# 承　认　书

# APPROVAL SHEET

| | |
|---|---|
| 客 户 名 称: Customer Name | |
| 产 品 名 称: Product Name | 片式压敏电阻器 chip Varistor |
| 制 造 商 料 号: Manufacturer P/N | FPV 系列 |
| 客 户 料 号: Customer P/N | |
| 版 本 号: Version No. | 15.02 |
| 标准类型： Standard type | ■标准品 Standard product　□非标准品 Custom product |

| 制造厂商 Manufacturer | | |
|---|---|---|
| 拟制 Draft | 审核 Check | |
| | 品管部 | 技术部 |
| 林晓华 | 徐雪枫 | 覃贤 |
| 日期 Date | 2015-06-08 | 2015-06-08 |

| 客户承认印章 APPROVAL SIGNET | |
|---|---|
| | |
| 日期 Date | |

注：请确认后签回，如不签回，则视贵公司默认产品发货按我司标准品标准执行。

Note: Please confirm and sign back, if not we will considered the acception as our standard.

地址：广东省肇庆市风华路 18 号电子城

Address:FENGHUA ELECTRONIC INDUSTRIAL CITY, 18th FENGHUA ROAD, ZHAOQING GUANGDONG, P.R, CHINA

销售部电话 Tel: 0758-6923615　传真 Fax: 0758-6923617

技术部电话 Tel: 0758-6923611

网址 Web: http://www.fenghua-advanced.com

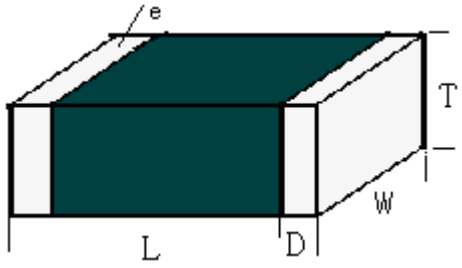
邮箱 E-mail: 2008lihuiqin@163.com

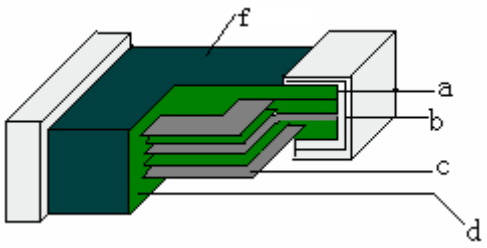
【 样单号 Sample No: 】

# 履 历 表 Resume

| 版本<br>Version No. | 修 改 明 细<br>Modify Details | 日期<br>Date |
|---|---|---|
| 15.01 | 首次发行 Initial issue | 2015-02-01 |
| 15.02 | 电性能参数表，增加了下划线部分。 | 2015-06-08 |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

