



# 过温保护 OVER TEMPERATURE PROTECTION

更好的电路安全卫士!  
You build electronics, We safeguard them!

Product Portfolio



贝特卫士  
www.betterfuse.com

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# 公司简介

## OUR COMPANY

Dongguan Better Electronics Technology Co. Ltd. was established in 2003. The company is positioned as a comprehensive circuit protection component manufacturer and solution consultant, and has now become a leading brand in the fuse industry in China.

Dongguan Better Electronics Technology Co. Ltd. has passed ISO9001, ISO14001, ISO45001, IATF16949, QC080000 management system certifications. Its products have passed UL, CCC, CQC, VDE, ASTA, PSE, CB, TUV as well as other certifications. The group owns three national high-tech enterprises, two national-level specialized and special new "little giant" enterprises, two Guangdong Province circuit protection component engineering technology research centers. We have won qualifications of the first batch of "multiplication plan" pilot enterprises in Dongguan City, Intellectual property management standards implementation enterprises, Integration and implementation of informatization and industrialization enterprise.

Product applications cover 3C & various home appliances, new energy vehicles, photovoltaic power generation, energy storage & rail transit as well as many other fields. It is simply summarized as "Wherever electricity is used, our electronic circuit protection components can be used!"

The company focuses on mid-to-high-end electronics and power circuit protection components, and focuses on product research and development and innovation. Our sales scale and product category rank first in the domestic industry, we are a leading enterprise in subdivided industries. Since our establishment, we have worked hard for many years in the 3C & various home appliance industries which has formed a very stable business "chassis". With the development of clean energy, new energy vehicles and other industries, we have made remarkable achievements in the field of new energy in recent years.

Guided by the company's five core concepts of "brand, vitality, teamwork, efficiency, and integration", we continue to optimize and improve equipment automation and management IT, striving to provide more secure, honest and value-added services to outstanding customers around the world.

东莞市贝特电子科技股份有限公司成立于2003年，公司定位全面电路保护元件制造商和方案顾问，目前已成为中国区行业领跑品牌。

公司已通过ISO9001、ISO14001、ISO45001、IATF16949、QC080000，产品分别通过UL、CCC、CQC、VDE、ASTA、PSE、CB、TUV等多项认证。集团旗下拥有三家国家高新技术企业、两家国家级专精特新“小巨人”企业、两个广东省电路保护元件工程技术研究中心，并荣获东莞市首批“倍增计划”试点企业、知识产权管理贯标企业、两化融合贯标企业等荣誉。

产品应用覆盖3C产品&白色家电、新能源汽车、光伏发电、储能&轨道交通等众多领域。简单概括为“凡是用电的地方，均会用到电路保护元器件”。

公司聚焦中高端电子、电力电路保护元件，专注产品研发及创新，销售规模及产品类别稳居国内行业前列，为细分行业龙头。公司自成立以来的3C行业耕耘形成了很稳定的业务“底盘”，随着清洁能源、新能源汽车等行业的发展，公司近年来在新能源领域取得了骄人的成绩。

在“品牌、活力、团队、效率、整合”公司五大核心理念的指引下，我们对设备自动化、管理IT化等进行持续优化和改善，与时俱进，为全球客户提供诚信、增值的服务。



# Company History

- 2023** Set up SCUT&BETTERFUSE Joint Laboratory for Intelligent Manufacturing and Process  
成立华南理工大学&贝特卫士智能制造及工艺联合实验室
- 2022** Accessed as a National Specialized Special New "Little Giant" Business.  
荣获国家级专精特新“小巨人”企业
- 2021** Import OA SPC system  
Increase the OV production line  
导入OA SPC系统  
增加OV产线
- 2020** The found of Dongguan ADLER Electric Co., Ltd  
The found of Dongguan ELB electrical Co., Ltd.  
东莞三厂正式成立  
东莞市艾乐贝电子有限公司成立
- 2019** Dongguan Betterfuse second branch was officially established  
MES & U9 system running  
The found of Dongguan Advonsoon Automation Co., Ltd. Dongguan Bxway Electronics Co., Ltd.  
东莞贝特卫士第二分公司正式成立  
MES和U9系统运行  
东莞市艾德迅自动化有限公司, 东莞市贝芯微电子有限公司成立
- 2018** In round C financing, Shenzhen Dachen Chuangye Investment, Shenzhen co-win venture capital investment limited, China Venture Capital Inc. and other investment companies invest 30,000,000RMB.  
Obtain IATF 16949 system certification  
C轮融资达晨、同创伟业、中国风险等投资资金3000万, 取得IATF 16949体系认证
- 2017** In round B financing, Shenzhen hi-tech investment co., ltd and other three investment company invest 31,000,000RMB.  
Joint venture of Xi'An ADLER electric appliance,  
The first batch of Pilot enterprise of "Income Doubling Program" in Dongguan,  
Establish CPC Better Guardian party branch  
B轮融资深圳高新投等四家风投3100万,  
合资成立西安艾德乐电器  
东莞市首批“倍增计划”试点企业、中共贝特卫士党支部成立
- 2016** Successfully landed the Chinese OTC Market and acquired the qualification of the intellectual property management system certification  
贝特卫士成功登陆新三板, 获得“知识产权管理体系认证”资质
- 2015** Obtained the certification of "Engineering Research Center of Circuit Protection Components in Guangdong Province"  
取得“广东省电路保护元件工程技术研究中心”资格认定
- 2014** Accessed to the certification of ISO 14001 and QC 080000 quality management system and successfully registered "Betterfuse" brand trademark as "贝特卫士", which pronounced similar to "Betterfuse"  
通过“ISO 14001”和“QC 080000”质量管理体系认证,  
成功注册“贝特卫士”品牌商标
- 2012** Completion of the stock reform, obtain angel investment foundation 10 million  
股改完, 引入天使投资汇通盈富1000万
- 2011** Accessed to the qualification of "high-tech enterprise"  
获得“高新技术企业”资质
- 2010** Successfully merged with Asiafuse (HK) Electronics Limited, Wholesome Electronics Co., Ltd., Tronic Electronics Limited., Waltron Electronic Co., Ltd.,  
先后并购艾弗电子(香港)公司, 宏立信电子, 创领电子, 华创电子
- 2007** Accessed to "ISO 9001" quality management system certification  
获得“ISO 9001”质量管理体系认证
- 2003** August, Betterfuse came into being in the ruins of Wickman's factory, which was took over by Littlefuse  
正式注册“东莞市贝特电子科技有限公司”

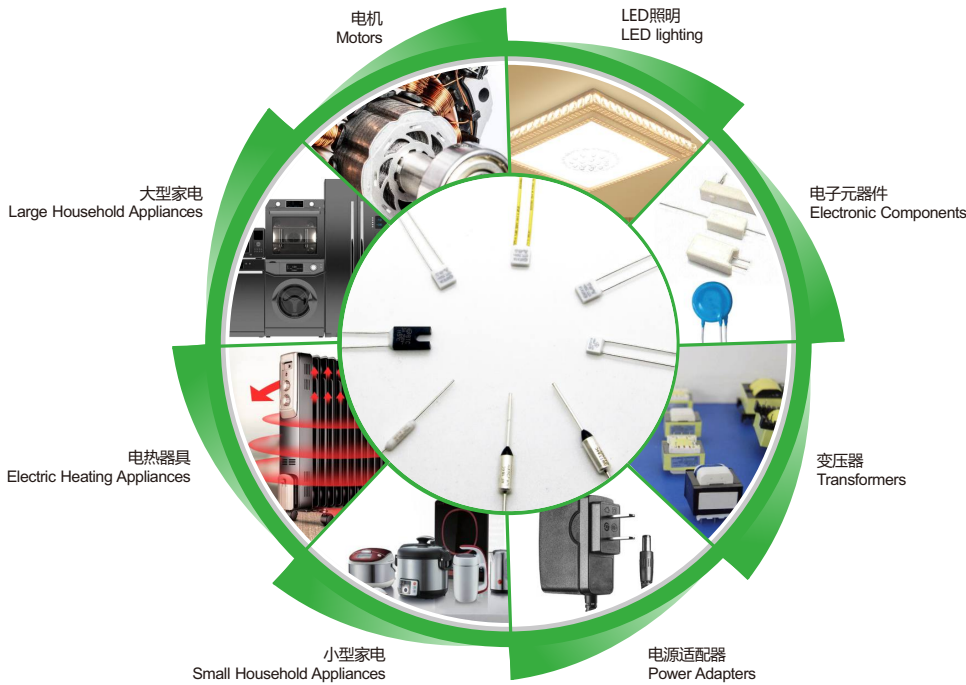
企业核心理念  
Company's Core Philosophy



Note: The above ertification marks show a summary of all available product certification, each product's own specific certifications shall prevail.

