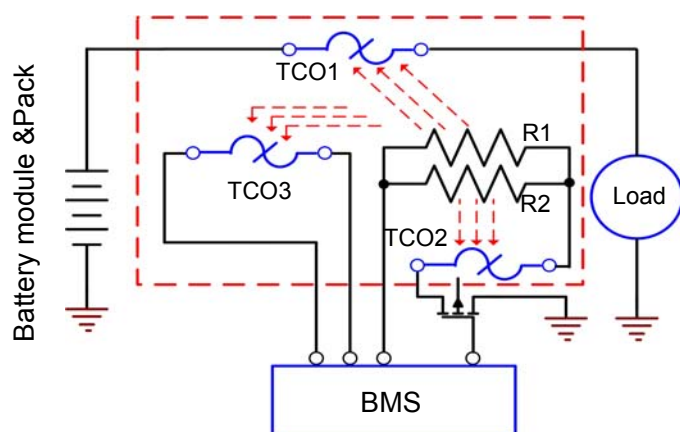


Features and Benefits

- Patent design
- Fast response Cutoff time $\leq 30s$
- Low Resistance $\leq 0.5m\Omega$
- One-time protection
- Active control
- Over-heating protection
- Isolated remote indication

Product Description



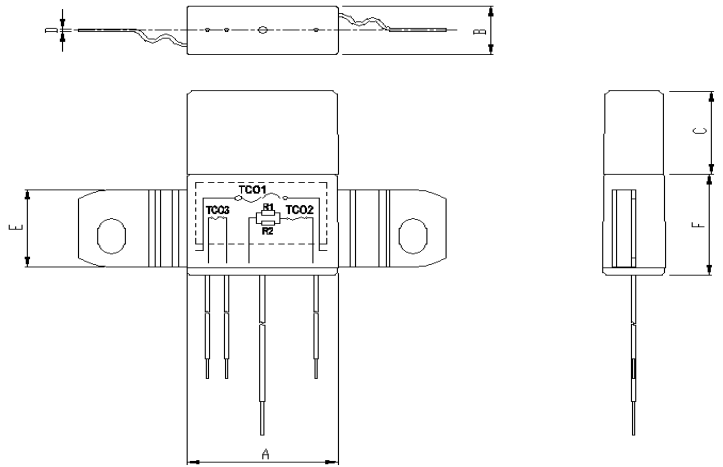
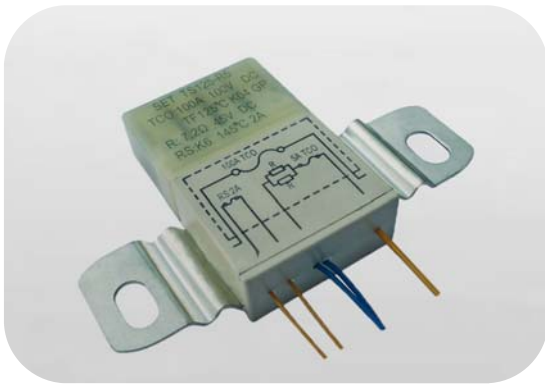
The left figure is the principle and application note. Inside the red square is ITCO, which integrated TCO1, R1&R2, TCO2 and TCO3.

When the BMS detect the abnormal behavior of EV battery,

The BMS output a signal to activate the MOSFET. Then the heater R1&R2 is power on and heat. The thermal cutoff (TCO1) blow and disconnect the circuit. After that, The TCO2 blow and disconnect the heater, the TCO3 blow at the same time and output a remote signal to BMS.



