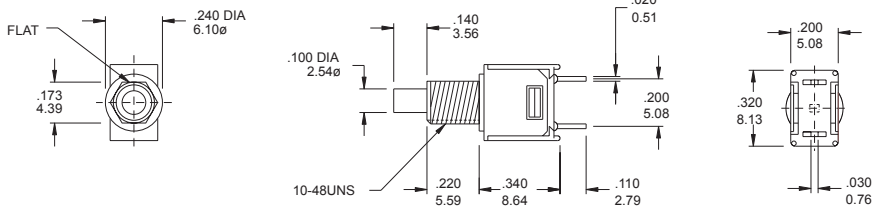
support Bracket
(none) Std. straight type
S snap-in type

Contact Material	
Q	silver plated
R	gold plated
G	gold over silver
K	gold / tin-lead

SPST

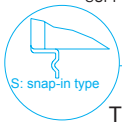
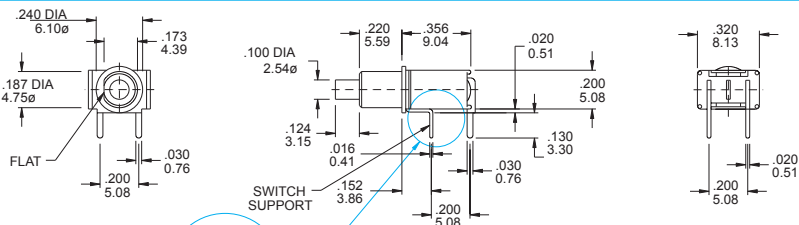

Model No.	Switching position	
TS-21	off	Mom
Term. Comm.	open	1-2

SCHEMATIC


TS-21- SBQ
SPST

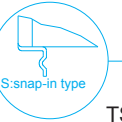
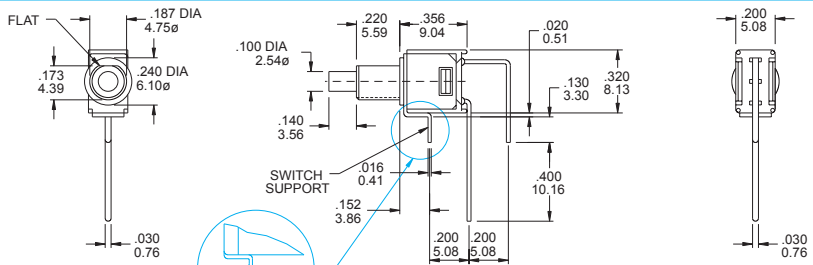

Model No.	Switching position	
TS-21A	off	Mom
Term. Comm.	open	1-2

SCHEMATIC


TS-21A- UQ / TS-21A-UQ-S
SPST

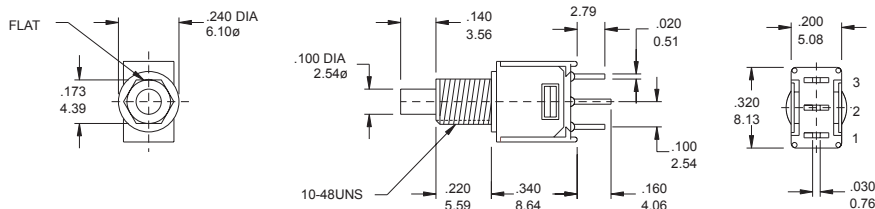

Model No.	Switching position	
TS-21B	off	Mom
Term. Comm.	open	1-2

SCHEMATIC


TS-21B- UQ / TS-21B-UQ-S
SPDT

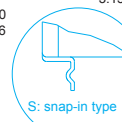
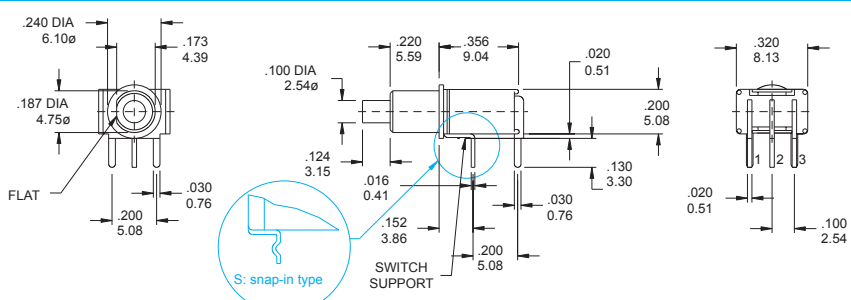