# 产品应用领域

## PRODUCT APPLICATION

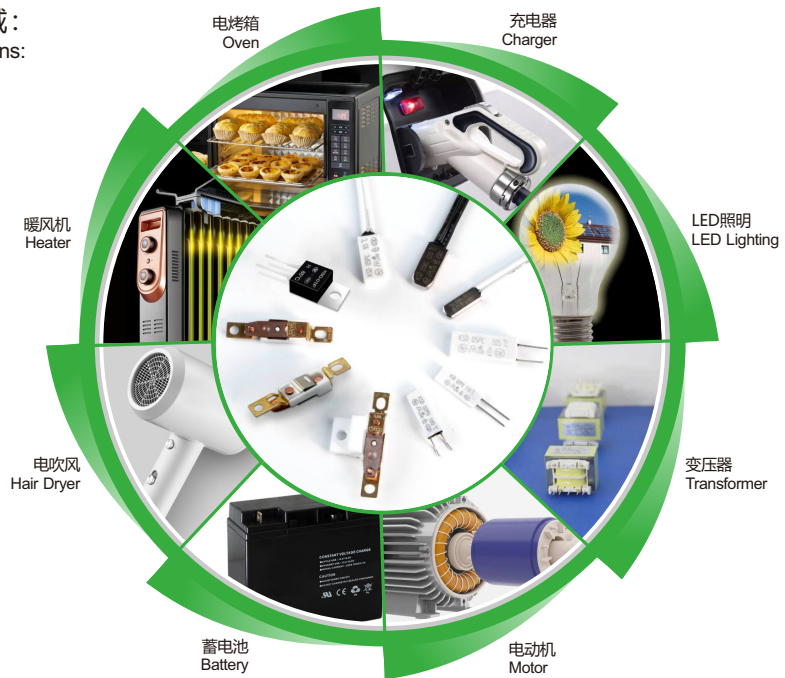


### OT-F产品应用领域： OT-F products applications:

- LED照明  
Led Lighting
- 变压器  
Transformers
- 电源适配器  
Power Adapters
- 电子元器件  
Electronic Components,
- 大型家电  
Large Household Appliances
- 小型家电  
Small Household Appliances
- 电热器具  
Electric Heating Appliances,
- 电机  
Motors

### OT-S产品应用领域： OT-S products applications:

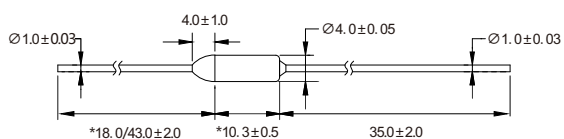
- LED照明  
LED Lighting
- 变压器  
Transformer
- 电动机  
Motor
- 蓄电池  
Battery
- 电吹风  
Hair Dryer
- 暖风机  
Heater
- 电烤箱  
Oven
- 充电器  
Charger



# BTT系列温度保险丝 BTT SERIES THERMAL FUSE



## 尺寸 DIMENSIONS(MM)

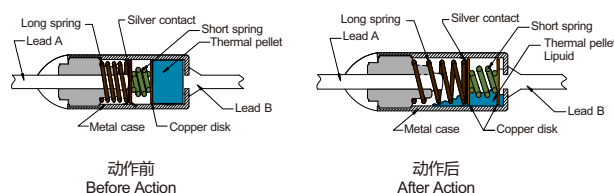


备注：导线长度可根据客户要求定制  
Note: Wire length can be customized according to customer requirements.

## 关键特性 KEY FEATURES OF THE PRODUCT

- 有机化合物型  
Product of organic compound type
- 温度带丰富 (73-257C)  
Temperature band is rich (73-240C)
- 动作温度精准  
Accurate action temperature
- 一次动作保护, 不可恢复  
Not recoverable

## 工作原理 WORKING PRINCIPLE



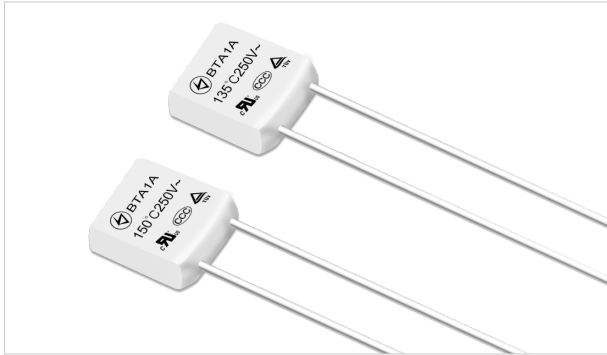
当温度保险丝本体及周边环境温度上升至有机化合物熔点时，化合物由固态变为液态，在弹簧弹力作用下，推开触点起到切断电流作用。  
When fuse body and its ambience temperature rises to the melting point of the organic compound, the compound changes from solid state to liquid state. Under the action of spring elasticity, the contact is pushed off to cut off the current.

## 参数表 PARAMETER LIST

序号 No.	料号 PN	额定 动作温度 Tf	动作 温度 Operating temperature	保持 温度 Th	极限 温度 Tm	额定 电流 Rated Current		额定 电压 Rated Voltage	认证 certification					
		(°C)	(°C)	(°C)	(°C)	(A)	(V)	UL/C-UL	CCC	TUV	PSE	VDE	KC	
1	BTT0**073	73	69±2	57	180	10A	15A	250VAC	●	●	●	●	●	●
2	BTT0**077	77	74±2	62	180	10A	15A	250VAC	●	●	●	●	○	●
3	BTT0**084	84	80±3	69	180	10A	15A	250VAC	●	●	●	●	○	●
4	BTT0**094	94	91+3-2	78	180	10A	15A	250VAC	○	●	●	●	○	●
5	BTT0**099	99	95±2	83	180	10A	15A	250VAC	●	●	●	●	●	●
6	BTT0**113	113	108+2-3	95	180	10A	15A	250VAC	●	●	●	●	●	●
7	BTT0**121	121	117±3	106	180	10A	15A	250VAC	●	●	●	●	●	●
8	BTT0**128	128	124±3	113	200	10A	15A	250VAC	●	●	●	●	○	●
9	BTT0**133	133	129+3-2	118	400	10A	15A	250VAC	●	●	●	●	●	●
10	BTT0**142	142	140±2	127	200	10A	15A	250VAC	●	●	●	●	●	●
11	BTT0**152	152	149±2	137	210	10A	15A	250VAC	●	●	●	●	○	●
12	BTT0**157	157	152±2	138	200	10A	15A	250VAC	●	●	●	●	●	●
13	BTT0**167	167	164+2-3	153	250	10A	15A	250VAC	●	●	●	●	○	●
14	BTT0**172	172	168±3	153	230	10A	15A	250VAC	●	●	●	●	●	●
15	BTT0**184	184	180±2	159	210	10A	15A	250VAC	●	●	○	●	●	○
16	BTT0**192	192	189±2	177	320	10A	15A	250VAC	●	●	●	●	●	●
17	BTT0**216	216	213±3	200	380	10A	15A	250VAC	●	●	●	●	●	●
18	BTT0**229	229	225±2	200	380	10A	15A	250VAC	●	●	●	●	○	●
19	BTT0**240	240	235±2	210	380	10A	15A	250VAC	●	●	●	●	●	●
20	BTT0**257	257	254±2	200	480	10A	15A	250VAC	●	●	●	●	○	●

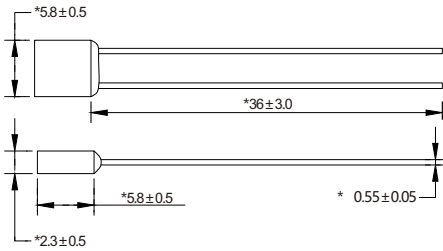
注: (1)\*\*:对应10A或15A  
(1)\*\*: Response 10A or 15A  
(2)●=取得 ○=未取得  
(2) ●=obtained ○=no obtained

# BTA系列温度保险丝 BTA SERIES THERMAL FUSE

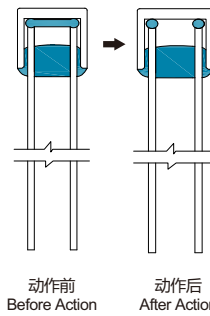


- 环保易熔合金型  
Environmentally fusible alloy type
- 塑料外壳  
Plastic case
- 动作温度精准  
Accurate action temperature
- 一次动作保护，不可恢复  
Not recoverable

## 尺寸 DIMENSIONS(MM)



备注：导线长度可根据客户要求定制  
Note: Wire length can be customized according to customer requirements.



当温度保险丝本体及周边环境温度上升至温度保险丝熔断温度时，在助熔剂发挥表面张力作用下，合金呈球状熔断，切断电路，发挥保护功能。

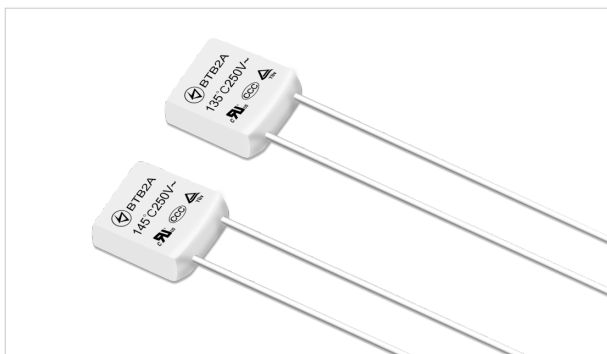
When fuse body and its ambience temperature rises to the melting point of Thermal fuse, the alloy is spherical fused under the surface tension of flux, cutting off the circuit and playing a protective role.

