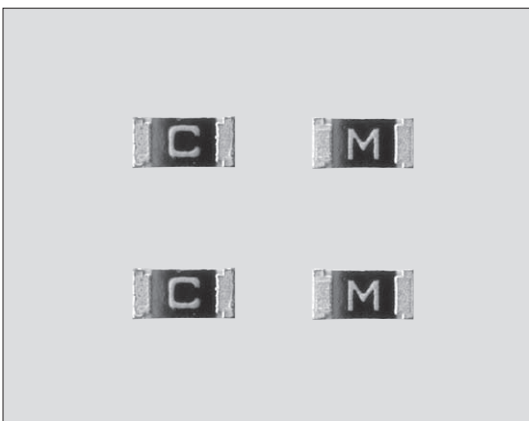
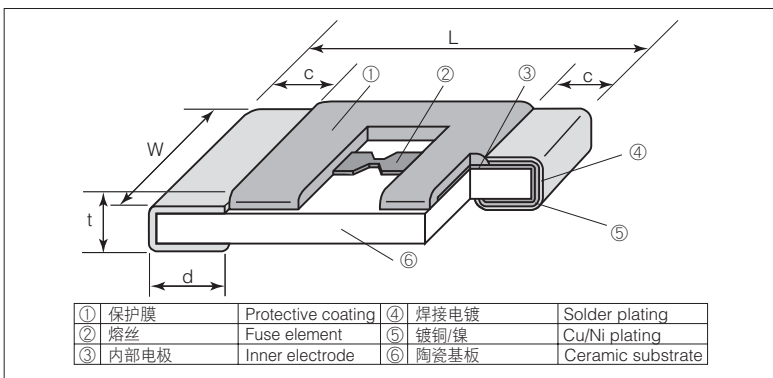


## TF16SN 片式保险丝 Chip Current Fuses



### ■ 结构图 Construction



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。
- 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。
- 内部电阻值低，电压降低，可以减少电力消耗。
- 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.
- The original manufacturing method makes the fusing characteristics stable.
- 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
- HDD、CD-ROM
- 手机
- 摄像机
- 数码相机
- Notebook personal computers
- HDDs、CD-ROMs
- Cellular-telephones
- Camcorders
- Digital still cameras

### ■ 额定值 Ratings

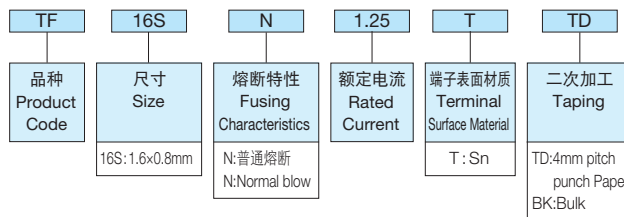
型号 Type	表示 Marking	额定电流 Rated Current	熔断时间 Fusing Time	内部电阻值 Internal R. (mΩ) Max.	额定电压 Rated Voltage	额定环境温度 Rated Ambient Temp.	使用温度范围 Operating Temperature Range	编带和包装数/卷 Taping & Q'ty/Reel (pcs)
TF16SN0.20	A	0.20A	施加额定电流的200%的电流时，在1秒钟以内。参照熔断特性图。	1500	32V	+70℃	-40~+125℃	5,000
TF16SN0.25	C	0.25A		960				
TF16SN0.315	D	0.315A		600				
TF16SN0.40	H	0.40A		440				
TF16SN0.50	F	0.50A		300				
TF16SN0.63	I	0.63A		190				
TF16SN0.70	J	0.70A		170				
TF16SN0.80	K	0.80A		135				
TF16SN1.00	L	1.00A		103				
TF16SN1.25	M	1.25A		78				
TF16SN1.60	N	1.60A	58					
TF16SN2.00	S	2.00A	47					
TF16SN2.50	T	2.50A	38					
TF16SN3.15	U	3.15A	28					

### ■ 外形尺寸 Dimensions

型号 Type (Inch Size Code)	尺寸 Dimensions (mm)					Weight (g) (1000pcs)
	L	W	c	d	t	
TF16SN (0603)	1.6±0.2	0.8±0.1	0.3±0.1	0.3±0.1	0.4 <sup>+0.1</sup> <sub>-0.06</sub>	2.15

### ■ 品名构成 Type Designation

实例 Example



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.