Idea Thermal Cut Off (*i*TCO)



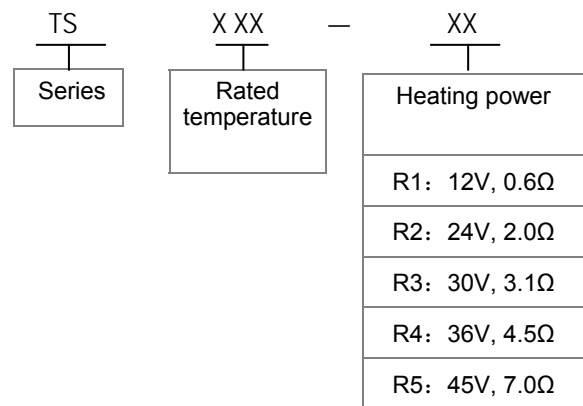
Dimensions (mm)

Series	A	B	C	D	E	F
TS125/TS136-Rx	30±2	12.4±2	21.5±2	0.8±0.1	20±2	26±2

Applications

- EV Li-ion battery Pack
- High power Solid state Relay
- High power IGBT

Part Number System



Patent

- Utility Model ZL201120105395.3

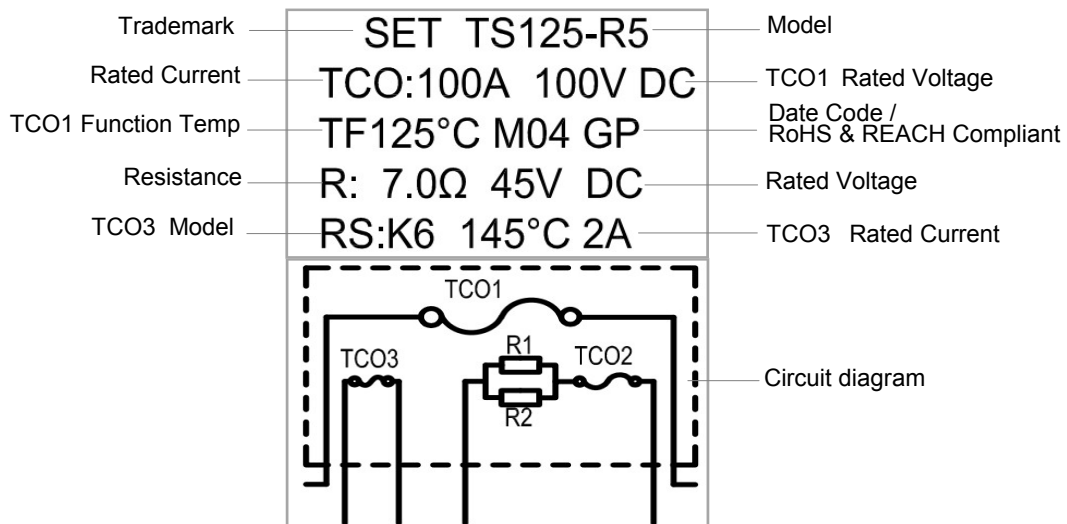
Designed to Standards

- UL60691
- GB9816

Agency Approval

- UL/cUL: E214712

Marking



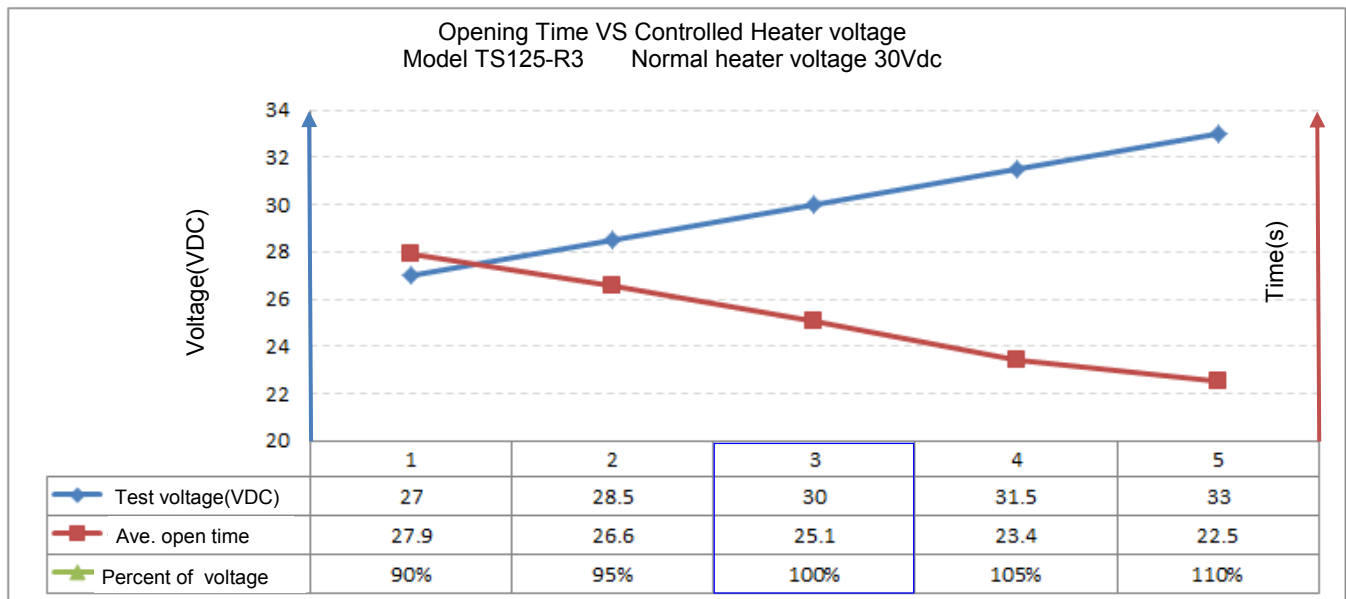


Specifications

Model	TCO1					Heater Assemble		Action Time			
	Rated Function temperature Tf (°C)	Fuse-Temp (°C)	Holding temperature Th (°C)	Max. temperature limit Tm (°C)	Rated Voltage Ur (Vac)	Rated Current Ir (A)	Resistance Rated Voltage (Vdc)	Resistance (Ω)	TCO1 (S)	TCO2 (S)	TCO3 (S)
TS125-R1	125	122±2	80	180	250AC	80	12	0.6+/-7.5%	<40	TCO1+ (5-20)	TCO2 +/-5
					125AC	100					
					100DC	100					
TS125-R2	125	122±2	80	180	250AC	80	24	2.0+/-7.5%	<40	TCO1+ (5-20)	TCO2 +/-5
					125AC	100					
					100DC	100					
TS125-R3	125	122±2	80	180	250AC	80	30	3.1+/-7.5%	<30	TCO1+ (5-20)	TCO2 +/-5
					125AC	100					
					100DC	100					
TS125-R4	125	122±2	80	180	250AC	80	36	4.5+/-7.5%	<30	TCO1+ (5-20)	TCO2 +/-5
					125AC	100					
					100DC	100					