## 参数表 PARAMETER LIST

序号 No.	料号 PN	额定 动作温度 Tf	动作 温度 Operating temperature	保持 温度 Th	极限 温度 Tm	额定 电流 Rated Current	额定 电压 Rated Voltage	认证 certification					
		(°C)	(°C)	(°C)	(°C)	(A)	(V)	UL/C-UL	TUV	CCC	PSE	KC	VDE
1	BTA 102C	102	98±2	80	203	1A	250V	●	●	●	●	●	○
2	BTA 115C	115	111±2	100	203	1A	250V	●	●	●	●	●	●
3	BTA 125C	125	120±2	106	203	1A	250V	●	●	●	●	●	●
4	BTA 130C	130	125±2	108	203	1A	250V	●	●	●	●	●	●
5	BTA 135C	135	131±2	116	203	1A	250V	●	●	●	●	●	○
6	BTA 145C	145	140±2	127	203	1A	250V	●	●	●	●	●	○
7	BTA 150C	150	144±2	129	203	1A	250V	●	●	●	●	●	○

注：(1) ●=取得 ○=未取得  
(1) ●=obtained ○=no obtained

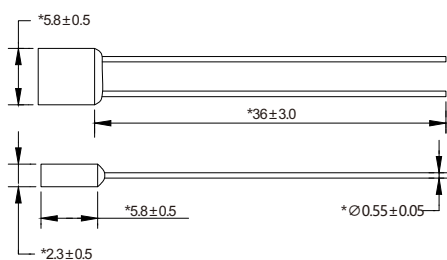
# BTB系列温度保险丝 BTB SERIES THERMAL FUSE



## 关键特性 KEY FEATURES OF THE PRODUCT

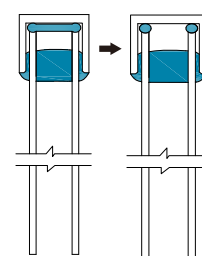
- 环保易熔合金型  
Environmentally fusible alloy type
- 塑料外壳  
Plastic case
- 动作温度精准  
Accurate action temperature
- 一次动作保护, 不可恢复  
Not recoverable

## 尺寸 DIMENSIONS(MM)



备注: 导线长度可根据客户要求定制  
Note: Wire length can be customized according to customer requirements.

## 工作原理 WORKING PRINCIPLE



当温度保险丝本体及周边环境温度上升至 温度保险丝熔断温度时, 在助熔剂发挥表面张力作用下, 合金呈球状熔断, 切断电路, 发挥保护功能。

When fuse body and its ambience temperature rises to the melting point of Thermal fuse, the alloy is spherical fused under the surface tension of flux, cutting off the circuit and playing a protective role.

动作前 Before Action      动作后 After Action

## 参数表 PARAMETER LIST

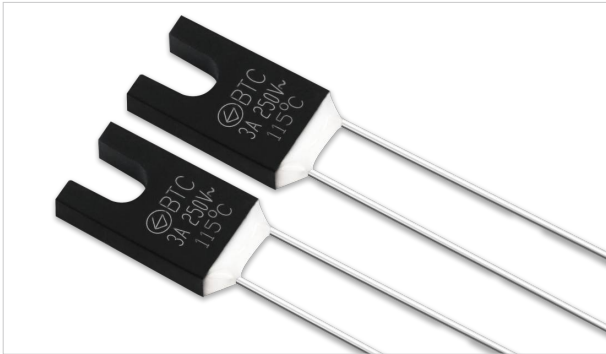
序号 No.	料号 PN	额定 动作温度 Tf	动作 温度 Operating temperature	保持 温度 Th	极限 温度 Tm	额定 电流 Rated Current	额定 电压 Rated Voltage	认证 certification					
		(°C)	(°C)	(°C)	(°C)	(A)	(V)	UL/C-UL	TUV	CCC	PSE	KC	VDE
1	BTB 102C	102	98±2	80	203	2A	250VAC	●	●	●	●	●	○
2	BTB 115C	115	111±2	100	203	2A	250VAC	●	●	●	●	●	●
3	BTB 125C	125	121±2	106	203	2A	250VAC	●	●	●	●	●	●
4	BTB 130C	130	125±2	108	203	2A	250VAC	●	●	●	●	●	●
5	BTB 135C	135	131±2	116	203	2A	250VAC	●	●	●	●	●	○
6	BTB 145C	145	140±2	127	203	2A	250VAC	●	●	●	●	●	○
7	BTB 150C	150	144±2	129	203	2A	250VAC	●	●	●	●	●	○

注: (1) ●=取得 ○=未取得  
(1) ●=obtained ○=no obtained



# BTC系列温度保险丝 BTC SERIES THERMAL FUSE

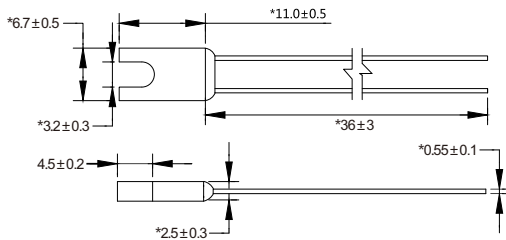
ROHS



## 关键特性 KEY FEATURES OF THE PRODUCT

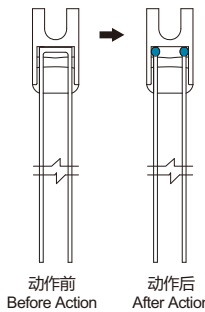
- 环保易熔合金型  
Environmentally fusible alloy type
- 塑料外壳  
Plastic case
- 外壳U型结构, 可螺栓固定安装  
U Type case structure for bolt fixture
- 采用CP线, 提高耐焊性  
Adopt CP line to improve soldering performance
- 动作温度精准  
Accurate action temperature
- 一次动作保护, 不可恢复  
Not recoverable

## 尺寸 DIMENSIONS(MM)



备注: 导线长度可根据客户要求定制  
Note: Wire length can be customized according to customer requirements.

## 工作原理 WORKING PRINCIPLE



当温度保险丝本体及周边环境温度上升至 温度保险丝熔断温度时, 在助熔剂发挥表面张力作用下, 合金呈球状熔断, 切断电路, 发挥保护功能。

When fuse body and its ambience temperature rises to the melting point of Thermal fuse, the alloy is spherical fused under the surface tension of flux, cutting off the circuit and playing a protective role.

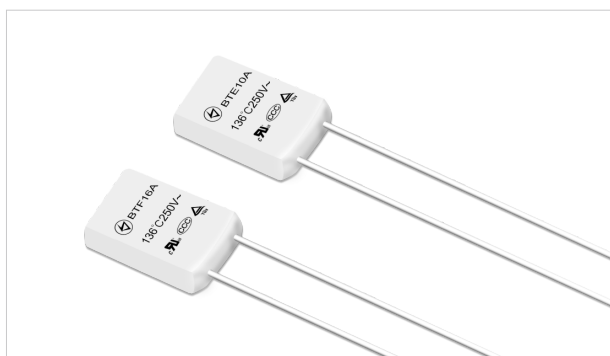
## 参数表 PARAMETER LIST

序号 No.	料号 PN	额定 动作温度 Tf	动作 温度 Operating temperature	保持 温度 Th	极限 温度 Tm	额定 电流 Rated Current	额定 电压 Rated Voltage	认证 certification				
		(°C)	(°C)	(°C)	(°C)	(A)	(V)	UL/C-UL	TUV	CCC	PSE	KC
1	BTC 115C	115	111±2	95	200	3A	250VAC	●	●	●	●	●
2	BTC 125C	125	121±2	106	203	3A	250VAC	○	○	○	○	○
3	BTC 130C	130	125±2	108	203	3A	250VAC	○	○	○	○	○
4	BTC 135C	135	131±2	116	203	3A	250VAC	○	○	○	○	○
5	BTC 145C	145	140±2	127	203	3A	250VAC	○	○	○	○	○
6	BTC 150C	150	144±2	129	203	3A	250VAC	○	○	○	○	○

注: (1) ●=取得 ○=未取得  
(1) ●=obtained ○=no obtained



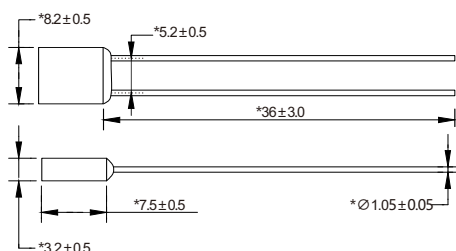
# BTE/BTF系列温度保险丝 BTE/BTF SERIES THERMAL FUSE



## 关键特性 KEY FEATURES OF THE PRODUCT

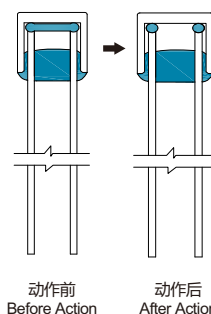
- 环保易熔合金型  
Environmentally fusible alloy type
- 塑料外壳  
Plastic case
- 动作温度精准  
Accurate action temperature
- 一次动作保护，不可恢复  
Not recoverable

## 尺寸 DIMENSIONS(MM)



备注：导线长度可根据客户要求定制  
Note: Wire length can be customized according to customer requirements.

## 工作原理 WORKING PRINCIPLE



当温度保险丝本体及周边环境温度上升至温度保险丝熔断温度时，在助熔剂发挥表面张力作用下，合金呈球状熔断，切断电路，发挥保护功能。

When fuse body and its ambience temperature rises to the melting point of Thermal fuse, the alloy is spherical fused under the surface tension of flux, cutting off the circuit and playing a protective role.

