

ETD/ETA/ETS SERIES

TRI-STATE TYPE

PATENT NO.:5065276(U.S.A.)476184856189(U.S.A.)

FEATURES

- With three state (1, open, 0) setting function, especially suitable for encoding/decoding of tri-state 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 has 512 (2^9) codes, gains 38 times more codes with a *USE* tri-state DIP Switch.
- Bottom sealed to ensure free of flux immersion during wave soldering.
- All plastics are UL 94V-0 grade fire retardant.
- Gold plated contact to ensure low contact resistance and tin plated terminals to prevent contamination during soldering.
- Twin contacts designed to ensure stable contact.
- Ideal for coding tele-communication, transceiving, remote control and burglar alarm systems which use integrated circuits with tri-state coding systems.

SPECIFICATIONS

1 . ELECTRICAL

Contact rating	
switching	25 mA, 24 VDC
non-switching	100 mA, 50 VDC
Contact resistance	
initial	50 m Ω Max.
after life test	100 m Ω Max.
Insulation resistance	1000 M Ω Min. at 100 VDC
Dielectric strength	500 VDC Min. for 60 seconds
Capacitance between adjacent switches 5 pF Max.	

2 . MECHANICAL

Temperature rating	
operating	-25°C to + 70°C
storage	-40°C to + 85°C
Operation 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
Resistance to soldering heat	260±5°C for 5±1 seconds
Reflow soldering heat for SMT type (reference only)	reflow zone 230±5°C for 30 seconds

