



Safety Precautions 安全预防措施

【1】 Each thermal-link has specific Electrical and Temperature Rating and must be used with in the pre-scribed ratings. These ratings include Tf (Rated Functioning Temperature), Th or Tc (Holding Temperature), Tm (Maximum Temperature Limit), and the electrical ratings. Please see the technical data sheet.

使用中须注意，每个型号的温度保险丝都有其特定的电流、电压规格以及温度规格，包括Tf（额定动作温度）、Th 或者 Tc（保持温度）、Tm（极限温度）以及其电流、电压的规格，详见数据表。

【2】 For reason of safety that a thermal-link is a non-repairable item and that, in case of replacement an equivalent thermal-link with the same catalogue number shall be used, mounted in exactly the same way.

基于安全原因，温度保险丝是不可修复的产品，替换时应使用同类别同型号的温度保险丝并且严格按照同样的方法正确安装。

【3】 Install thermal-links so that their temperatures do not continuously exceed the Holding Temperature specified in the individual specification.

安装温度保险丝时要确保其应用环境的温度不会超过其相应规格中的保持温度。

【4】 The end product should be designed so that thermal-link detects only intended heat source (radiant, convection, and /or conductance). For example, in a heater application, thermal-link should not be heated through lead wire which will accelerate the fusing off of the thermal-link, In case of a transformer or motor application, where the temperature should be controlled in a transformer or motor coil, and thermal-link should have good heat conductive contact with the transformer or motor coil.

最终产品需要确保温度保险丝仅能从预定的热源处（辐射源、对流源、和/或热传导）感受温度。举例来说，如应用于加热器，温度保险丝不能让导线过多受热，这样会加速保险丝熔化断裂；如用于变压器或发动机，温度应该由变压器或发动机线圈控制，这时温度保险丝就需要与变压器或发动机线圈之间有良好的热传导。

【5】 It is recommended that using the dummy thermal-link having an internal thermocouple to select the proper temperature rating and location of the thermal-link.

建议采用内置热电偶式的仿真温度保险丝来确定适合的温度要求和安装位置。

【6】 Do not locate the thermal-link on an assembly subjected to severe continuous vibration.

勿将温度保险丝安装在可能经常出现剧烈振动的地方。

【7】 The end product should be tested to ensure that potentially abnormal conditions do not exposed the thermal-link to the temperature exceeding its Tm.

需对最终产品进行测试，以确保潜在的异常状况不会导致温度保险丝超过其极限温度。

【8】 The seal or body must not be damaged, burned or over heated.

保险丝的封口及主体不能受损，烧伤或者过度受热。

【9】 Mounting design of the thermal-links

安装温度保险丝

9.1 Mount the thermal-link at the location where temperature rises evenly.

将温度保险丝安装在可使其温度可以平稳上升的部位。

9.2 Design the lead wire as long as possible and connect it in the way that tension or pressed torsion is not applied to the wire.

确保引脚足够长，且其安装方法不会造成强行按压、拉伸及扭转引脚之现象。

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【10】Lead wire bending 引脚成形

10.1 If the lead has to be used by bending it, bend it at approx 3mm in minimum away from the molded section.

如果一定要弯折引脚，那么应确保弯折处与主体间至少应有3mm的距离。

10.2 Use radio pinchers to bend the wire as shown in Fig.1 and not to damage the molded section of the case and the lead wire. 使用工具钳子如图1要求弯折引脚，并且不要损坏外壳和引脚之间的主体

10.3 Leads should not be cut, nicked, bended sharply, fractured or burned during forming or installation.

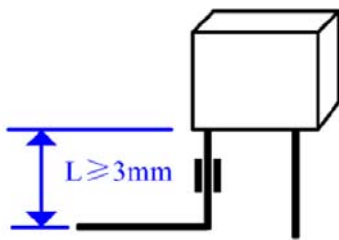


Figure 1

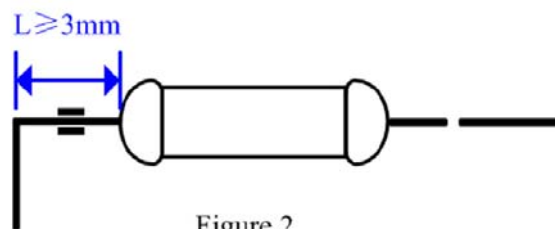


Figure 2

在成形和安装过程中，引脚不应被用力过猛地裁切、切割、弯折，不能断裂或被烧伤。

10.4 Tangential forces on the leads must be avoided (i.e. pushing or pulling on the leads at angle to thermal-link body) as such forces may damage the seal of thermal-links.