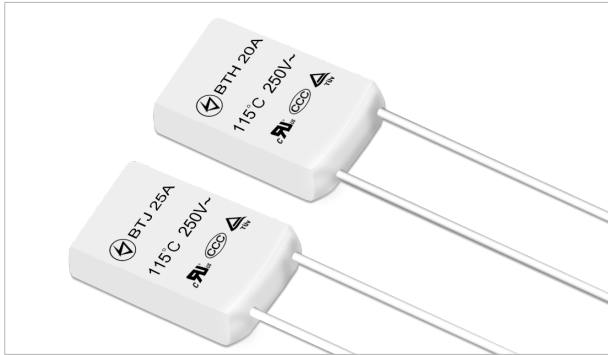
## 参数表 PARAMETER LIST

序号 No.	料号 PN	额定 动作温度 Tf	动作 温度 Operating temperature	保持 温度 Th	极限 温度 Tm	额定 电流 Rated Current	额定 电压 Rated Voltage	认证 certification					
		(°C)	(°C)	(°C)	(°C)	(A)	(V)	UL/C-UL	TUV	CCC	PSE	KC	VDE
1	BTE 115C	115	111±2	85	200	10A	250V	●	●	●	●	●	○
2	BTE136C	136	131±2	106	200	10A	250V	●	●	●	●	●	○

序号 No.	料号 PN	额定 动作温度 Tf	动作 温度 Operating temperature	保持 温度 Th	极限 温度 Tm	额定 电流 Rated Current	额定 电压 Rated Voltage	认证 certification					
		(°C)	(°C)	(°C)	(°C)	(A)	(V)	UL/C-UL	TUV	CCC	PSE	KC	VDE
1	BTF 115C	115	111±2	85	200	15A 16A	250V	●	●	●	●	●	○
2	BTF136C	136	131±2	106	200	15A 16A	250V	●	●	●	●	●	○

注：(1) ●=取得 ○=未取得  
(1) ●=obtained ○=no obtained

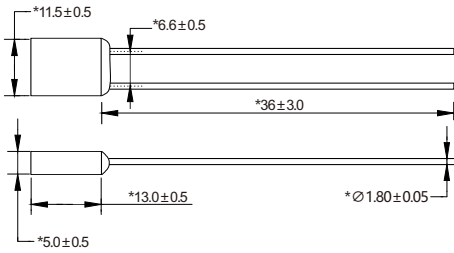
# BTH/BTJ系列温度保险丝 BTH/BTJ SERIES THERMAL FUSE



## 关键特性 KEY FEATURES OF THE PRODUCT

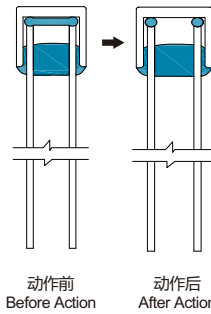
- 环保易熔合金型  
Environmentally fusible alloy type
- 塑料外壳  
Plastic case
- 动作温度精准  
Accurate action temperature
- 一次动作保护, 不可恢复  
Not recoverable

## 尺寸 DIMENSIONS(MM)



备注: 导线长度可根据客户要求定制  
Note: Wire length can be customized according to customer requirements.

## 工作原理 WORKING PRINCIPLE



当温度保险丝本体及周边环境温度上升至温度保险丝熔断温度时, 在助熔剂发挥表面张力作用下, 合金呈球状熔断, 切断电路, 发挥保护作用。

When fuse body and its ambience temperature rises to the melting point of Thermal fuse, the alloy is spherical fused under the surface tension of flux, cutting off the circuit and playing a protective role.

## 参数表 PARAMETER LIST

序号 No.	料号 PN	额定 动作温度 Tf	动作 温度 Operating temperature	保持 温度 Th	极限 温度 Tm	额定 电流 Rated Current	额定 电压 Rated Voltage	认证 certification					
		(°C)	(°C)	(°C)	(°C)	(A)	(V)	UL/C-UL	TUV	CCC	PSE	KC	VDE
1	BTH 115C	115	111±2	85	200	20A	250/277/480V	●	●	●	●	●	○
2	BTH 136C	136	131±2	106	200	20A	250V	○	○	○	○	○	○

序号 No.	料号 PN	额定 动作温度 Tf	动作 温度 Operating temperature	保持 温度 Th	极限 温度 Tm	额定 电流 Rated Current	额定 电压 Rated Voltage	认证 certification					
		(°C)	(°C)	(°C)	(°C)	(A)	(V)	UL/C-UL	TUV	CCC	PSE	KC	VDE
1	BTJ 115C	115	111±2	82	200	25A	250V	●	●	●	●	●	○
2	BTJ136C	136	131±2	106	200	25A	250V	○	○	○	○	○	○

注: (1) ●=取得 ○=未取得  
(1) ●=obtained ○=no obtained



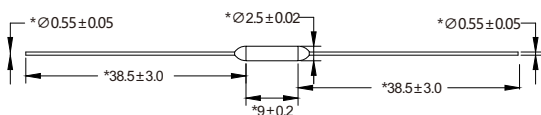
# BTW系列温度保险丝 BTW SERIES THERMAL FUSE



## 关键特性 KEY FEATURES OF THE PRODUCT

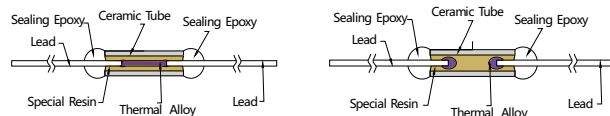
- 环保易熔合金型  
Environmentally fusible alloy type
- 陶瓷外壳  
Ceramic case
- 动作温度精准  
Accurate action temperature
- 一次动作保护，不可恢复  
Not recoverable

## 尺寸 DIMENSIONS(MM)



备注：导线长度可根据客户要求定制  
Note: Wire length can be customized according to customer requirements.

## 工作原理 WORKING PRINCIPLE



当温度保险丝本体及周围环境温度上升至 温度保险丝熔断温度时，在助熔剂发挥表面张力作用下，合金呈球状熔断，切断电路，发挥保护功能。

When fuse body and its ambience temperature rises to the melting point of Thermal fuse, the alloy is spherical fused under the surface tension of flux, cutting off the circuit and playing a protective role.

## 参数表 PARAMETER LIST

序号 No.	料号 PN	额定 动作温度	动作 温度	保持 温度	极限 温度	额定 电流		额定 电压	认证 certification			
		Tf	Operating temperature	Th	Tm	Rated Current	Rated Voltage	UL/C-UL	TUV	CCC	PSE	
		(°C)	(°C)	(°C)	(°C)	(A)	(V)					
1	BTW 115C	115	111±2	100	203	1	2	250VAC	○	○	○	○
2	BTW 125C	125	121±2	106	203	1	2	250VAC	○	○	○	○
3	BTW 130C	130	125±2	108	203	1	2	250VAC	○	○	○	○
4	BTW 135C	135	131±2	116	203	1	2	250VAC	○	○	○	○
5	BTW 145C	145	140±2	127	203	1	2	250VAC	○	○	○	○
6	BTW 150C	150	144±2	126	200	1	2	250VAC	●	●	●	●

注：(1)●=取得○=未取得  
(1) ●=obtained ○=no obtained

## 术语说明 THE TERM

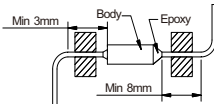
<b>额定动作温度(Tf)</b> Rated Action Temperature	温度保险丝按照规定方法测试，改变其导线状态的温度，按照IEC60691，EN60691，UL60691等要求规定，温度保险丝需在额定动作温度+0，-10°C范围内熔断，日本电气用品安全法规定为±7°C。 Temperature fuses are tested in accordance with the prescribed method to change the temperature of the conductor state. According to IEC 60691, EN 60691, UL 60691 and other requirements, temperature fuses should be fused within the rated operating temperature of +0, -10 degree C. The Japanese Electrical Supplies Safety Law stipulates that the temperature fuses should be fused in the range of +7 degree C.
<b>动作温度</b> Action Temperature	以1分钟0.5°C 1°C升温速率，对产品本体施加10mA以下电流，测得使温度保险丝断开的温度。 At the heating rate of 0.5 C 1 C per minute, the temperature of the fuse was measured through a current below 10 mA to the product body.
<b>保持温度(Th)</b> Holding Temperature	对保险丝施加额定电流，连续168H不更改导电状态时所测量到的最高温度。 The rated current is applied to the fuse, and the highest temperature measured in continuous 168H is not changed.
<b>极限温度(Tm)</b> Ultimate Temperature	温度保险丝承受10分钟后不会发生重新接通现象的最高温度。 The temperature fuse will withstand to keep disconnected with the highest temperature after 10 minutes.

## 安装注意事项 INSTALLATION INSTRUCTIONS

- 请勿将温度保险丝作为电流保险丝使用。  
Do not use the temperature fuse as the current fuse.
- 温度保险丝有规定额定范围（额定动作温度，额定电压，额定电流），请勿在额定范围外使用。  
The temperature fuse has a specified rating range (rated action temperature, rated voltage, rated current). Please do not use it outside the rating range.
- 请将温度保险丝设计在熔断后，不超过最高极限温度（TM）机器上使用。  
Please design the temperature fuse for use on the machine with the maximum temperature (TM) not exceeding the maximum temperature (TM) after the fuse is broken.
- 请勿将温度保险丝使用在水或有有机溶液中，亚硫酸气体，氮氢化合物等腐蚀性气体及高湿环境下使用；依据客户的使用要求，在选择温度保险丝时，需对安装的妥当性进行判断。  
Do not use the temperature fuse in water or organic solution, sulfite gas, nitrogen and hydrogen compound and other corrosive gases and high-humidity environment; According to the customer suse requirements, when selecting the temperature fuse, the installation of the appropriate judgment.
- 使用过程中，请注意不要施加过度机械外力。  
Please be careful not to apply excessive mechanical force during use.