TS125-R5	125	122±2	80	180	250AC	80	45	7.0+/-7.5%	<30	TCO1+ (5-20)	TCO2 +/-5
					125AC	100					
					100DC	100					

Fusing Characteristics

This is an example of opening time VS different controlled heater voltage. (Reference only)





Specifications

Model	TCO1						Heater Assemble		Action Time		
	Rated Function temperature Tf (°C)	Fuse-Temp (°C)	Holding temperature Th (°C)	Max. temperature limit Tm (°C)	Rated Voltage Ur (Vac)	Rated Current Ir (A)	Re-sistance Rated Voltage (Vdc)	Resistance (Ω)	TCO1 (S)	TCO2 (S)	TCO3 (S)
TS136-R1	136	132±2	80	180	250AC	80	12	0.6+/-7.5%	<40	TCO1+ (5-20)	TCO2 +/-5
					125AC	100					
					100DC	100					
TS136-R2	136	132±2	80	180	250AC	80	24	2.0+/-7.5%	<40	TCO1+ (5-20)	TCO2 +/-5
					125AC	100					
					100DC	100					
TS136-R3	136	132±2	80	180	250AC	80	30	3.1+/-7.5%	<30	TCO1+ (5-20)	TCO2 +/-5
					125AC	100					
					100DC	100					
TS136-R4	136	132±2	80	180	250AC	80	36	4.5+/-7.5%	<30	TCO1+ (5-20)	TCO2 +/-5
					125AC	100					
					100DC	100					
TS136-R5	136	132±2	80	180	250AC	80	45	7.0+/-7.5%	<30	TCO1+ (5-20)	TCO2 +/-5
					125AC	100					
					100DC	100					

Fusing Characteristics

This is an example of opening time VS different controlled heater voltage. (Reference only)