Model No.	Switching position	
TS-22	On	Mom
Term. Comm.	2-1	2-3

SCHEMATIC


TS-22- SBQ
SPDT

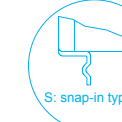
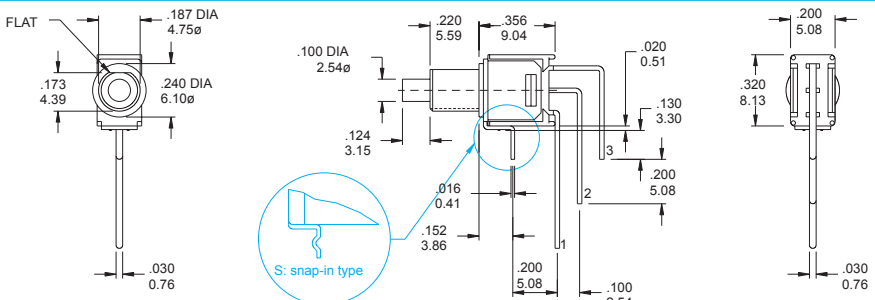

Model No.	Switching position	
TS-22A	On	Mom
Term. Comm.	2-1	2-3

SCHEMATIC


TS-22A- UQ / TS-22A-UQ-S
SPDT


Model No.	Switching position	
TS-22B	On	Mom
Term. Comm.	2-1	2-3

SCHEMATIC


TS-22B- UQ / TS-22B-UQ-S



TS40-P

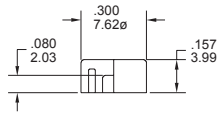
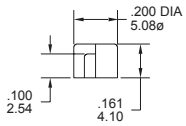
Sub-Miniature push button Switches

Cap and Actuator Option

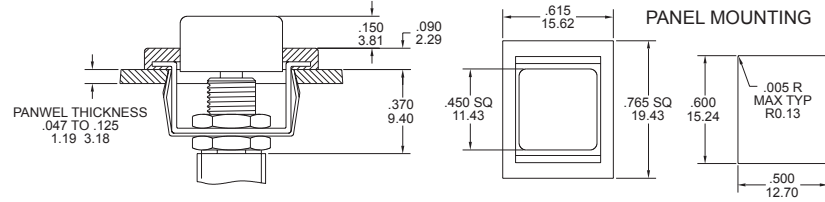
Cap color Option

CV

CV1



F22A



THIS ACTUATOR ONLY APPLY MODEL NO. TS-21 (SPST)

CAP & ACTUATOR OPTIONS	
1	White
2	Black(Std.)
3	Red
4	Orange
5	Yellow
6	Green
7	Blue
8	Brown
9	Gray

Bushing Option

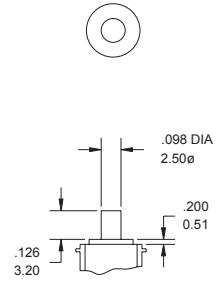
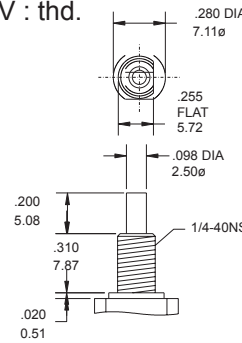
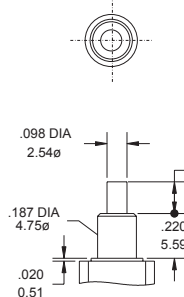
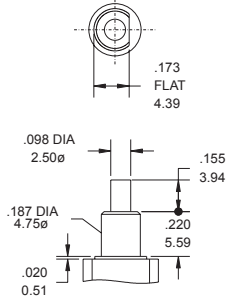
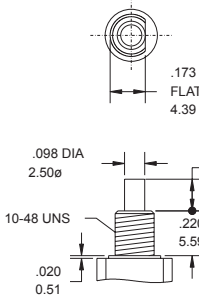
S

U

T

V : thd.