※BTT有机化合物型产品请在距离外壳根部3mm，环氧树脂侧8mm以上进行导线弯折作业，弯曲过程中请固定导线（如下图），同时，对产品施加的机械外力勿超过下表。

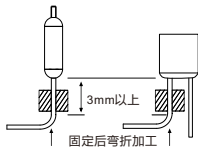
※Type of products does the bluetail ticket tracker (BTT) organic compounds in a 3 mm case root, epoxy resin side more than 8 mm wire bending operations, in the process of bending please fixed wire (pictured), at the same time, external mechanical forces toward a product over the table below.



拉力 Tension	压力 Pressure	扭曲 Twist force
1.61KG	0.41KG	180° 1time

※BTA,BTB ,BTC ,BTW等易熔合金型产品请在距离保险丝本体3mm以上进行导线弯折作业，弯折过程请固定导线（如下图），勿使环氧树脂部位发生破裂。

※For BTA,BTB,BTC and btw fusing gold type products, please bend the wire more than 3mm from the fuse body. During the bending process, please fix the wire (as shown in the figure below), so as not to break the epoxy resin part.



- BTT系列使用过程需确保外壳无变形及损伤（外壳变形后，触点可能无法弹开最终导致产品无法发挥保护功能）。

During the use of btt series, it is necessary to ensure that the outer case is free from deformation and damage (after the outer case is deformed, the contact may not be able to be opened, resulting in the failure of the product to play the protective function).

- BTT系列安装时，请勿使环氧树脂侧导线接触到产品外壳（一旦接触，可能导致电流从环氧树脂侧导线流向另一侧导线，无法切断电路）

The bluetail ticket tracker (btt) series when installation, please do not make epoxy wire in contact with the product side case (once the contact, may cause current flow from epoxy resin side wire to the other side of the wire, can't cut of the circuit)

- 焊接时请勿过度加温于温度保险丝，请控制最低温度，最短时间进行焊接作业，在冷却过程，请勿动温度保险丝。

Do not overheat the therma fuse when welding, please control the lowest temperature, the shortest time for welding operation, in the cooling process, do not move the temperature fuse.

※BTT系列保险丝若需要使用焊锡或浸锡方式安装时，需确保焊接位置距离保险丝本体大于10mm，焊接温度300度内时，焊接时间控制在1~2S内完成，Tf121以下产品建议不要使用焊锡或浸锡方式安装。

※If the BTT series fuse needs to be installed using soldering tin or soldering tin, it shall ensure that the welding position is greater than 10mm from the fuse body, and when the welding temperature is with in 300 degrees, the welding time shall be controlled within 1-2s. Tf121 the following products are not recommended to be installed using soldering or immersion tin.

※BTA,BTB ,BTC ,BTW等易熔合金系列产品锡焊及浸锡焊接时可参照下表，尽可能延长导线焊接距离，焊接距离小于10mm时，建议使用散热辅助工具（如使用尖嘴钳夹住导线利于散热）；焊接后请放置30S以上后移动产品。

※For the soldering and soldering of BTA,BTB,BTC and BTW fusing gold series products, please refer to the following table to extend the soldering distance of wires as far as possible. when the welding distance is less than 10mm, it is recommended to use the auxiliary tools for heat dissipation (for example, it is recommended to use the tongs to clamp the wires for heat dissipation).After welding, please place the mobile product for more than 30S.

额定动作温度 Tf	焊接距离 Soldering distance	焊接时间(S) ※300摄氏度时 Soldering time (300°C)
102-115	10mm	1
125-145	10mm	2
150	10mm	3

## 组合部件及二次加工品 COMBINED PARTS AND SECONDARY PRODUCTS



除向客户提供标准产品外，我们能够根据客户需求，定制组合件及各类规格的二次加工品，给客户带来便捷配套服务。

In addition to providing standard products to customers, we can customize the combination parts and secondary processing products of various specifications according to customers' needs to provide convenient supporting services to customers.



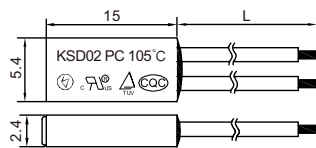
# KSD02热保护器系列 KSD02 THERMAL PROTECTOR SERIES



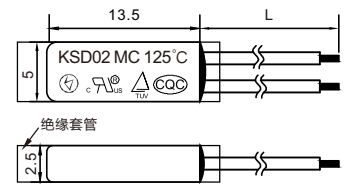
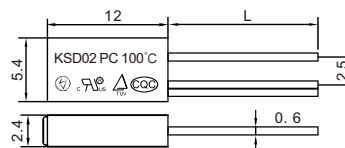
## 关键特性 KEY FEATURES OF THE PRODUCT

- 体积小, 便于安装  
Small size, easy for installing
- PBT外壳, 金属外壳, 环氧树脂密封  
PBT case, metal case, epoxy seal
- 自动复位双金属片, 寿命高达10000次以上  
Auto reset bimetallic strip, usage count more than 10000 times.
- 防潮, 防尘, 防浸漆  
Moistureproof, dustproof, anti soaking paint
- 优越的热响应, 电流温度双重保护  
Superior thermal response, double protection for current & temperature
- 按要求定制  
Customized base on customers & requirements

## 尺寸 DIMENSIONS(MM)



塑壳  
Plastic Case



铁壳  
Iron Case

注: 标准线材3266 22#白色线, 线长L=70mm, 电子线的型号规格、颜色、长度, 套管的规格、长度, 镀锡铜线的长度等可依客户要求定制  
Note: Standard wire is 3266 22# white wire, wire length is 70mm. The model specification/color/length/specification of tube/length of tin copper wire for electronic wire could be customized base on customers' requirements.

## 参数表 PARAMETER LIST

常闭  
Often Close Type



动作前 (触点接通)  
Before Action (Contact Connection)

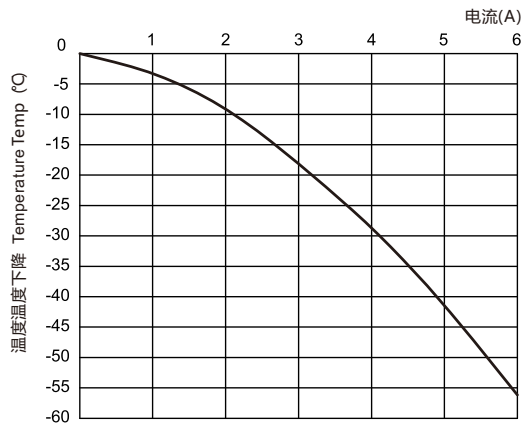


动作后 (触点断开)  
After Action (Contact Disconnection)

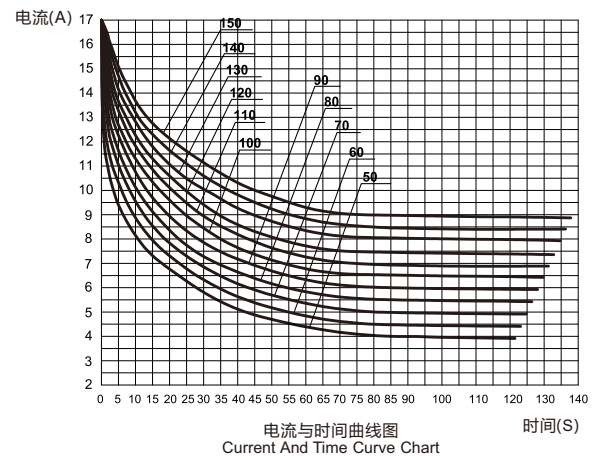
温度升高: 热量传递到双金属片上, 达到动作温度值, 触点断开  
温度下降: 双金属片迅速恢复原状, 触点闭合, 电路接通  
Temperature rise: Heat is transferred to bimetallic strip to reach the operating temperature value, and the contacts are disconnected.  
Temperature drop: Bimetallic strip quickly restored to original state, contact closed and circuit connected.

注: 常开型动作原理与此相反  
Note: Normally open operating principle is opposite

## 电流-温度下降曲线图 OPERATING TEMP. DROP DUE TO CURRENT



## 电流与时间曲线图 CURRENT AND TIME CURVE CHART



## 参数表 PARAMETER LIST

KSD02热保护器系列 KSD02 THERMAL PROTECTOR SERIES										
电气特性 Electric characteristic		AC250V/2A; AC115V/3A; DC48V/3A								
接触电阻 Contact resistance		≤50mΩ								
温度特性 Temperature characteristic										
料号 PN	动作温度(°C) Action temperature	复位温度(°C) Reset temp(°C)	最高使用环境 极限温度 Highest ambient temp	常闭 Often close		常开 Often open		认证 Certification		
				塑壳 Platic case	铁壳 Iron case	塑壳 Platic case	铁壳 Iron case	TUV	UL	CQC
KSD040****	40±5	≥30	90°C	●	●	●	-	●	●	●
KSD045****	45±5	≥33	95°C	●	●	●	-	●	●	●
KSD050****	50±5	≥35	100°C	●	●	●	-	●	●	●
KSD055****	55±5	42±6	105°C	●	●	●	-	●	●	●
KSD060****	60±5	45±8	110°C	●	●	●	-	●	●	●
KSD065****	65±5	48±10	115°C	●	●	●	-	●	●	●
KSD070****	70±5	50±12	120°C	●	●	●	-	●	●	●
KSD075****	75±5	53±14	125°C	●	●	●	-	●	●	●
KSD080****	80±5	55±15	130°C	●	●	●	-	●	●	●
KSD085****	85±5	60±15	135°C	●	●	●	-	●	●	●
KSD090****	90±5	65±15	140°C	●	●	●	-	●	●	●
KSD095****	95±5	70±15	145°C	●	●	●	-	●	●	●
KSD100****	100±5	70±15	150°C	●	●	●	-	●	●	●
KSD105****	105±5	75±15	155°C	●	●	●	-	●	●	●
KSD110****	110±5	75±15	160°C	●	●	●	-	●	●	●
KSD115****	115±5	80±15	165°C	●	●	●	-	●	●	●
KSD120****	120±5	85±15	170°C	●	●	●	-	●	●	●
KSD125****	125±5	85±15	175°C	●	●	●	-	●	●	●
KSD130****	130±5	90±15	180°C	●	●	-	-	●	●	●
KSD135****	135±5	95±15	180°C	●	●	-	-	●	●	●
KSD140****	140±5	100±15	180°C	●	●	-	-	●	●	●
KSD145****	145±5	100±15	180°C	●	●	-	-	●	●	●
KSD150****	150±5	105±15	180°C	●	●	-	-	●	●	●