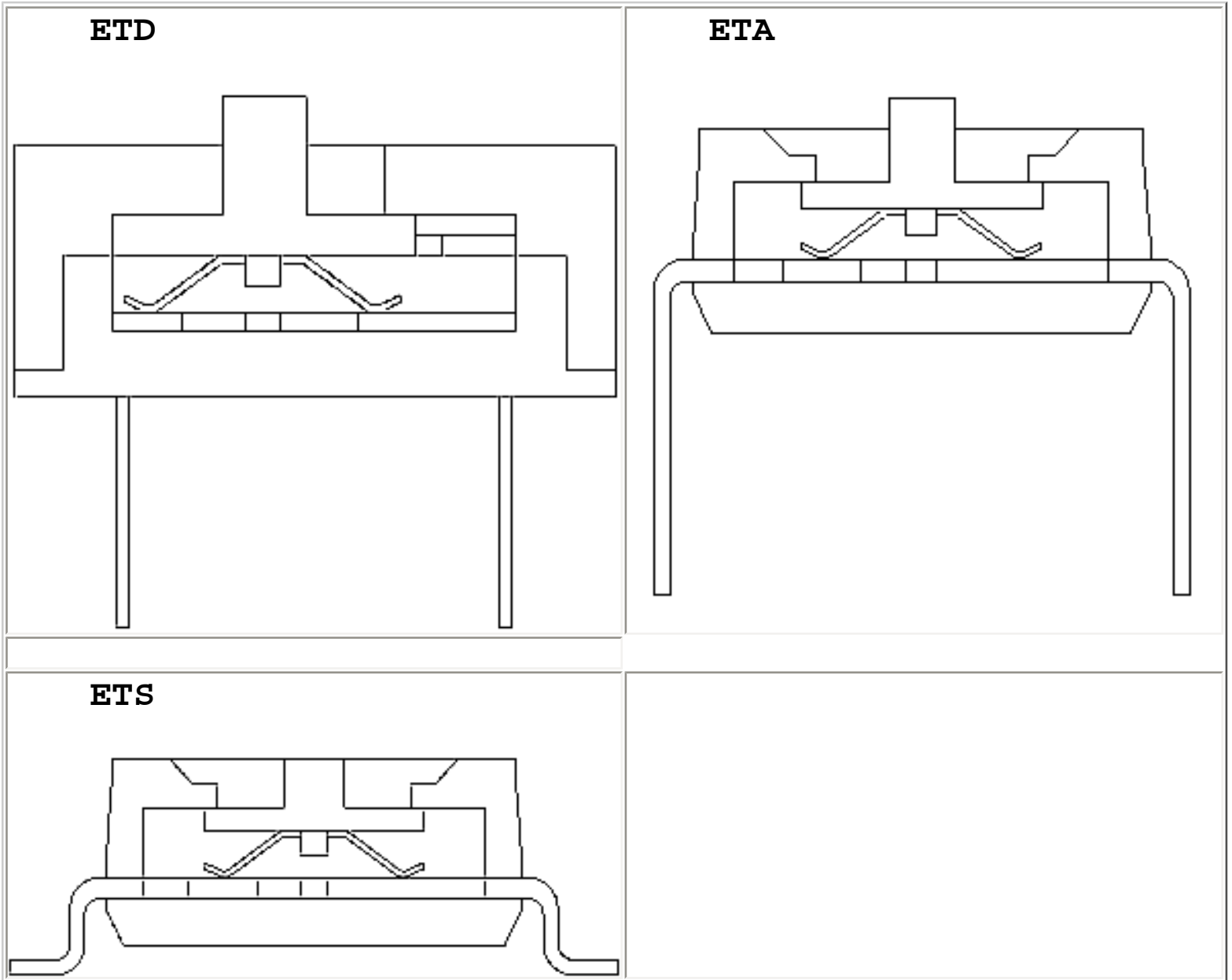
PART NUMBERING SYSTEM

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ETS  1  08  L  T
|    |    |    |
|    |    |    | +---- Option: Blank:Non-Top Tape Sealed
|    |    |    |          T:Top Tape Sealed
|    |    |    | +---- Actuator: L:Low Profile Actuator
|    |    |    |          E:Extended Actuator
|    |    |    | +---- Number of Positions: As Dimensions and Circuitry
|    |    |    | +---- Contact Form: SPST
+---- Series Name: ETD:Bottom Sealed Type
                  ETA:Automatic Inserting Type
                  ETS:Surface Mounting Type

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CONSTRUCTION



OPTIONS

1. Tape sealed.
ETDxxxET ETSxxxLT

2. Reverse P.C.B. LAYOUT available

P.C.B. LAYOUT
(TOP VIEW)

$\phi 0.8$ HOLE (+) (-)

$2.54 \times (P-1) \pm 0.1$
 $(0.100 \times (P-1))$

7.62 ± 0.1
 (0.300)

ETAxxxLT



DIMENSIONS AND CIRCUITRY (UNIT: mm)

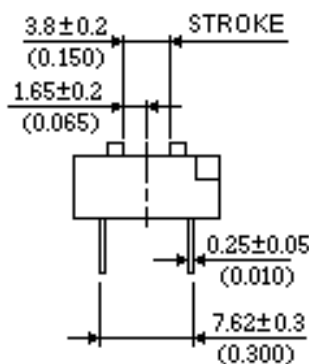
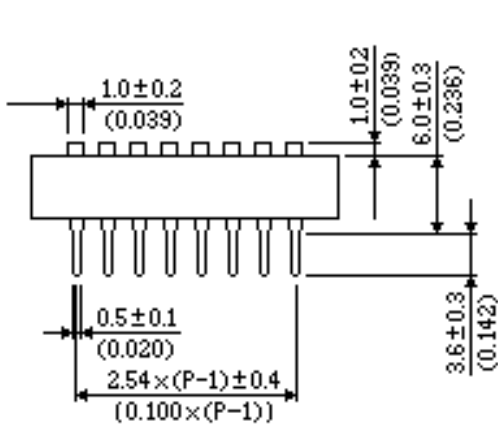
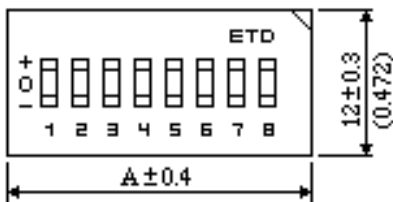
ETD

