

# ETD/ETA/ETS SERIES

## TRI-STATE TYPE

### Features

- With three states (1, open, 0) setting function, especially suitable for encoding / decoding of tristate encoder/decoder integrated circuit to obtain more security codes than traditional two-state (1,0) operation. For instance, 9 bits with tri-state gets 19,683 ( $3^9$ ) codes while two-state gets 512 ( $2^9$ ) codes, gains 38 times in former!
- Bottom sealed standard to ensure free of flux immersion during wave soldering.
- All materials are UL 94V-0 grade fire retardant plastics.
- Gold plated contact to ensure low contact resistance and tin plated terminal to prevent contamination during soldering.
- Twin contact designed to ensure stable contact.
- Ideal for coding of tele-communication, transceiving, remote control and burglar alarm systems which use integrated circuits with tri-state coding system



## SPECIFICATIONS

### 1. ELECTRICAL

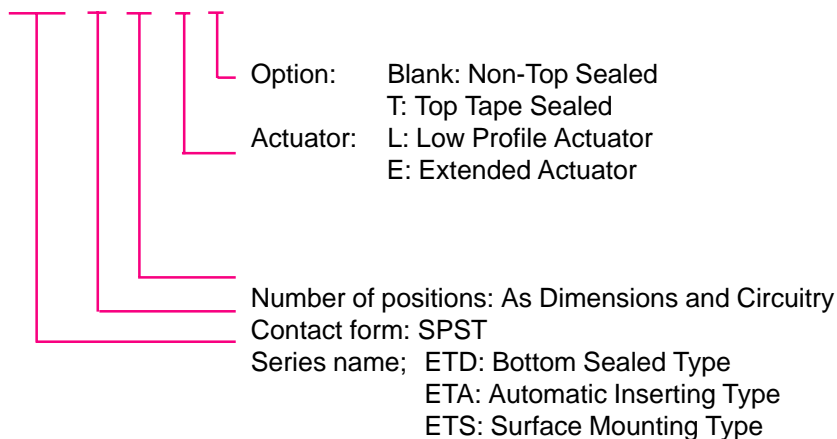
Contact rating	
Switching	25mA, 24VDC
Non-switching	100mA, 50VDC
Contact resistance	
Initial:	50m ohm Max.
After Life test:	100m ohm Max.
Insulation Resistance	1000M ohm Min. at 100VDC
Dielectric strength	500VDC Min. for 60 seconds
Capacitance between adjacent switches	5pF Max.

### 2. MECHANICAL AND ENVIRONMENTAL

Temperature rating	
Operating	-25°C to +70°C
Storage	-40°C to +85°C
Operating force	800g Max.
Mechanical life	2000 Operations
Humidity	95% RH, 40°C for 96 Hrs.
Vibration	Per MIL-STD-202F, Method 204D
Solderability	After flux 230 ± 5°C for 5 ± 0.5 seconds, 95% coverage.
Soldering heat	for ETA, ETD type 260 ± 5°C for 5 ± 1 sec. for ETS type 260 ± 5°C for 10 ± 1 sec. 280 ± 5°C for 2 ± 0.5 sec. (Resistance to IR Reflow Soldering Heat)

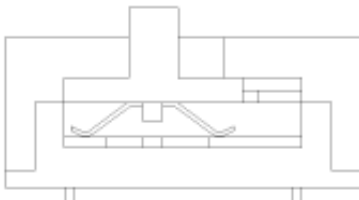
## PART NUMBERING SYSTEM

ETS 1 08 L T

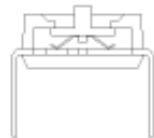


## CONSTRUCTION

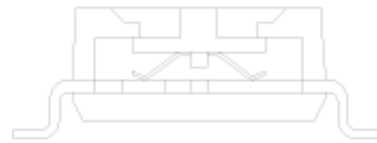
ETD



ETA



ETS

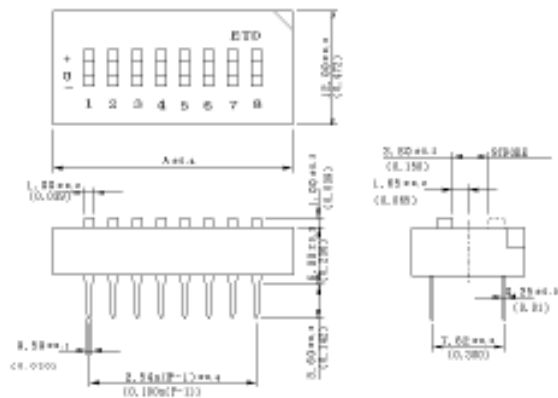


## DIMENSIONS AND CIRCUITRY

ETD

Dimension A		ETD					
Positions	4	5	7	8	9	10	
A	15.36 (0.603)	17.94 (0.702)	22.92 (0.902)	25.46 (1.002)	28.96 (1.142)	39.54 (1.557)	

Unit: mm (inch)



ETA

Dimension A		ETS/ETA								
Positions	2	3	4	5	7	8	9	10	12	
A	8.68 (0.341)	9.22 (0.363)	11.78 (0.463)	14.3 (0.563)	19.38 (0.763)	21.92 (0.863)	24.46 (0.963)	27.00 (1.063)	32.08 (1.263)	

Unit: mm (inch)