S9



TERMINAL OPTION (ONLY FOR THE TS-21 / TS-22)

Terminal Seal Option

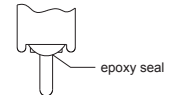
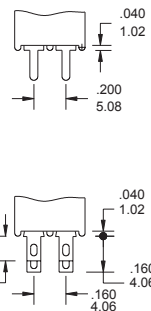
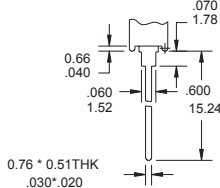
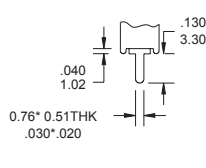
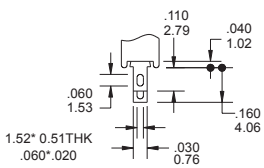
B Solder Lug(STD)

C PRINTED CIRCUIT

D Wire Wrap

DPDT

-E Terminal Seald



P.C.B MOUNTING DIMENSION

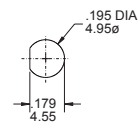
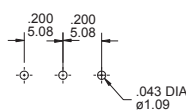
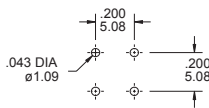
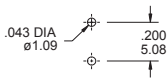
PANEL MOUNTING DIMENSION

TS-21 (PC terminal)

TS-21A

TS-21B

10-48 BUSHING

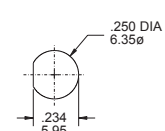
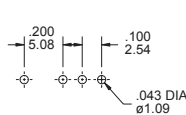
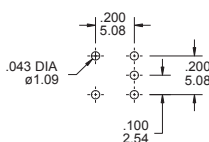
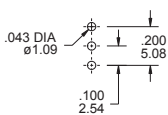


TS-22 (PC terminal)

TS-22A

TS-22B

1/4 IN. BUSHING



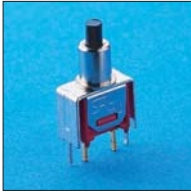
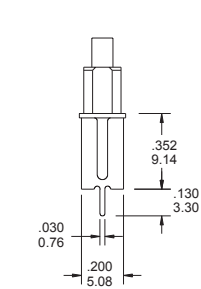
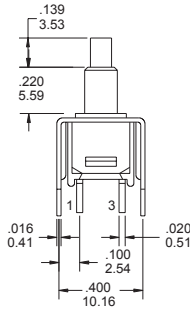
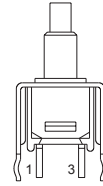
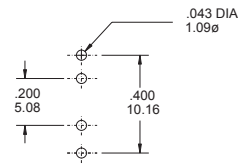
CONTACT MATERIAL OPTIONS

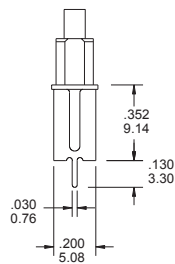
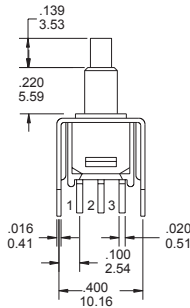
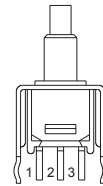
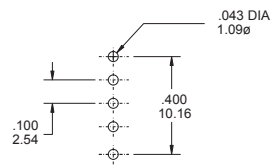
CODE	CONTACT MATERIAL	TERMINAL MATERIAL	RATING
Q	Silver plated	Silver plated	1 A @ 120V AC or 28 V DC;
R	Gold plated over nickel plated	Gold plated over nickel plated	0.4VA MAX @ 20 V AC or DC MAX
G	Gold plated over silver plated	Gold plated over silver plated	0.4 VA MAX @ 20 V AC or DC MAX or 1 A @ 120V AC or 28 V DC;
K	Gold plated over nickel plated	Tin-lead over nickel plated	0.4VA MAX @ 20 V AC or DC MAX

* THE K option is only for some special item. Please inquiry first when you need the "K" option

VERTICAL SUPPORT BRACKET OPTION

only for the TS21/TS22 . If you need the vertical support support bracket , Choose the terminal option in "C" code

A5/ A5S

SPST

TS-21-UCQ-A5

A5 (STD.)
P.C. MOUNTING

A5S (Snap-in)
A5/ A5S

SPDT

TS-22-UCQ-A5

A5 (STD.)
P.C. MOUNTING

A5S (Snap-in)

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