DIMENSION A

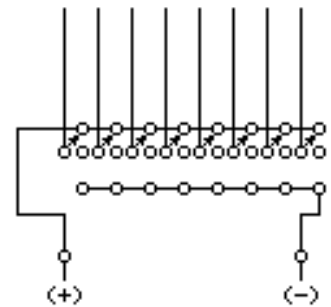
ETD

Positions	4	5	6	7	8	9	10
A	15.30 (0.602)	17.84 (0.702)	20.38 (0.802)	22.92 (0.902)	25.46 (1.002)	28.00 (1.102)	30.54 (1.202)

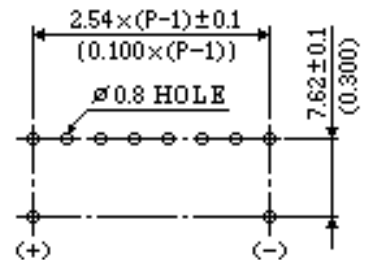
Unit:mm(inch)



CIRCUIT DIAGRAM



P.C.B. LAYOUT (TOP VIEW)



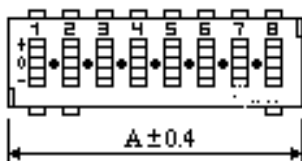
ETA

DIMENSION A

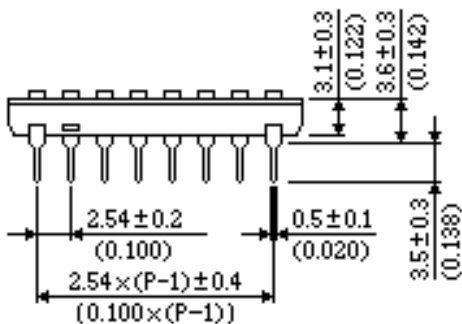
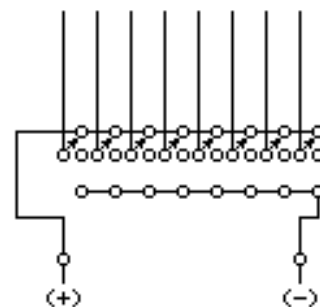
ETA/ETS

Positions	2	3	4	5	6	7	8	9	10	12
A	6.88 (0.263)	9.22 (0.363)	11.76 (0.463)	14.30 (0.563)	16.84 (0.663)	19.38 (0.763)	21.92 (0.863)	24.46 (0.963)	27.00 (1.063)	32.08 (1.263)

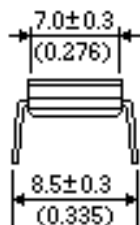
Unit:mm(inch)



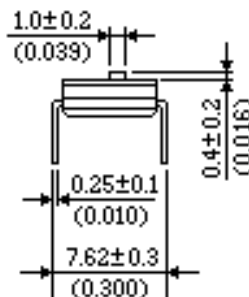
CIRCUIT DIAGRAM



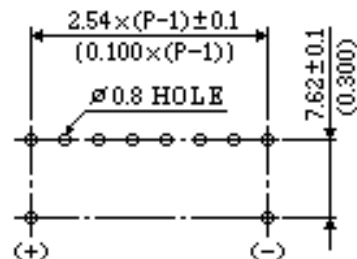
(L) TYPE



(E) TYPE



P.C.B. LAYOUT (TOP VIEW)

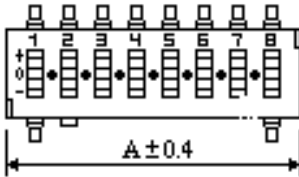


DIMENSION A

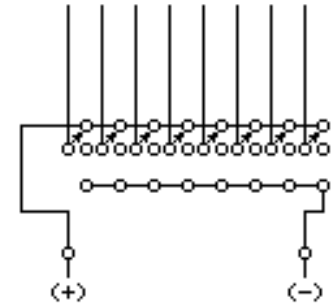
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Unit:mm(inch)



CIRCUIT DIAGRAM



(L) TYPE

(E) TYPE

**P.C.B. LAYOUT
(TOP VIEW)**

