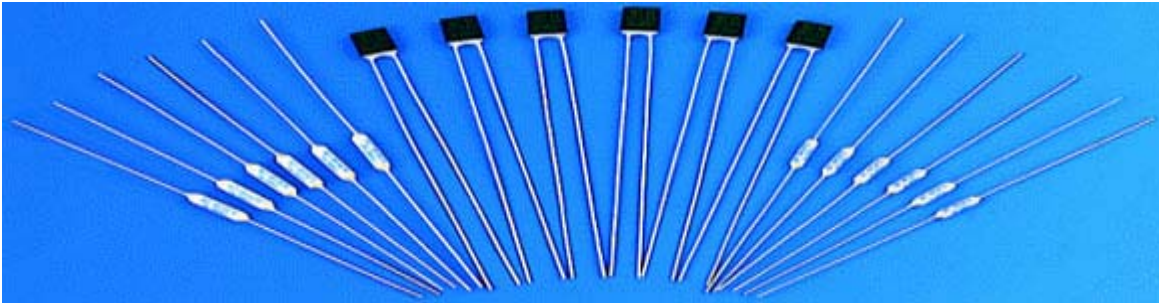


HITECH THERMAL CUTOFF INTRODUCE

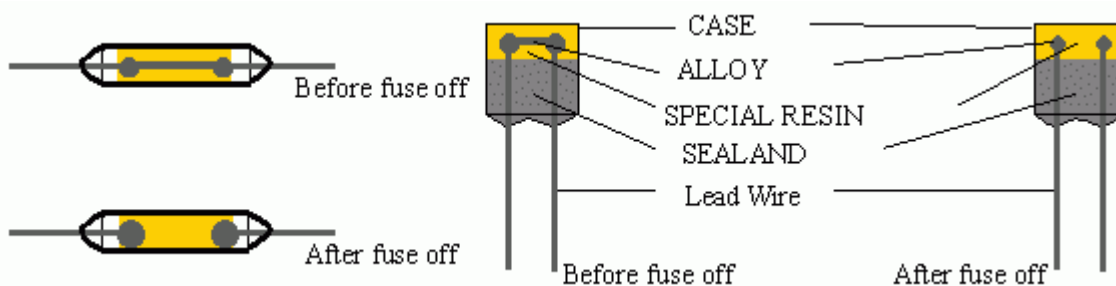
Thermal cutoff has two types: axial lead type and radial lead type, the structure as fig:



-Principle

When the thermal cutoff senses an abnormal heat caused by component or equipment through thermal cutoff body and leads wire, the fusible alloy melts by reaching at the temperature of the melting point of the alloy.

An electrical circuit of the thermal cutoff opens with forming two separate balls at the edges of the leads by surface tension of melted fusible alloy



--Purpose

Apply to need overheat proof:

Coil products(transformer, power supply adapter, charger and electromotor)

Home appliances(the electric fan, air conditioner, heater, humidifier, and illuminate tool)

communication engineering devices(telephone series, electrograph and decoder)

audiovisuals(the television, VCR, VCD and DVD machine)

office accommodations(computer and peripheral equipment, duplicator, printer)

Glossary

★Rated Functioning Temperature:

The temperature at which a thermal cutoff changes its state of conductivity to open circuit with detection current as the only load.

★Fuse temperature:

Functioning temperature of a thermal cutoff carrying current less than 0.01A and placing in an oil bath where temperature rises 0.25-0.5°C per minute.

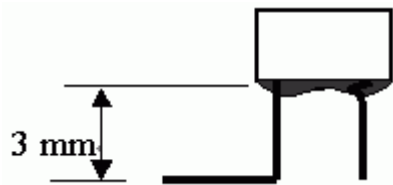
★Maximum Temperature Limit:

TM is the maximum temperature at which mechanical and electrical properties of a thermal cutoff can be maintained without resuming conductivity after functioning.

★Holding Temperature:

TH is the maximum temperature at which a thermal cutoff can be maintained with functioning while conducting rated current for a period of 168 hours.

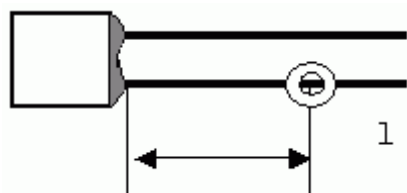
-Use explain& notice



1.Mounting thermal cutoffs

①Mount the thermal cutoff(TCO)at the location where TCO.temperature rises evenly.

②Design the lead wire as long as possible and connect it in the method that tension and oppressed torsion are not applied to be the wire.



2.Forming lead wire

①If the lead has to be used by folding it, fold it at approx 3mm in minimum away from the molded section.

②Use radio pinchers to fold the wire as shown in Fig.1 and not to damage the molded section of case and the lead wire.

3.Splices and terminations

①If it is necessary to make splice of lead wire, there shall be an arrangement that prevents deflection or damage of TCO wires.

②Terminals or clamps should be of corrosion resistance materials.

4. Welding and soldering leads

- ① Avoid excess heat affecting TCO and reduce heating to minimum during soldering.
- ② Soldering should be carried out within the soldering conditions listed in table 1.
- ③ When soldering is required under severe conditions except listed in table 1, use a heat sink on TCO lead wire between solder joint and TCO body.
- ④ Perform the soldering operation carefully that the pull, push and /or twist tensions are not applied to TCO body and lead wire.
- ⑤ After soldering, leave it for natural cooling more than 20 sec. during this cooling time and never move TCO body and lead wire.

5. Location of TCO with regard to wet application

If TCO is applied to coffeepot, hot-water heater, dryer, hygostat, etc., locate TCO at the position where TCO is prevented breakage from spilling water or other liquid.

Rated function temperature(TF)	Lead length (l)			Soldering temperature
	10mm	20mm	30mm	
102-115°C	●	2	3	400°C
116-135°C	1●	3	5	
136-150°C	3	5	5	