ETD/ETA/ETS SERIES

TRI-STATE TYPE

ETD

ETA

ETS

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 ECE 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

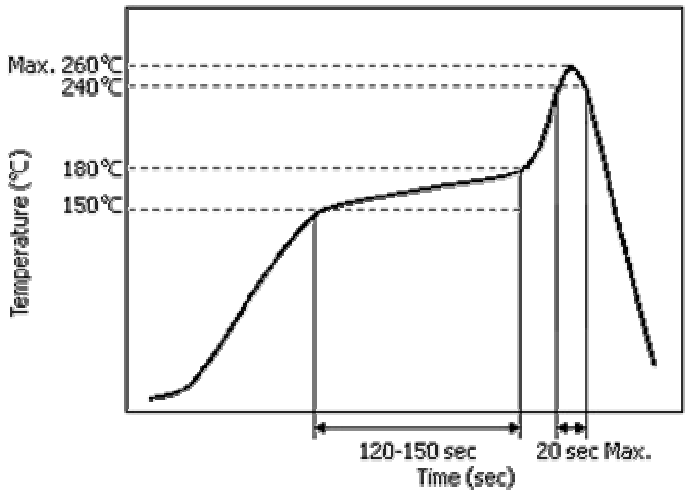
1.ELECTRICAL

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

2.MECHANICAL

Temperature rating	operating: -25℃ to + 70℃
	storage: -40℃ to + 85℃
Operation force	800g Max.
Mechanical life	2000 operations
Humidity	95%RH, 40℃ for 96 Hrs.
Vibration	Per MIL-STD-202F, method 204D
Solderability (for through hole type)	after flux 230±5℃ for 5±0.5 seconds, 95% coverage
Resistance to soldering heat (for through hole type)	260±5℃ for 5±1 seconds

Reflow soldering heat for SMT type (reference only)

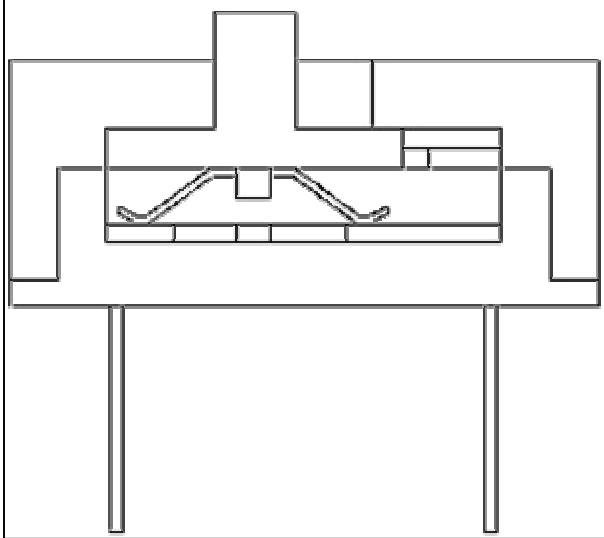


PART NUMBERING SYSTEM

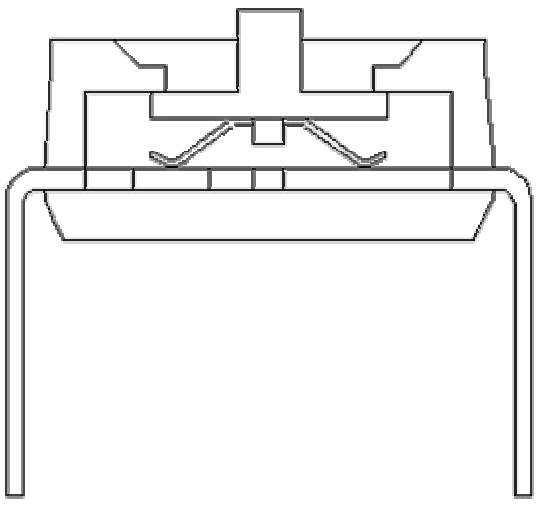
```
ETS 1 08 L T X
 |  |  |  |  |  |
 |  |  |  |  | +--- Blank:Standard
 |  |  |  |  |      Z:RoHS Compliant
 |  |  |  | +--- Option:
 |  |  |  |      Blank:Non-Top Tape Sealed
 |  |  |  |          T:Top Tape Sealed
 |  |  | +--- Actuator:
 |  |  |      L:Low Profile Actuator
 |  |  |      E:Extended 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
```

CONSTRUCTION

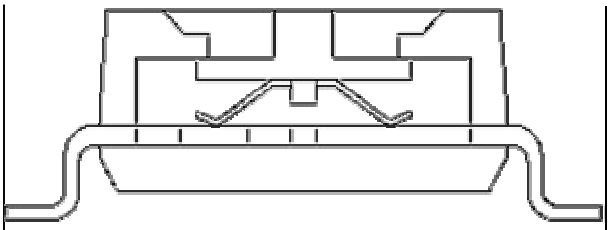
ETD



ETA



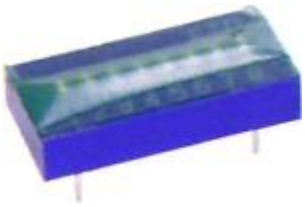
ETS



OPTIONS

1.Tape sealed.