## ■ 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。

### ● 降低温度

在环境温度70℃以上使用时，需要校正温度，应考虑右图的降低系数。

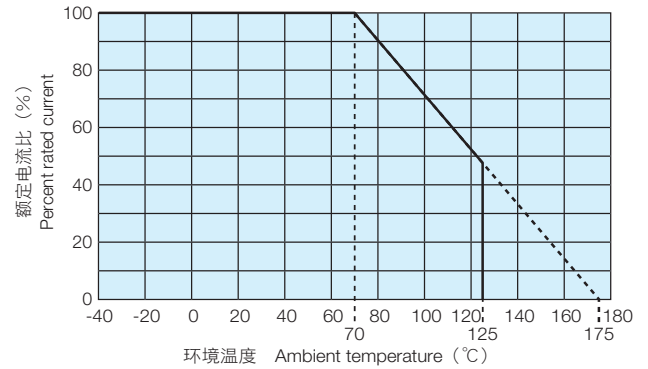
### ● Stationary current

Regard the peak of stationary current waveform as stationary current value when the stationary current is repeated pulse.

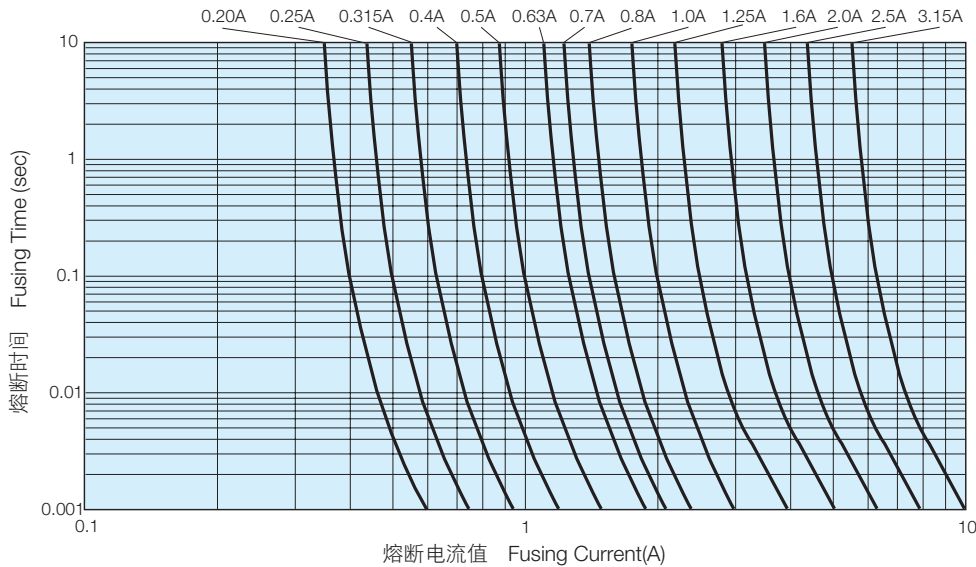
### ● Temperature Derating

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.

## ■ 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	1秒以内。 Within 1s.	-	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2mm，一次。 Distance between holding points 90mm, bending width 2mm, 1time.
耐焊接热 Resistance to soldering heat	10	4.5	260°C ± 5°C, 10s ± 0.5s
焊接性 Solderability	95%以上为新的焊接覆盖。 95% coverage min.	-	245°C ± 3°C, 3s ± 0.5s
通电寿命 Load life	10	4.5	70°C ± 2°C, 1000h, 额定电流 × 100%, 1.5小时ON/0.5小时OFF的周期。 Rated current × 100%, 1.5h ON/0.5h OFF cycle
耐湿通电寿命 Load life moisture	10	4.5	40°C ± 2°C, 90%~95%RH, 1000小时, 额定电流 × 100%, 1.5小时ON/0.5小时OFF的周期。 Rated current × 100%, 1.5h ON/0.5h OFF cycle
温度突变 Rapid change of temperature	10	4	-40°C (30min) / +125°C (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	10KΩ以上 10kΩ or more	-	熔断后的直流电阻值。 Measure DC resistance after fusing

## ■ 使用注意事项 Precautions for Use

- 为能有保险丝特性，本产品的基材，使用了特殊的陶瓷。产品在安装时，请不要施加过度应力。同样，请不要反复施加加热循环等过度的热应力，产品会有出现裂纹的情况，使用前必须在实际机器上确认。
- 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.