避免正对引脚施加外力（比如与温度保险丝主体成一定角度推或拉），因为这样的力会损坏温度保险丝封口。

【11】The seal or body must not be damaged, burned or over heated.

应确保外壳密封完好，必须保证无损坏、烧焦、过热情况。

【12】Stress due to expansion and contraction of parts attached to the leads or body, vibration or other movements of parts should be considered when designing the end product. A flexible or bent heater lead or a cold, low resistance heater lead should be used to connect to thermal-link.

设计最终产品时应考虑到与引脚接触的零部件因膨胀及收缩所造成的应力、振动或其他运动，应采用柔韧的、易弯曲的引脚或者低阻引线来连接温度保险丝。

【13】Resistance of connections should be monitored to ensure minimal resistance. Improper connections or secure may result in premature failure of the thermal-link. Samples of joints should be inspected to ensure adequate mechanical bonding of lead to connection wires. Improper connections can cause damage to the seal or other parts which may result in shorting or nuisance tripping of the devices due to the generation of excessive heat at a faulty high resistance junction.

应确保接触电阻为最小值，不正确的连接可能造成温度保险丝提前失效，需要对焊接样本进行检查以确保引脚和连接线充分地连接，不正确的连接可能引起封口或其他部份的损坏，不良连接产生的高阻可能导致器件过热而引起短路或损坏。

【14】Splices and terminations 引脚的结合以及末端材料

14.1 If it is necessary to bare the lead of wire, there shall be an arrangement that prevents deflection or damage of the thermal-link wires. 若必需外露一定长度的引脚，应该采取可以防止温度保险丝引脚歪斜或损坏的措施。

14.2 Terminals or clamps should be of corrosion resistance materials. 所采用的末端材料或夹具应为抗腐蚀材料。

14.3 Appropriate free lengths of wire and sufficiently flexible wire connections should be used. Thermal-links and splices should be secured to prevent vibration or flexing of thermal-links and splices during normal operation.



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【15】Soldering of leads引脚焊接

15.1 Soldering should be carried out within the soldering conditions listed in table 1.

15.2 Because the thermal element of thermal-link is a fusible alloy which connected with lead wires, improper soldering operation (too high soldering temperature, too long soldering time, too short lead wire used etc.) will cause thermal element damaged by the excessive heat transmit from the lead wire which may result in premature opening of thermal-link.

由于温度保险丝中与引脚连接的感温体是可熔化的合金，因此不正确的焊接操作（例如：温度过高、焊时过长、引脚过短等）可能导致感温体被引脚传递的过高热量波及，从而使得温度保险丝提前断开。

15.3 When soldering is required under severe conditions listed other than specified table 1, use a heat sink on thermal-link lead wire between solder joint and thermal-link body.

若需要在比表1规定更为严苛环境下进行焊接时，应在焊接点和温度保险丝主体间的引脚上使用散热装置。

15.4 Perform the soldering operation carefully so that the pull/push and twist tensions are not applied to thermal-link body and lead wire. 焊接时应小心，以避免温度保险丝主体和引脚遭受到推/拉力以及扭力。

15.5 After soldering leave it for natural cooling for longer than 20 sec. During this cooling time, never move the thermal-link body and lead wire. 焊接后应让其自动冷却20秒以上，在冷却期间，勿移动温度保险丝本体和引脚。

【16】Location of thermal-link with regard to wet application安装温度保险丝时应注意防潮

If thermal-link is applied to coffeepot, hot-water heater, dryer, hygrostat, etc., locate the thermal-link at the position where thermal-link is protected from breakage by spilling water or other liquid and from damage by high humidity.