## 1 外形尺寸与内部结构 Dimension & Inner-configuration:




a. 银层 Ag layer

b. Ni/Sn 镀层 Ni/Sn plating

c. 内电极 Inner electrode

d. 瓷体 Body

e. 端电极 Terminal electrode

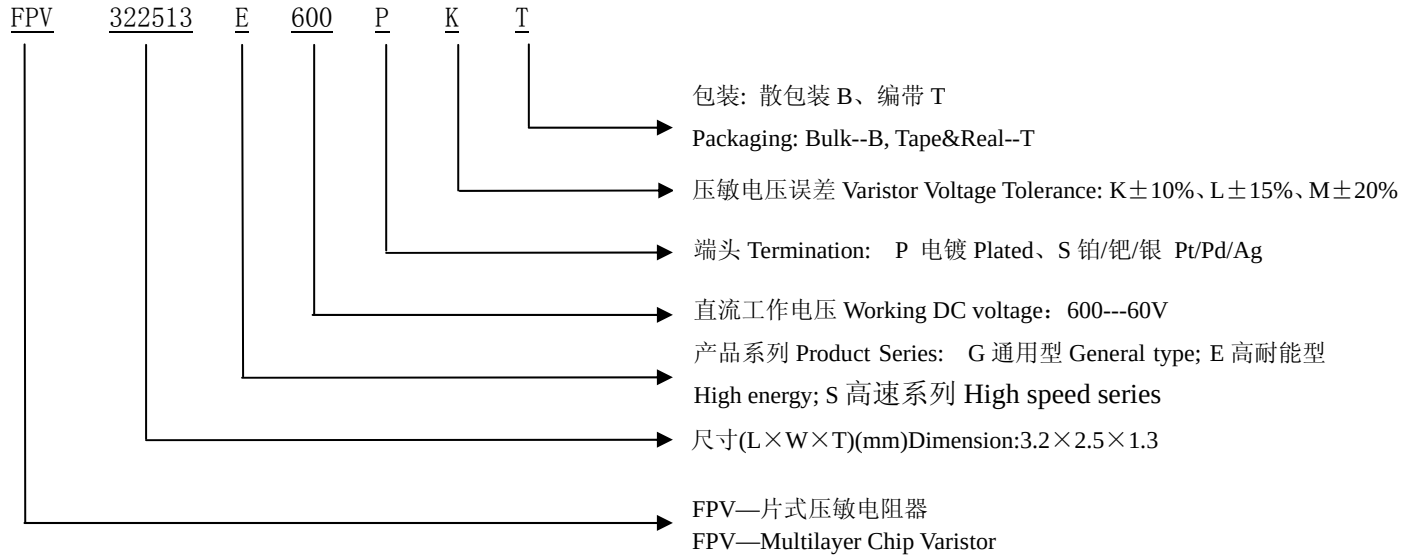
f. 玻璃层：Gass layer

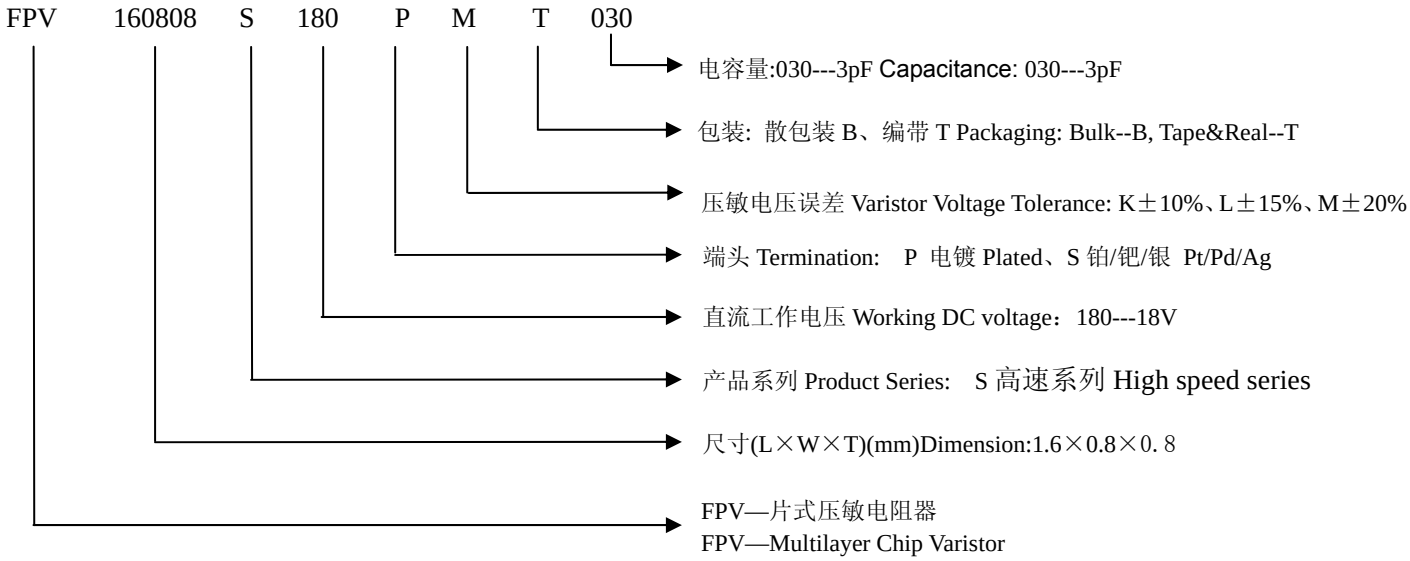
| 序号 No. | 部位 Component | | 材料 Material |
|---|---|---|---|
| 1 | 瓷体Body | | 氧化锌：ZnO |
| 2 | 玻璃层：Gass layer | | 硅铋系Si-Bi |
| 3 | 内电极Inner electrode | | 钯/银Pd/Ag |
| 4 | 端电极 Terminal electrode | 银层 Ag layer | 银Ag |
| | | Ni/Sn镀层Ni/Sn plating | 镍层-锡层Ni-Sn |

