

## SPECIFICATIONS

CONTACT RATING:Q: 1A @120 VAC or 28 VDC

ELECTRICAL LIFE: 50,000 make-and-break cycles at full load

CONTACT RESISTANCE: 20 mΩ max. initial @2-4 VDC, 100 mA

INSULATION RESISTANCE: 1,000 MΩ min.

**DIELECTRIC STRENGTH:** 1,500 V RMS @ sea level.

OPERATING TEMPERATURE: -30°C to +85°C

## MATERIALS

CASE - diallyl phthalate ( DAP )

PLUNGER - thermoplastic polyester

BUSHING - Copper alloy , nickel plated

HOUSING - Stainless Steel

CONTACT AND TERMINAL - Copper alloy , silver plated

**SWITCH SUPPORT** - Copper alloy , tin plated

## 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	
TS-21	SPST off-mom.
TS-22	SPDT on-mom.

Cap or Actuator	
(none)	none
CV	5.08
CV1	7.62
F22A	With frame

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

Plunger		
(none)	std.	
FP	flush type	

Bushing		
S	10-48 thd.(FLAT)	5.59
U	none thd.(FLAT)	5.59
T	none thd.(ROUND)	5.59
V	1/4-40 thd.	7.87
V1	none thd.	7.87
S9	flush	

Termination	
B	solder lug
C	P.C
D	wire wrap

Vertical support Bracket	
(none)	
A5	(std)straight type
A5S	snap-in type

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

Epoxy seal	
(none)	none seal
E	epoxy seal

RoHS code	
H = RoHS Compliant	

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

Horizon Right Angle	Vertical Right Angle	Switches Function
TS-21A TS-22A	TS-21B TS-22B	SPST off-mom. SPDT on-mom.

Cap	
(none) CV CV1	none 5.08 7.62

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

Plunger		
(none) FP	std. flush type	

Bushing		
S	10-48 thd.(FLAT)	5.59
U	none thd.(FLAT)	5.59
T	none thd.(ROUND)	5.59
S9	flush	

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

Epoxy seal	
(none) E	none seal epoxy seal

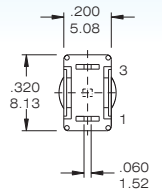
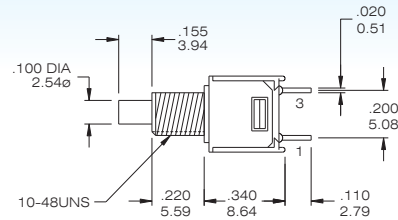
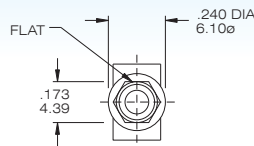
Support Bracket	
(none) S	Std. straight type snap-in type

RoHS code	
H = RoHS Compliant	

**TS40-P****Sub-Miniature Push button Switches****SPST**

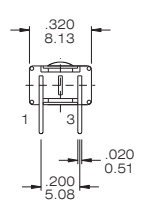
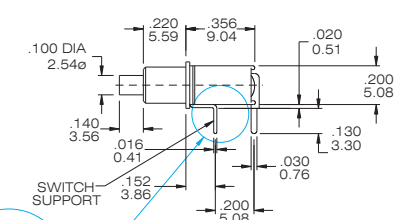
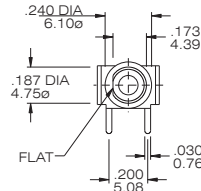
Model No.	Switching position	
TS-21	Off	Mom
Term. Comm.	open	1-3

SCHEMATIC

**TS-21- SBQ****SPST**

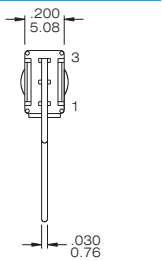
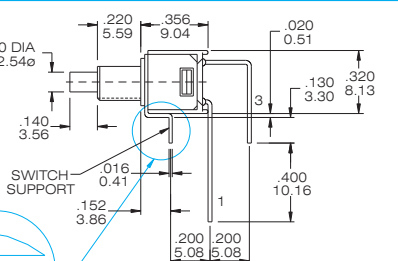
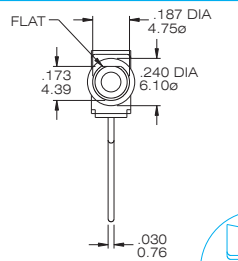
Model No.	Switching position	
TS-21A	Off	Mom
Term. Comm.	open	1-3