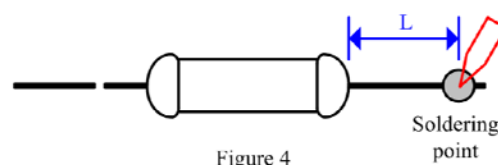
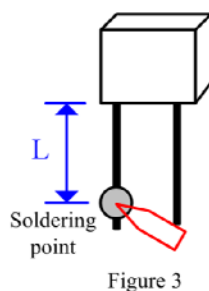
如果温度保险丝是用于咖啡壶、热水器、干燥机、温度调节器等环境下，那么应将温度保险丝安装在无水泄漏和非高湿度的部位。

【17】After Installation, the end construction shall comply with the appliance standard.

安装完成后，应确保整体结构符合应用标准的要求。

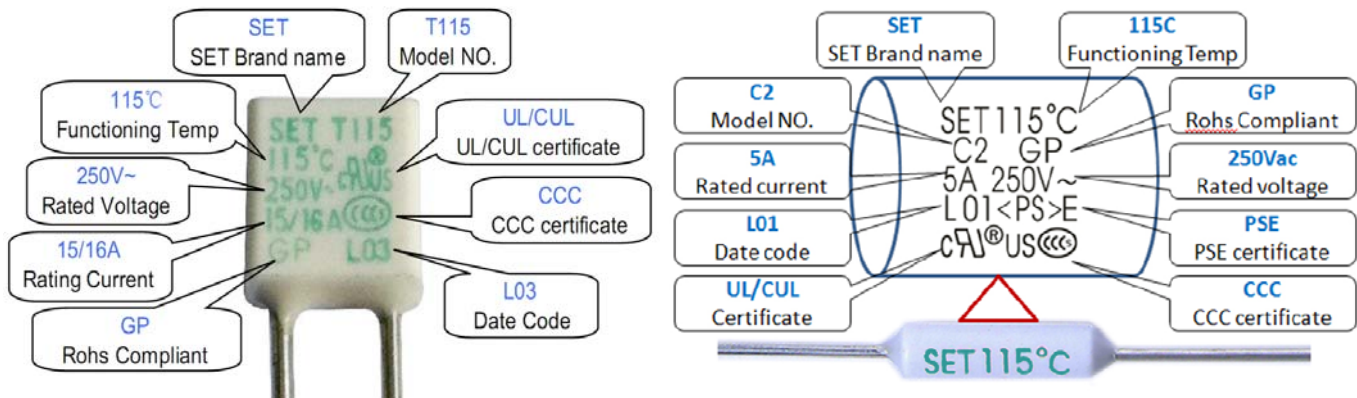
Table 1.soldering time (Sec) 表1: 焊接时间 (秒)

Function temperature Tf 额定温度℃	Max allowable soldering time (s) 最大允许焊接时间			Solder temperature 焊接温度
	Length of Lead wire (L) 引线长度			
	10mm	20mm	30mm	
102~115	1*	2	3	400℃
116~135	1*	3	5	
136~150	3	5	5	
151~221	4	6	7	
*Need to add auxiliary heat conduction for not damage the thermal fuse unexpectedly.				
*为防止温度保险丝被焊断，焊接时需要增加辅助散热装置。				

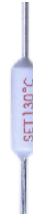




Marking 标志



Standard Packing information 标准包装

	Model 型号	Ir (A) 额定 电流	Length of Lead wire (mm) 引脚长度	QTY (PC) 数量	Gross Weight (Kg) 毛重	Size of Carton (cm) 纸箱尺寸
<div>Radial 方壳</div> 	F	1	69	50,000	18	44x30x26
	K	2	69	50,000	20	44x30x26
	X	3	69	50,000	21	44x30x26
	Y	5	69	30,000	24.5	44x30x26
	S	10	45	25,000	26.5	44x30x26
	T	15	45	25,000	26.5	44x30x26
	P	20	50	9,000	25.5	44x30x26
	Q	25	50	9,000	26	44x30x26
	N	30	50	4,500	20	44x30x26
	G	40	50	4,500	24.5	44x30x26
<div>Axial 瓷管</div> 	V	1	37	50,000	11.5	44x30x26
	H	2	36	50,000	15.5	44x30x26
	B	3	53	50,000	22.5	44x30x26
	C	5	38	30,000	19.5	44x30x26
	U	10	38	15,000	17.5	44x30x26
	R	15	38	15,000	17.5	44x30x26

Customized Service 定制服务



Insulation sleeve 加绝缘套管



Lead wire Cutting 引脚裁切



Lead wire Bending 引脚折弯