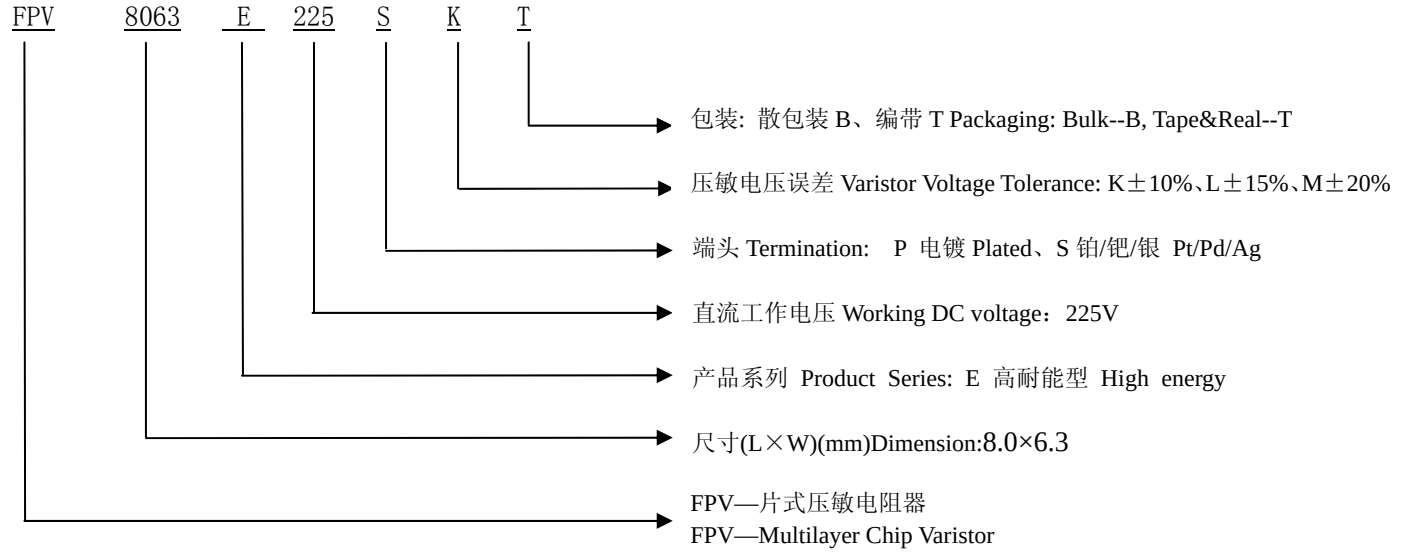
单位Unit: mm( inch )

