

## TUR 型压敏电阻器

### 承 认 书

#### SPECIFICATION FOR APPROVAL

客户名称 CUSTOMER :                   IBS                  

产品规格 PART NO :                   TUR10D471K                  

料 号 PART NUMBER:                   MYG10471                  

日 期 DATE :                   2020/06/15                  

用户承认 FOR CUSTOMER APPROVAL	技术 TECHNOLOGY	日期 DATE
	彭树伟	2020/06/15
	审核 CHECKED	日期 DATE
		2020/06/15



## 目录 Index

1. 修改记录表 Revised record sheet	1
2. 型号代码 Part Number Code	2
3. 外形尺寸 Structure And Dimensions	2
4. 电性能参数 Electrial characteristics	3
5. 机械性能 Mechanical characteristecs	3
6. 周期试验 Reliability Test	4
7. 焊接推荐 Soldering recomendation	4
8. 降功耗曲线 Maximum Power Rating (Pmax)	4
9. 装箱资料 Packing Specifiction	5
10. 贮存条件 Storage condition of Products	6
11. 安全认证 Safety Approvals	6
12. 体系认证 Certificates	6
13. V-I 曲线 V-I Curve	6
14. 最大峰值电流 Max. Surge Current	7

### 1.修改记录 REVISED RECORD SHEET

序号	修改日期	修改内容

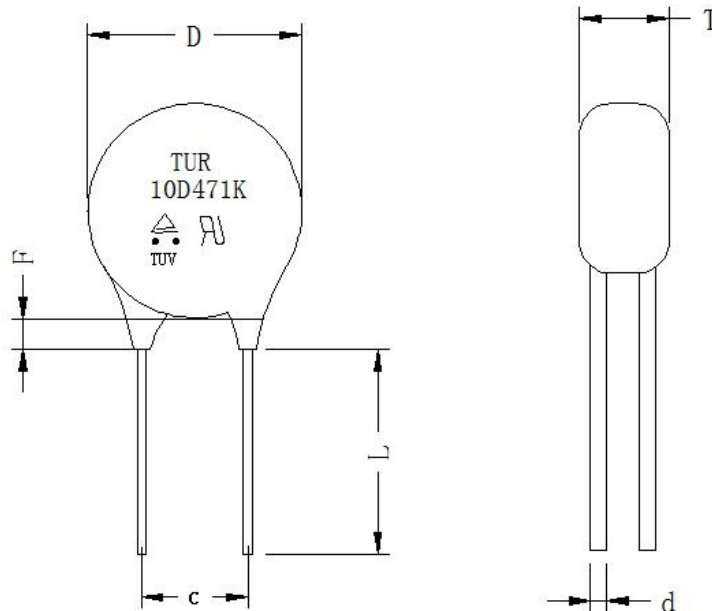
Specification Of Varistors for Surge Suppression (TUR10D471K)

2.Part Number Code 型号代码

TUR 10D 471 K  
 1      2      3      4

NO	ITEM	DIGIT	SPECIFICATION
1	PRODUCT TYPE	TUR	JOCOL VARISTOR TUR TYPE
2	DISC SIZE	10D	Φ10
3	V1mA	471	47X10 <sup>1</sup> V
4	Tolerance of V1mA	K	±10%

3.Dimensions 外形尺寸: (mm)



Dmax	L	C	Tmax	d	Fmax
13.5	3.5±0.5	7.5±0.5	6.5	0.8±0.05	≤2.5

3-1 Material of coating 包封料: Epoxy resin

3-2 Material of leads 引线: CP Wires

3-3 Color of coating 颜色: Blue

3-4 Marking 标志: Laser

#### 4. Electrical Characteristics 电性能(Ambient Ta=25°C

##### 4-1

	Item	Symbol	Conditions	Value	Unit
a	Normal Varistor Voltage 压敏电压	V <sub>1mA</sub> (V)	1mA DC	470	V
b	Max. Clamping Voltage 最大限制电压	V <sub>p</sub>	-----	775	V
		I <sub>p</sub>	8/20 μ S	25	A

##### 4-2

	Item		Value	Unit
a	Max.Allowable Voltage 最大允许电压	AC rms	300	V
		DC	385	V
b	Max. Peak Current(8/20 μ S) 脉冲电流	1 time	2500	A
		2 time	1200	A
c	Reference Capacitance 电容量		350	PF
d	Operating temperature Range 使用温度		-40----+125	°C
e	Storage Temperature Range 贮存温度		-40----+125	°C

#### 5.Mechanical Characteristecs 机械性能

##### 5-1 Tensile Strength of Terminals Test 引出端抗拉强度

Conditions	Test Result
Fasten body with a Load Applied to each lead 1.0 kg for 10 sec	No break out and damage OK