注: (1) 复位温度仅供参考 (2) ●=取得 ○=未取得  
 (1) Reset temp for reference (2) ●=obtained ○=no obtained

## 应用 APPLICATION

- |                                 |                                     |  |   |
|---------------------------------|-------------------------------------|--|---|
| (1) 电动机保护<br>Motor Protection   | (3) 变压器保护<br>Transformer Protection | (5) 加热垫温度控制<br>Heating Pad Temperature Control | (7) LED灯管, 球泡保护<br>Led Lamp Tube, Bulb Protection |
| (2) 蓄电池保护<br>Battery Protection | (4) 充电器保护<br>Charger Protection     | (6) 电源保护<br>Power Protection                   | (8) PCB电路板保护<br>Pcb Circuit Board Protection      |

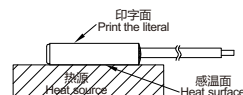
## 储存及安装注意事项 STORAGE AND INSTALLATION PRECAUTIONS

(1) 产品应在相对湿度小于90%，环境温度40°C以下通风、洁净、干燥、无腐蚀性气体的场所中存放。

The product should be stored in a ventilated, clean, dry and non-corrosive place with relative humidity less than 90% and ambient temperature below 40 °C.

(2) 保护器应安装于被保护对象温升的敏感点，其感温面应与被保护部件有效地紧密接触或直接面向被保护区域。

The protector shall be installed at the sensitive point of temperature rise of the protected object, and its temperature sensing surface shall be in close contact with the protected part effectively or directly oriented to the protected area.



(3) 不得使用尖锐的工具对保护器挤压。  
No sharp tools should be used to crush the protectors.

(4) 不得用重力捶压保护器。  
Do not use gravity to beat the protector.



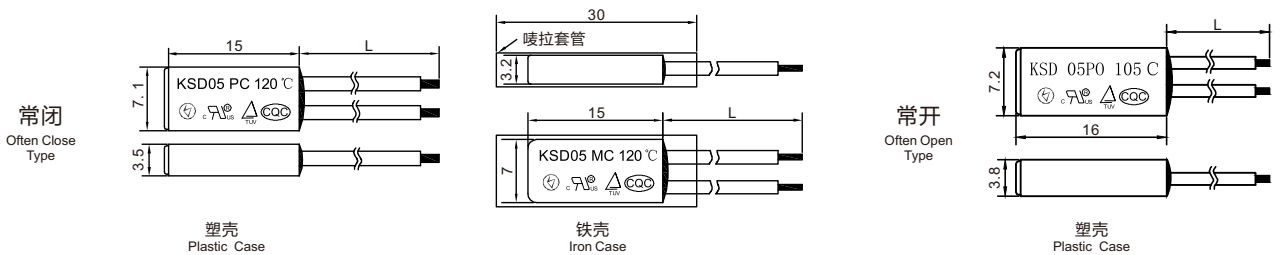
# KSD05热保护器系列 KSD05 THERMAL PROTECTOR SERIES



## 关键特性 KEY FEATURES OF THE PRODUCT

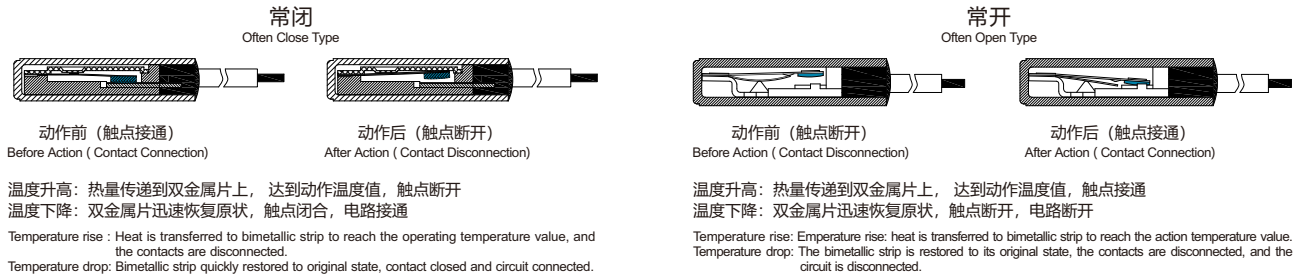
- 体积小，快速动作  
Small size, quick action
- PBT外壳，金属外壳，环氧树脂密封  
PBT case, metal case, epoxy seal
- 自动复位双金属片  
Auto reset bimetallic strip
- 防潮，防尘，防浸漆  
Moistureproof, dustproof, anti soaking paint
- 优越的热响应  
Superior thermal response
- 按要求定制  
Customized according to requirements

## 尺寸 DIMENSIONS(MM)

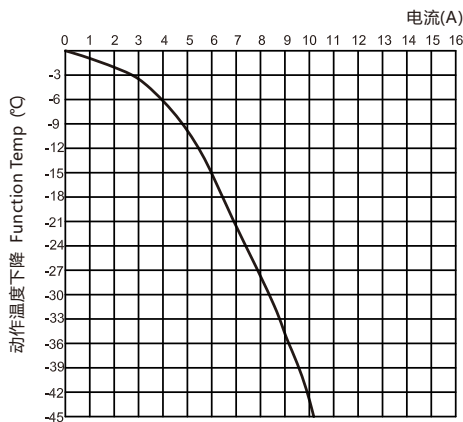


注：电子线的型号规格、颜色、长度，套管的规格、长度，镀锡铜线的长度等可依客户要求定制  
Note: Type specification, color, length, sleeve specification, length of tin-plated copper wire can be customized according to customer requirements

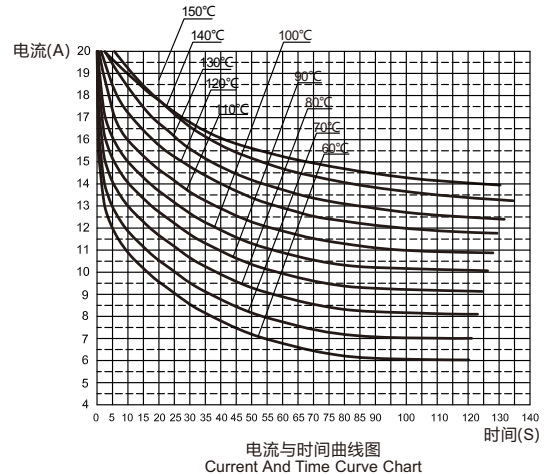
## 参数表 PARAMETER LIST



## 电流-温度下降曲线图 OPERATING TEMP. DROP DUE TO CURRENT



## 电流与时间曲线图 CURRENT AND TIME CURVE CHART





## 参数表 PARAMETER LIST

KSD热保护器系列 KSD THERMAL PROTECTOR SERIES										
电气特性 Electric characteristic		AC250V/5A; AC115V/8A; DC24V/10A								
接触电阻 Contact resistance		≤50mΩ								
温度特性 Temperature characteristic										
料号 PN	动作温度(°C) Action temperature	复位温度(°C) Reset temp(°C)	最高使用环境 极限温度 Highest ambient temp	常闭 Often close		常开 Often open		认证 Certification		
				塑壳 Platic case	铁壳 Iron case	塑壳 Platic case	铁壳 Iron case	TUV	UL	CQC
KSD060****	60±5	45±8	110°C	●	●	●	-	●	●	●
KSD065****	65±5	48±10	115°C	●	●	●	-	●	●	●
KSD070****	70±5	50±12	120°C	●	●	●	-	●	●	●
KSD075****	75±5	53±15	125°C	●	●	●	-	●	●	●
KSD080****	80±5	55±15	130°C	●	●	●	-	●	●	●
KSD085****	85±5	60±15	135°C	●	●	●	-	●	●	●
KSD090****	90±5	65±15	140°C	●	●	●	-	●	●	●
KSD095****	95±5	70±15	145°C	●	●	●	-	●	●	●
KSD100****	100±5	70±15	150°C	●	●	●	-	●	●	●
KSD105****	105±5	75±15	155°C	●	●	●	-	●	●	●
KSD110****	110±5	75±15	160°C	●	●	●	-	●	●	●
KSD115****	115±5	80±15	165°C	●	●	●	-	●	●	●
KSD120****	120±5	85±15	170°C	●	●	●	-	●	●	●
KSD125****	125±5	85±15	175°C	●	●	●	-	●	●	●
KSD130****	130±5	90±15	180°C	●	●	-	-	●	●	●
KSD135****	135±5	95±15	180°C	●	●	-	-	●	●	●
KSD140****	140±5	100±15	180°C	●	●	-	-	●	●	●
KSD145****	145±5	100±15	180°C	●	●	-	-	●	●	●
KSD150****	150±5	105±15	180°C	●	●	-	-	●	●	●