SCHEMATIC

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

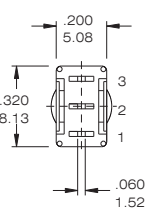
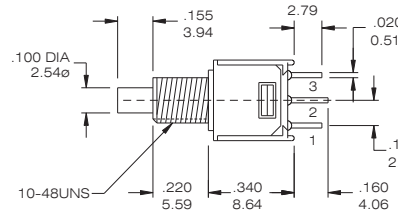
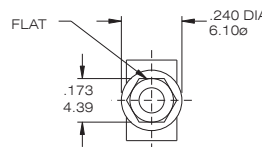
Model No.	Switching position	
TS-21B	Off	Mom
Term. Comm.	open	1-3

SCHEMATIC

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

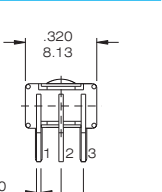
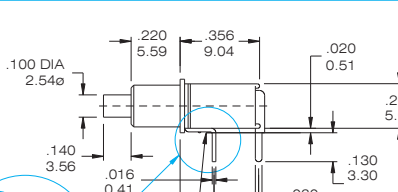
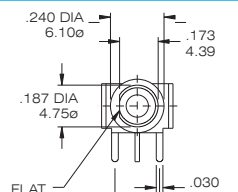
Model No.	Switching position	
TS-22	On	Mom
Term. Comm.	2-1	2-3

SCHEMATIC

**TS-22- SBQ****SPDT**

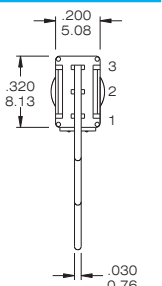
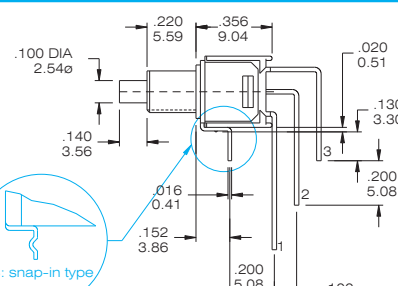
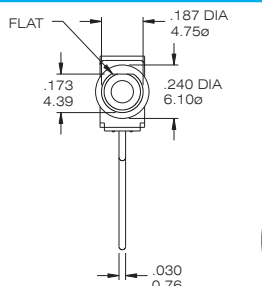
Model No.	Switching position	
TS-22A	On	Mom
Term. Comm.	2-1	2-3

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**

The dimensions in the catalogue and website are for reference only, not suitable for formal acknowledge.





## CONTACT MATERIAL OPTIONS

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

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

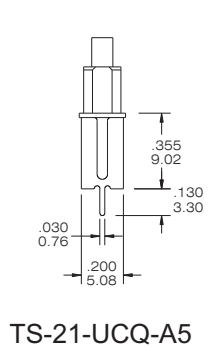
## VERTICAL SUPPORT BRACKET OPTION

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

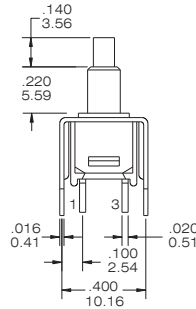
A5/ A5S



SPST

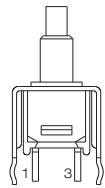
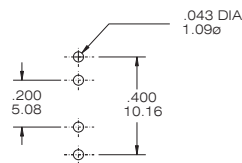


TS-21-UCQ-A5



A5 (STD.)

P.C. MOUNTING

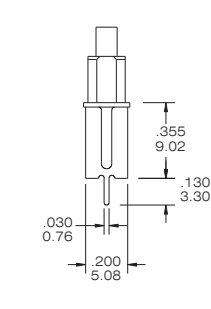


A5S (Snap-in)

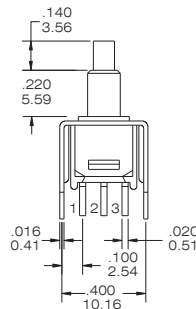
A5/ A5S



SPDT

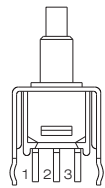
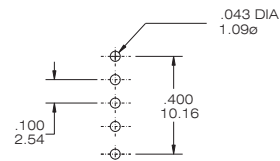


TS-22-UCQ-A5



A5 (STD.)

P.C. MOUNTING



A5S (Snap-in)