##### 5-2 Bending Strength of terminals Test 引出端抗弯强度

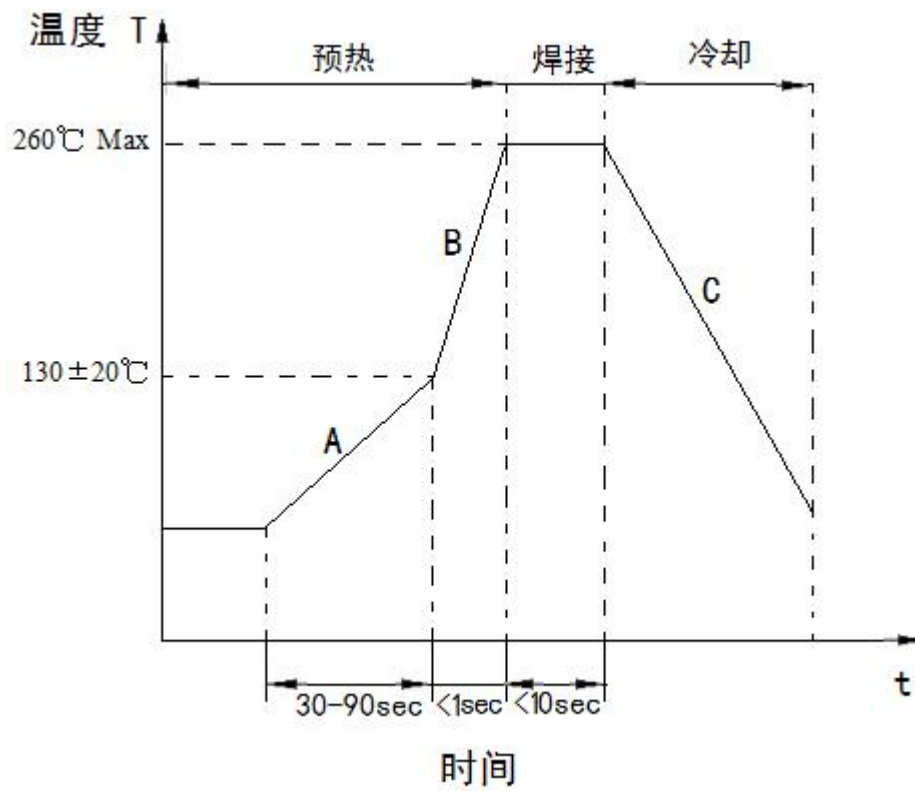
Conditions	Test Result
Fixed body hang 0.5 kg on one terminal bend 90 then back again in opposite	No break out and damage OK

## 6. Reliability Test 周期试验

Item	Test Conditions	Variable
Temp. Cycle Test 温度快速变化	$-40^{\circ}\text{C} \times \rightarrow +25^{\circ}\text{C} \times 3\text{min}$ $-85^{\circ}\text{C} \times \rightarrow +25^{\circ}\text{C} \times 3\text{min}$ } $\times 5\text{Cycles}$	$\frac{\Delta V_b}{V_b} \leq \pm 5\%$
Humidity Test 稳态湿热	$40^{\circ}\text{C} \quad 95\%RH \times 1000\text{Hrs}$	$\frac{\Delta V_b}{V_b} \leq \pm 5\%$ $R \geq 100M \Omega$
High Temperature Storage 高温贮存	$125^{\circ}\text{C} \times 1000\text{HRS}$	$\frac{\Delta V_b}{V_b} \leq \pm 5\%$
High Temperature Operation 上限类别耐久	Appiled at the maximum allowable Voltage $85\% \times 1000\text{HRS}$	$\frac{\Delta V_b}{V_b} \leq \pm 10\%$ $R \geq 1G \Omega$
Surge Life 脉冲寿命	Impuls listed below $\times 10000$ times In the interval of ten seconds $(8/20 \mu S)$	$\frac{\Delta V_b}{V_b} \leq \pm 10\%$
Insulation Test 绝缘耐压	AC 2500V	$R \geq 1G \Omega$