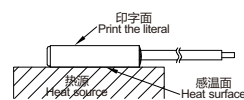
注: (1) 复位温度仅供参考  
 (1) Reset temp for reference  
 (2) ●=取得 ○=未取得  
 (2) ●=obtained ○=no obtained

## 应用 APPLICATION

- |                                 |                                     |  |   |
|---------------------------------|-------------------------------------|--|---|
| (1) 电动机保护<br>Motor Protection   | (3) 变压器保护<br>Transformer Protection | (5) 加热垫温度控制<br>Heating Pad Temperature Control | (7) LED灯管, 球泡保护<br>Led Lamp Tube, Bulb Protection |
| (2) 蓄电池保护<br>Battery Protection | (4) 充电器保护<br>Charger Protection     | (6) 电源保护<br>Power Protection                   | (8) PCB电路板保护<br>Pcb Circuit Board Protection      |

## 储存及安装注意事项 STORAGE AND INSTALLATION PRECAUTIONS

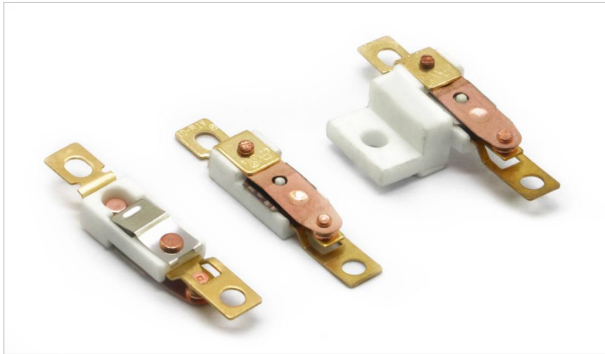
- (1) 产品应在相对湿度小于90%，环境温度40°C以下通风、洁净、干燥、无腐蚀性气体的场所中存放。  
 The product should be stored in a ventilated, clean, dry and non-corrosive place with relative humidity less than 90% and ambient temperature below 40 °C.
- (2) 保护器应安装于被保护对象温升的敏感点，其感温面应与被保护部件有效地紧密接触或直接面向被保护区域。  
 The protector shall be installed at the sensitive point of temperature rise of the protected object, and its temperature sensing surface shall be in close contact with the protected part effectively or directly oriented to the protected area.



- (3) 不得使用尖锐的工具对保护器挤压。  
 No sharp tools should be used to crush the protectors.
- (4) 不得用重力捶压保护器。  
 Do not use gravity to beat the protector.



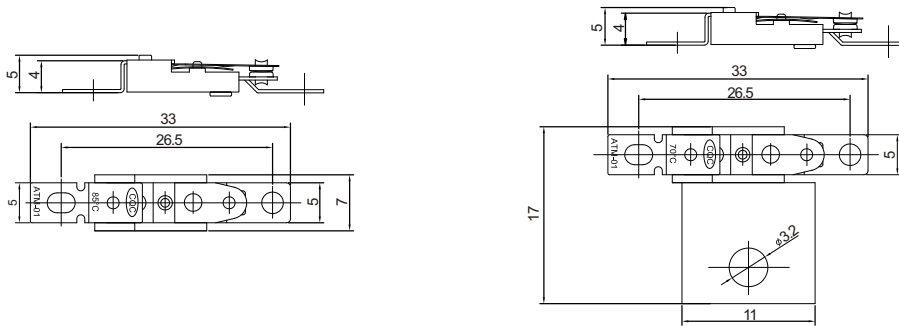
# ATM系列热切断器 ATM THERMAL CUT - OUT SERIES



## 关键特性 KEY FEATURES OF THE PRODUCT

- 可承受16A大电流  
May operation current 16A
- 10万次超长寿命  
100,000 million times long life
- 快速动作  
Quick action
- 优越的热响应  
Superior thermal response
- 陶瓷耐高温支架  
Ceramic high temperature resistant bracket

## 尺寸 DIMENSIONS(MM)



## 工作原理 WORKING PRINCIPLE

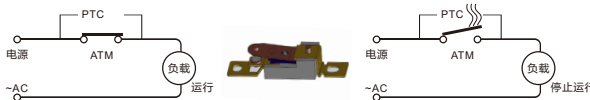
### 自动复位型(ATM-01)产品 Auto-Reset Type (ATM-01) Products



当被保护电器温度升高时所产生的热量传递到双金属片元件上，达到预定动作温度设定值时，双金属片元件便迅速动作，推动动触片断开触点，从而切断电路；当温度下降到额定复位温度值时，双金属片元件自动恢复接通电路。

When the temperature of the protected electrical apparatus rises, the heat generated is transferred to the bimetal sheet element, and when the predetermined operating temperature is reached, the bimetal sheet element acts quickly, pushing the moving contact to disconnect the contact, thereby cutting off the circuit; when the temperature drops to the rated reset temperature, the bimetal sheet element automatically restores the circuit to be connected.

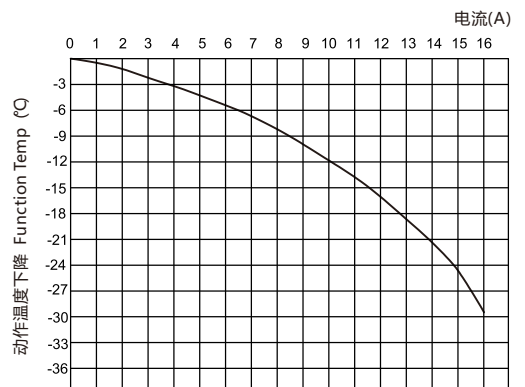
### 断电复位型(ATM-01P)产品 Turn off to reset (ATM-01P) Products



带PTC元件同触点电路形成一个并联电路，当温度升高后，触点电路断开，电流通过PTC元件形成回路，PTC迅速升温，高于额定的复位温度，使电路一直保持断开状态。当关闭总电源，温度下降到双金片的复位温度时，双金片迅速恢复，触点闭合，使保护的电路更安全，更可靠。

When the temperature rises, the contact circuit is disconnected, and the current passes through the PTC element to form a circuit. The PTC temperature rises rapidly, which is higher than the rated reset temperature, so that the circuit remains disconnected. When the total power supply is switched off and the temperature drops to the reset temperature of the double gold sheet, the double gold sheet is quickly restored and the contacts are closed, thus making the protective circuit safer and more reliable.

## 电流热效应温度曲线图 TEMPERATURE CURVE OF ELECTRIC THERMAL EFFECT



## 参数表 PARAMETER LIST

ATM系列热切断器 ATM THERMAL CUT - OUT SERIES								
电气特性 Electric characteristic		AC250V/16A 50/60HZ 10000cycles AC125V/16A 100000cycles						
接触电阻 Contact resistance		≤50mΩ						
温度特性 Temperature characteristic								
料号 PN	动作温度(°C) Action temperature	复位温度(°C) Reset temp(°C)	最高使用环境 极限温度 Highest ambient temp	常闭 自动复位 Often close (auto reset)	常闭 手动复位 Often close (manual reset)	认证 Certification		
						TUV	UL	CQC
ATM-01(01P)-60°C	60±5	45±8	110°C	●	●	●	●	●
ATM-01(01P)-65°C	65±5	48±10	115°C	●	●	●	●	●
ATM-01(01P)-70°C	70±5	50±12	120°C	●	●	●	●	●
ATM-01(01P)-75°C	75±5	53±15	125°C	●	●	●	●	●
ATM-01(01P)-80°C	80±5	55±15	130°C	●	●	●	●	●
ATM-01(01P)-85°C	85±5	60±15	135°C	●	●	●	●	●
ATM-01(01P)-90°C	90±5	65±15	140°C	●	●	●	●	●
ATM-01(01P)-95°C	95±5	65±15	145°C	●	●	●	●	●
ATM-01(01P)-100°C	100±5	70±15	150°C	●	●	●	●	●
ATM-01(01P)-105°C	105±5	75±15	155°C	●	●	●	●	●
ATM-01(01P)-110°C	110±5	75±15	160°C	●	●	●	●	●
ATM-01(01P)-115°C	115±5	80±15	165°C	●	●	●	●	●
ATM-01(01P)-120°C	120±5	85±15	170°C	●	●	●	●	●
ATM-01(01P)-125°C	125±5	85±15	175°C	●	●	●	●	●
ATM-01(01P)-130°C	130±5	90±15	180°C	●	●	●	●	●
ATM-01(01P)-135°C	135±5	95±15	185°C	●	●	●	●	●
ATM-01(01P)-140°C	140±5	100±15	190°C	●	●	●	●	●
ATM-01(01P)-145°C	145±5	100±15	195°C	●	●	●	●	●
ATM-01(01P)-150°C	150±5	105±15	200°C	●	●	●	●	●

注: (1) 复位温度仅供参考  
 (1) Reset temp for reference  
 (2) ●=取得 ○=未取得  
 (2) ●=obtained ○=no obtained

## 应用 APPLICATION

- (1) 电吹风、卷发器的过热保护  
Overheating Protection For Hair Driers And Curlers
- (2) 加热器, 爆米花机, 电烤箱  
Heater, Popcorn Maker, Electric Oven
- (3) 暖风机等  
Heating Fan, Etc

## 储存及安装注意事项 STORAGE AND INSTALLATION PRECAUTIONS

- (1) 产品应在相对湿度小于90%, 环境温度40°C以下通风、洁净、干燥、无腐蚀性气体的场所中存放。  
The product should be stored in a ventilated, clean, dry and non-corrosive place with relative humidity less than 90% and ambient temperature below 40%.
- (2) 安装和使用过程中, 绝不允许触碰弹片及感温部分, 否则将会导致限温器温度失准, 接触不良而不能工作。  
In the process of installation and use, the shrapnel and the temperature sensing part must not be touched. Otherwise, the temperature of the thermostat will be inaccurate and the contact is not good enough to work.



