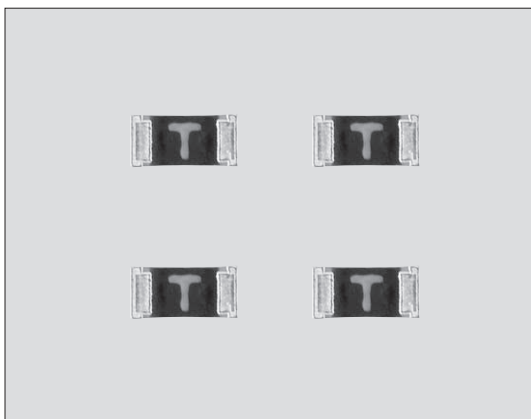


## TF16AT ■ 片式保险丝 (冲击耐受电压)

Chip Current Fuses (Anti Pulse)



外观颜色: 黑色 Coating color: Black

## ■ 特点 Features

- 是小型、轻量的二次电路用片状电流保险丝。
- 冲击耐受电压性优异。
- 根据独特的结构、制作方法, 熔断特性稳定。
- 可以把占有面积缩小。
- 内部电阻值非常低, 电压降低, 可以减少功率消耗。
- 适用于小型电子设备的电路配件过电流保护。
- 对应回流焊、波峰焊。
- 符合欧盟RoHS。
- Small and light chip current fuses for the secondary circuit.
- Excellent in anti-pulse characteristics.
- Original construction and manufacturing method stabilize fusing characteristics.
- Able to reduce an occupied area.
- Low power consumption and less voltage dropping due to exceedingly low internal resistance.
- Suitable for overcurrent protection of circuit block in small electronic devices.
- Suitable for both flow and reflow solderings.
- Products meet EU-RoHS requirements.

## ■ 取得规格 Approvals Awarded

UL248.14 认定文件号 File No. E131375

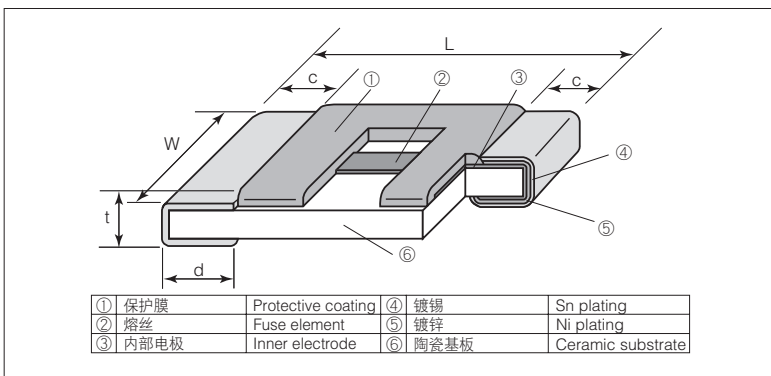
c-UL (CSA) C22.2 No.248.14

认定文件号 File No. E131375

## ■ 用途 Applications

- 笔记本电脑 Notebook personal computers
- HDD、CD-ROM HDDs、CD-ROMs
- 手机 Cellular-telephones
- 摄像机 Camcorders

## ■ 结构图 Construction



## ■ 外形尺寸 Dimensions

型号 Type (Inch Size Code)	尺寸 Dimensions (mm)					Weight (g) (1000pcs)
	L	W	c	d	t	
TF16AT (0603)	1.6±0.1	0.8±0.08	0.3±0.1	0.3±0.1	0.45±0.05	2.15

## ■ 品名构成 Type Designation

实例 Example

TF	16A	T	2.50	T	TD
品种 Product Code	尺寸 Size 16A: 1.6x0.8mm	熔断特性 Fusing Characteristics T:耐脉冲 T:Anti-pulse	额定电流 Rated Current	端子表面材质 Terminal Surface Material T: Sn	二次加工 Taping TD:4mm pitch punch paper BK: Bulk

欲知关于此产品含有的环境负荷物质详情 (除EU-RoHS以外), 请与我们联系。  
 编带细节请参考卷末附录C。

Contact us when you have control request for environmental hazardous material other than the substance specified by EU-RoHS.

For further information on taping, please refer to APPENDIX C on the back pages.

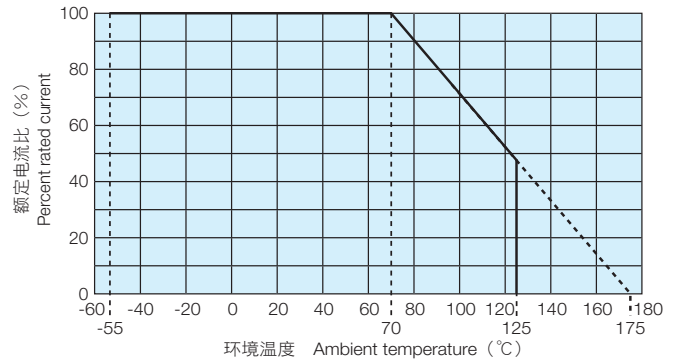
## ■ 额定值 Ratings

型号 Type	表示 Marking	额定电流 Rated Current	熔断时间 Fusing Time	内部电阻值 Internal R. (mΩ) Max.	额定电压 Rated Voltage	额定环境温度 Rated Ambient Temp.	使用温度范围 Operating Temperature Range	编带和包装数/卷 Taping & Q'ty/Reel (pcs)
TF16AT0.25	C	0.25A	施加额定电流的200%的电流时, 在5秒钟以内。参照熔断特性图。 Open within 5 s. at 200% rated current. Refer to the graph of fusing characteristics.	498	32V	+70℃	-55~+125℃	5,000
TF16AT0.315	D	0.315A		384				
TF16AT0.50	F	0.50A		198				
TF16AT0.63	I	0.63A		143				
TF16AT0.80	K	0.80A		120				
TF16AT1.00	L	1.00A		94				
TF16AT1.25	M	1.25A		73				
TF16AT1.60	N	1.60A		59				
TF16AT2.00	S	2.00A		42				
TF16AT2.50	T	2.50A		32				
TF16AT3.15	U	3.15A		24				
TF16AT4.00	X	4.00A		17				
TF16AT5.00	Y	5.00A		14				