## 7. Soldering recommendation 焊接

### 7.1 波峰焊 Wave Soldering Profile



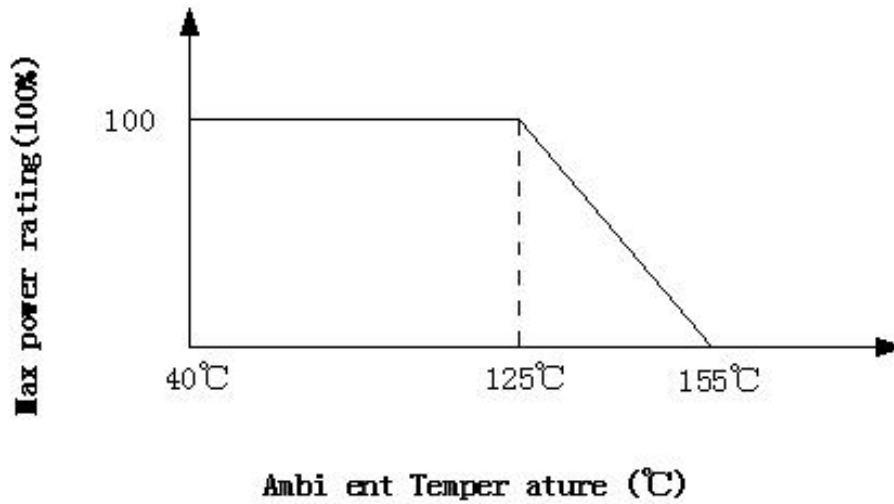
A 温区:温升 1~3°C/sec

B 温区:温升约 200°C/sec

C 温区:温升 Max5°C/sec

## 7.2 电烙铁焊接

项目	要求
烙铁头温度 (Max)	360°C
焊接时间(Max)	3sec
距离电阻体 Min)	2mm

**8.降功耗曲线 Maximum Power Rating (Pmax)**

**9. Packing Specification 装箱资料**

规格 Part NO: TUR10D471K

包装 Packing	数量 QTY	净重 N. W	毛重 G. W	LXWXH (mm)
袋包装 Polybag	500 PCS			
箱包装 Out-box	24 Polybag	14.6Kg	15.75Kg	405×310×240

**10. 贮存条件 Storage condition of Products**

贮存温度 Storage Temperature : -10~+40°C

相对湿度 Relative Humidity : ≤75%RH

贮存期限 Period of Storage : 12 Month

**11.安全认证 Safety Approvals**
**1. 美国 UL 产品安全认证**

UL &amp;cUL File No:E335740

**2. 德国 TUV 产品安全认证**

File No: R50056768

**3. 中国 CQC 产品安全认证:**

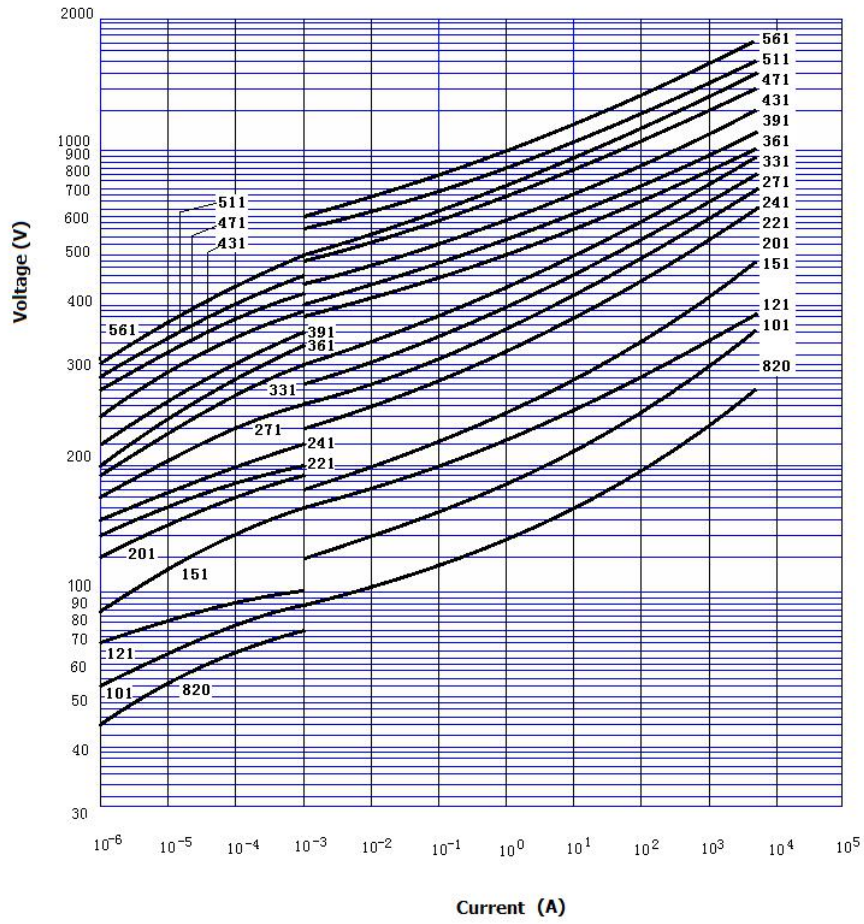
File No:CQC10001043608

**12.体系认证**
**12.1 ISO9001**



13. V-I 曲线

V-I 曲线



14. 最大峰值电流降额曲线