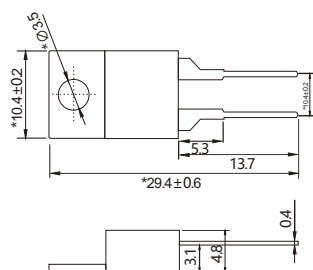
# KSD-01F电路板温控器系列 KSD-01F PCB THERMOSTAT SERIES



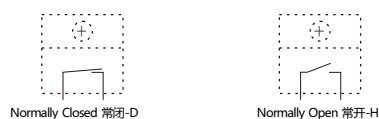
## 关键特性 KEY FEATURES OF THE PRODUCT

- 0-150°C, 每5度一规格, 0-40°C产品需特殊订制  
0-150°C. One specification every 5 degrees, 0-40°C products need to be specially customized
- 触点形式分: 常开/常闭二种  
Contact form: normally open/normally closed
- TO220封装  
TO220 international electronic package standard
- 产品动作精准可靠  
Accurate action temperature
- 电气参数: AC250V /DC24V 2A  
Electrical parameters: AC250V/DC24V 2A
- 使用寿命长(1万次)  
Long service life (10,000 cycles)

## 尺寸 DIMENSIONS(MM)



## 工作原理 WORKING PRINCIPLE



当外界温度过高时, 传递到经校正过的双金属片便迅速动作, 这样切断或接通电路(常闭或常开两种), 当温度下降到复位温度时, 双金属片又迅速复位, 重复工作以保证产品温度保护的安全性。

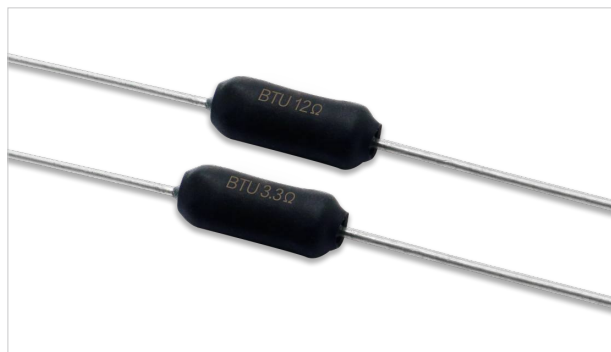
When the external temperature is too high, the corrected bimetallic sheet is transferred to the rapid action, so that the circuit is cut or switched on (normally closed or normally open two), when the temperature drops to the reset temperature, the bimetallic sheet is quickly reset, repeated work to ensure the safety of product temperature protection.

## 参数表 PARAMETER LIST

序号 No.	料号 PN	额定 动作温度 Tf	复位 温度 Reset temp	认证 certification		
		(°C)	(°C)	UL	TUV	CQC
1	KSD-01F * 040	40±5	28±8	○	○	●
2	KSD-01F * 045	45±5	33±8	○	○	●
3	KSD-01F * 050	50±5	37±8	○	○	●
4	KSD-01F * 055	55±5	40±10	○	○	●
5	KSD-01F * 060	60±5	45±10	○	○	●
6	KSD-01F * 065	65±5	48±12	○	○	●
7	KSD-01F * 070	70±5	50±12	○	○	●
8	KSD-01F * 075	75±5	53±15	○	○	●
9	KSD-01F * 080	80±5	55±15	○	○	●
10	KSD-01F * 085	85±5	60±15	○	○	●
11	KSD-01F * 090	90±5	65±15	○	○	●
12	KSD-01F * 095	95±5	70±15	○	○	●
13	KSD-01F * 100	100±5	70±15	○	○	●
14	KSD-01F * 105	105±5	75±15	○	○	●
15	KSD-01F * 110	110±5	75±15	○	○	●
16	KSD-01F * 115	115±5	80±15	○	○	●
17	KSD-01F * 120	120±5	85±15	○	○	●
18	KSD-01F * 125	125±5	85±15	○	○	●
19	KSD-01F * 130	130±5	90±15	○	○	●
20	KSD-01F * 135	135±5	95±15	○	○	●
21	KSD-01F * 140	140±5	100±15	○	○	●
22	KSD-01F * 145	145±5	105±15	○	○	●
23	KSD-01F * 150	150±5	110±15	○	○	●

注: (1) ●=取得 ○=未取得  
(1) ●=obtained ○=no obtained

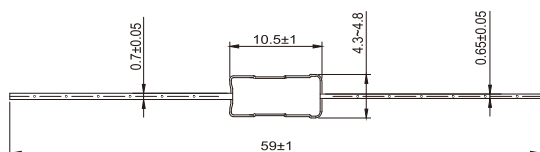
# BTU系列复合保护 BTU SERIES MULTIPLE PROTECTION



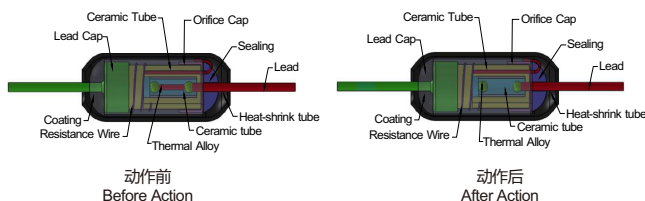
## 关键特性 KEY FEATURES OF THE PRODUCT

- 过流&过温双重保护  
Double protection of over current and over temperature
- 熔断电流小  
Low fusing current
- 熔断时表面温度低  
It have a low temperature on the surface during fusing.
- 电阻及温度保险丝动作温度可定制  
Resistance and temperature fuse operation temperature can be customized

## 尺寸 DIMENSIONS(MM)



## 工作原理 WORKING PRINCIPLE



绕线电阻与温度保险丝结合体，当电阻因微短路时，表面温度持续上升，温度传导至温度保险丝设计温度时，保险丝熔断，发挥保护功能。

Wire winding resistance and temperature fuse combination, when the resistance due to micro short circuit, the surface temperature continues to rise, temperature conduction to the temperature fuse design temperature, fuse fuses, play the protection function.

备注：导线长度可根据客户要求定制

Note: Wire length can be customized according to customer requirements.

## 参数表 PARAMETER LIST

序号 No.	料号 PN	功率 Power	电阻 (Ω)	电阻 公差 Resistance Tolerance	熔断 温度 Fusing Temperature (°C)	认证 certification		
						UL	TUV	CQC
1	BTU	0.5W	0.1-300	±5%	222&232+0-10	●	●	●
2	BTU	1W	0.1-300	±5%	222&232+0-10	●	●	●
3	BTU	2W	0.1-300	±5%	222&232+0-10	●	●	●

注：(1)电阻及熔断温度可定制

(1) Resistance and fuse temperature can be customized

(2)常用量产电阻规格：1.0Ω,1.1Ω,2.2Ω,2.8Ω,3.3Ω,4.3Ω,6.0Ω,22Ω

(2) Common use and could be volume production resistance specification: 1.0Ω, 1.1Ω, 2.2Ω, 2.8Ω, 3.3Ω, 4.3Ω, 6.0Ω, 22Ω

## 应用 APPLICATION



电源适配器  
The Power Adapter



LED灯  
LED lights



电动牙刷座充  
Electric toothbrush charger



无线AP  
Wireless AP



Management System  
IATF 16949:2016  
[www.tuv.com](http://www.tuv.com)  
ID 9000028566

National High-tech Enterprise  
SC 32C National Technical Committee Member of China  
ISO 9001 Certified Company  
ISO 14001 Certified Company  
ISO 45001 Certified Company  
QC 080000 Certified Company  
IATF 16949 Certified Company

国家高新技术企业  
SC 32C 国内专家组成员单位  
ISO 9001 认证企业  
ISO 14001 认证企业  
ISO 45001 认证企业  
QC 080000 认证企业  
IATF 16949 认证体系

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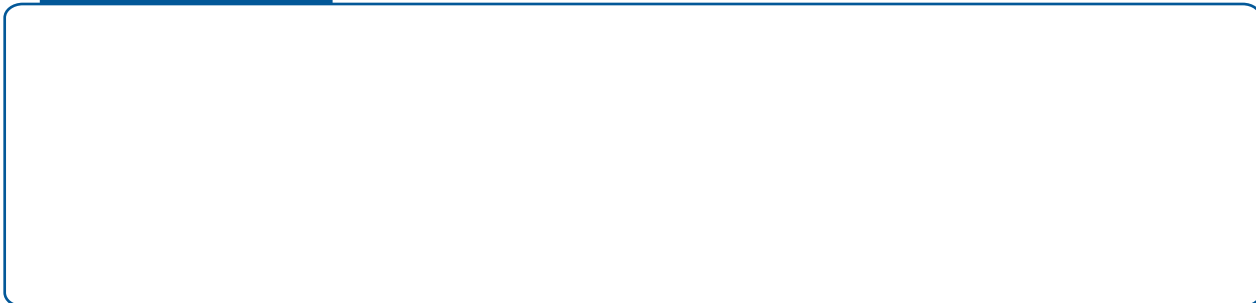
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