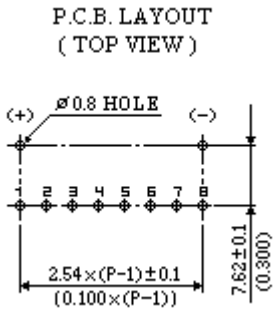
ETDxxxET



ETSxxxLT

ETAxxxLT

2.Reverse P.C.B. LAYOUT available



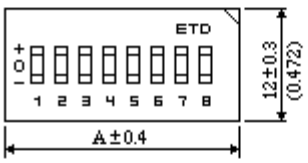
DIMENSIONS AND CIRCUITRY

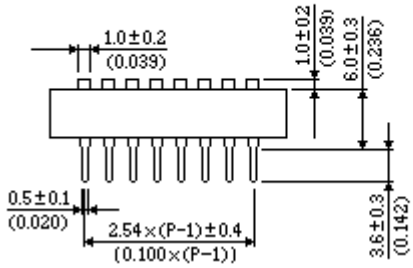
DIMENSION A

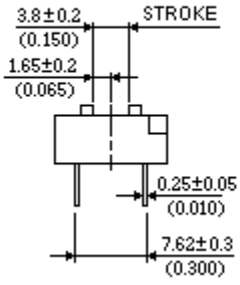
ETD

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 (0.202)

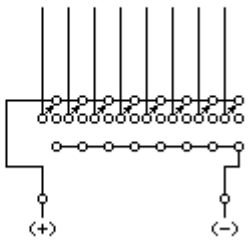
Unit:mm(inch)



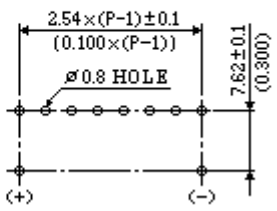




CIRCUIT DIAGRAM



P.C.B. LAYOUT
(TOP VIEW)

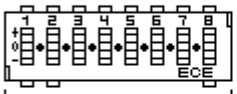


DIMENSION A

ETA

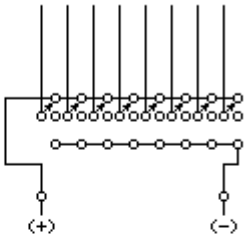
Positions	2	3	4	5	6	7	8	9	10	12
A	6.88 (0.263)	9.22 (0.363)	11.76 (0.463)	14.30 (0.563)	16.84 (0.663)	19.38 (0.763)	21.92 (0.863)	24.46 (0.963)	27.00 (1.063)	32.08 (1.263)

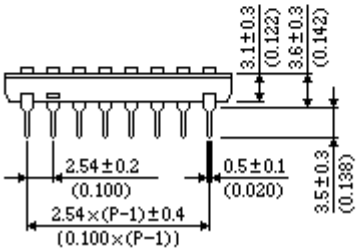
Unit:mm(inch)



A±0.5

CIRCUIT DIAGRAM





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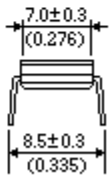

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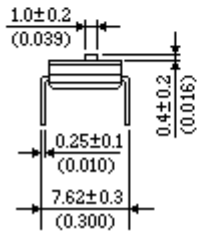
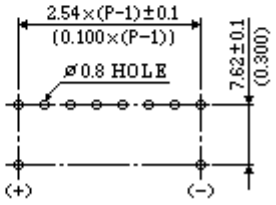


P.C.B. LAYOUT
(TOP VIEW)

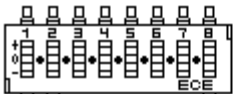


DIMENSION A

ETS

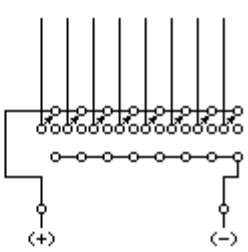
Positions	2	3	4	5	6	7	8	9	10	12
A	6.88 (0.263)	9.22 (0.363)	11.76 (0.463)	14.30 (0.563)	16.84 (0.663)	19.38 (0.763)	21.92 (0.863)	24.46 (0.963)	27.00 (1.063)	32.08 (1.263)

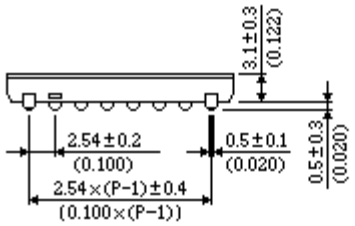
Unit:mm(inch)



A±0.5

CIRCUIT DIAGRAM





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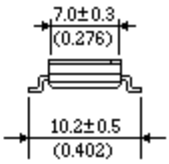

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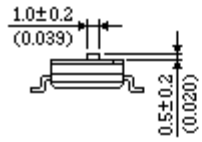

P.C.B. LAYOUT
(TOP VIEW)