



SPECIFICATIONS

CONTACT RATING:Q: 500mA @120 VAC or 28 VDC
 ELECTRICAL LIFE:30,000 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: 500 V RMS @ sea level.
 OPERATING TEMPERATURE: -30°C to 85°C

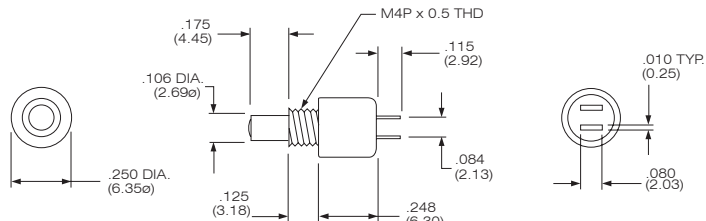
MATERIALS

Base - diallyl phthalate (DAP) (UL94V-0)
 Plunger -Glass filled Nylon(UL94V-0)
 Bushing -Copper alloy , nickel plated
 CONTACT AND TERMINAL - Copper alloy , silver plated

How do you build the switches you need!!

T S - 3 1 - Z - R - E - 2 -

Switch Type	Terminal	Contact material	Epoxy seal	Plunger color	RoHS code
TS-31 SPST short	Z	Q silver plated	(none) none seal	1 White	H = RoHS Compliant
TS-32 SPST long	C	R gold plated	E terminal seal	2 Black	
TS-33 SPST click		G Gold over silver			

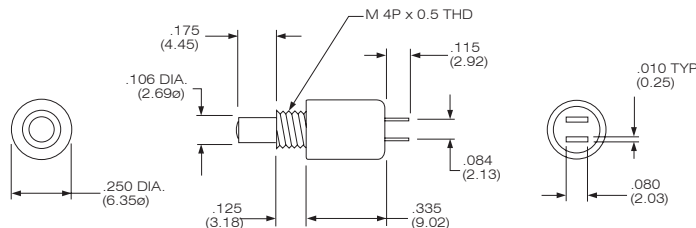


TS-31-ZR-E-2

MODEL NO.	SWITCH FUNCTION	
	POS. 1	POS. 2
TS-31	OFF	MOM.

Schematic:

N.O.
 Total Travel: .040 (1.02) typ.
 Actuation Force: 5 OZ. (140g) typ.
 MOM = Momentary

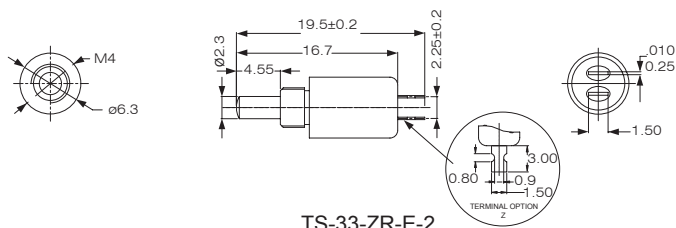


TS-32-ZR-E-2

MODEL NO.	SWITCH FUNCTION	
	POS. 1	POS. 2
TS-32	OFF	MOM.

Schematic:

N.O. w/Overtravel
 Total Travel: .106 (2.69) typ.
 Overtravel: .024 (0.61) typ.
 Actuation Force: 6.25 OZ. (177g) typ.
 MOM = Momentary



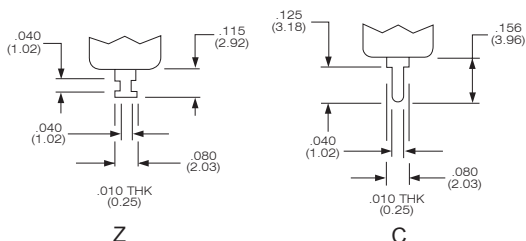
TS-33-ZR-E-2

MODEL NO.	SWITCH FUNCTION	
	POS. 1	POS. 2
TS-33	OFF	MOM.
TS-33A	ON	MOM.

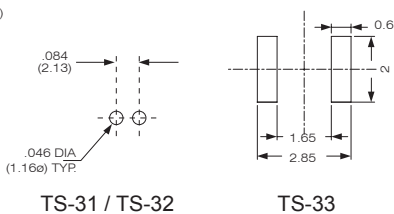
Schematic:

N.O.
 Total Travel: .071(1.80) typ.

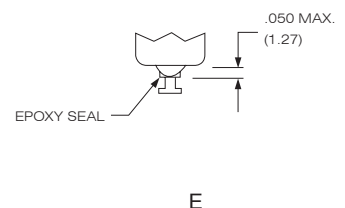
TERMINAL OPTION



PCB LAYOUT



TERMINAL SEAL OPTION



CONTACT MATERIAL OPTIONS

CODE	CONTACT MATERIAL	TERMINAL MATERIAL	RATING
Q	Silver plated	Silver plated	500mA @ 120 V AC or 28 V DC
R	Gold plated over nickel plated	Gold plated over nickel plated	0.4VA MAX @ 20V 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 500mA @ 120 V AC or 28 V DC

INDEX

TOGGLE

ROCKER

SLIDE

PUSH BUTTON

DIP

TACT