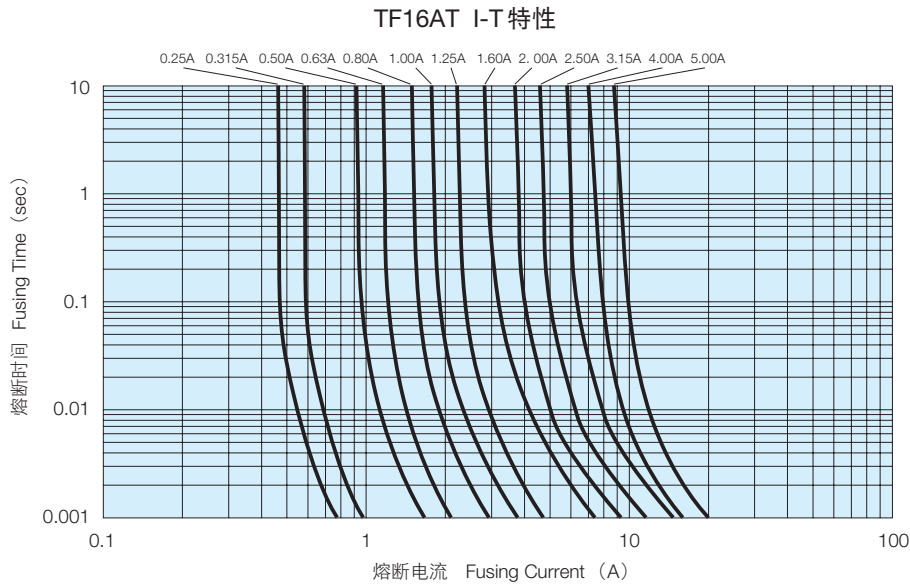
## ■ 降低额定值 Derating

- 稳恒电流  
稳恒电流在重复脉冲时，稳恒电流波形的峰值是恒稳电流值。
- 通常降低额定值  
本产品的通常降低额定值作为标准应在0.75以下。
- 降低温度  
在环境温度70℃以上使用时，需要校正温度，请参考右图的降低系数。
- Normal derating  
Normal derating of this product should be 0.75max. as standards.
- Temperature Derating  
Rated Current needs to be derated if used at an ambient temperature of 70℃ or more. Refer to the derating coefficient on the right figure.
- Stationary current  
Regard the peak of stationary current waveform as stationary current value when the stationary current is repeated pulse.

## ■ 根据环境温度减轻额定电流 Rated Current Derating



## ■ 熔断特性 Fusing Characteristics (标准熔断时间 Average Fusing Time)



## ■ 性能 Performance

试验项目 Test Items	标准值 Performance Requirements $\Delta R \pm \%$		试验方法 Test Methods
	保证值 Limit	代表值 Typical	
熔断特性 Fusing characteristics	5秒以内 Within 5s.	—	施加额定电流的200%的电流。 200% of rated current shall be carried.
电极强度 Bending test	应当没有电极剥离、导通断线等异常。 No mechanical damages.	—	支持点间隔90mm，弯曲宽度3mm，一次。 Distance between holding points 90mm, bending width 3mm, 1time.
耐焊接热 Resistance to soldering heat	10	5	260℃ $\pm$ 5℃, 10s $\pm$ 0.5s
焊接性 Solderability	95%以上为新的焊接覆盖。 95% coverage min.	—	245℃ $\pm$ 3℃, 3s $\pm$ 0.5s
通电寿命 Load life	10	5	70℃ $\pm$ 2℃, 1000h, 额定电流 $\times$ 75%, 1.5小时ON/0.5小时OFF的周期。 Rated current $\times$ 75%, 1.5h ON/0.5h OFF cycle
耐湿通电寿命 Load life moisture	10	5	40℃ $\pm$ 2℃, 90%~95%RH, 1000小时, 额定电流 $\times$ 75%, 1.5小时ON/0.5小时OFF的周期。 Rated current $\times$ 75%, 1.5h ON/0.5h OFF cycle
温度突变 Rapid change of temperature	10	5	-55℃ (30min) / +125℃ (30min) 10 cycles
耐溶剂性 Resistance to solvent	外观应无消失等异常。 No evidence of damages to protective.	—	依据MIL-STD-202F Conforming to MIL-STD-202F
残留电阻值 Residual resistance	10k $\Omega$ 以上 10k $\Omega$ or more	—	熔断后的直流电阻值。 Measure DC resistance after fusing

## ■ 使用上的注意

- 为能有保险丝特性，本产品的构造是以特殊树脂保护熔丝。安装元件时，请调整喷嘴的下死点等，不要对产品施加过度应力。施加过度应力使产品受损时，产品有可能会特性劣化、断线。
- 选定保险丝时，请与本目录内的「保险丝的使用注意事项」一起确认。
- The substrate material of TF10BN applies ceramics to achieve good fusing characteristics. Please keep away from oxygen gas/liquid because such environment may deteriorate element strength and the performance by glass component corrosion.
- When you select fuse product, please make sure to confirm "Precautions for Use of Fusing Components" in this catalogue and ask KOA sales.