| 型号 Size | L | W | T | D |
|---|---|---|---|---|
| 100505 | 1.0±0.15（0.040±0.006） | 0.5±0.15（0.020±0.006） | 0.5±0.15（0.020±0.006） | 0.25±0.1(0.010±0.004) |
| 160808 | 1.6±0.20（0.063±0.008） | 0.8±0.20（0.031±0.008） | 0.8±0.20（0.031±0.008） | 0.3±0.2(0.01±0.008) |
| 201209 | 2.0±0.20（0.079±0.008） | 1.2±0.20（0.047±0.008） | 0.9±0.20（0.035±0.008） | 0.5±0.3(0.020±0.012) |
| 321611 | 3.2±0.20（0.126±0.008） | 1.6±0.20（0.063±0.008） | 1.1±0.20（0.043±0.008） | 0.5±0.3(0.020±0.012) |
| 322513 | 3.2±0.20（0.126±0.008） | 2.5±0.20（0.098±0.008） | 1.3±0.20（0.051±0.008） | 0.5±0.3(0.020±0.012) |
| 453215 | 4.5±0.20（0.180±0.008） | 3.2±0.20（0.126±0.008） | 1.5±0.20（0.060±0.008） | 0.5±0.3(0.020±0.012) |
| 5750 | 5.7±0.3（0.22±0.012） | 5.0±0.3（0.20±0.012） | 1.0~2.5(0.050±0.100) | 0.7±0.3(0.028±0.012) |
| 8063 | 8.0±0.3（0.320±0.012） | 6.3±0.3（0.250±0.012） | 1.0~2.5(0.050±0.100) | 0.7±0.3(0.028±0.012) |
| 1080 | 10.2±0.3（0.400±0.012） | 8.0±0.3（0.320±0.012） | 1.0~2.5(0.050±0.100) | 0.7±0.3(0.028±0.012) |

## 2 产品品名构成 Product Spec. Model



## 3 电性能参数表 Electrical Characteristics List

| 规格型号 Part Number | 客户物料号 Customers P/N | 工作电压 Working Voltage | | 压敏电压 Varistor Voltage @ 1mA DC | | 最大限制电压 Maximum Clamping Voltage 8/20 μs | 能量耐量 Energy Absorption | 峰值电流 Peak Current | 标准电容量 Typical Capacitance @ 1MHz |
|---|---|---|---|---|---|---|---|---|---|
| | | 直流 DC | 交流 AC | $V_B$ | | | 10/1000μs | 8/20μs | |
| | | 伏特 Volts | 伏特 Volts | 伏特 Volts | $\Delta V_B$ | 伏特 Volts | 焦耳 Joules | 安培 Amps | pF |
| **通用系列 general series** | | | | | | | | | |
| FPV100505G8R0PLT | | 8 | 5.7 | 12 | ±15% | 27@1A | 0.05 | 20 | 46~299 |
| FPV100505G9R0PLT | | 9 | 6.4 | 13 | ±15% | 30@1A | 0.05 | 20 | 40~360 |
| FPV100505G110PLT | | 11 | 7.8 | 16 | ±15% | 33@1A | 0.05 | 20 | 36~234 |
| FPV100505G120PLT | | 12 | 8.5 | 18 | ±15% | 34@1A | 0.05 | 20 | 30~195 |
| FPV100505G140PKT | | 14 | 10 | 20 | ±10% | 35@1A | 0.05 | 20 | 24~156 |
| FPV100505G160PKT | | 16 | 11.3 | 22 | ±10% | 39@1A | 0.05 | 20 | 20~130 |
| FPV100505G180PKT | | 18 | 12.7 | 25 | ±10% | 44@1A | 0.05 | 20 | 18~108 |
| FPV160808G8R0PLT | | 8 | 5.7 | 12 | ±15% | 27@1A | 0.1 | 30 | 50~325 |
| FPV160808G9R0PLT | | 9 | 6.4 | 13 | ±15% | 30@1A | 0.1 | 30 | 48~312 |
| FPV160808G110PLT | | 11 | 7.8 | 16 | ±15% | 33@1A | 0.1 | 30 | 44~286 |
| FPV160808G120PLT | | 12 | 8.5 | 18 | ±15% | 34@1A | 0.1 | 30 | 42~273 |
| FPV160808G140PKT | | 14 | 10 | 20 | ±10% | 35@1A | 0.1 | 30 | 38~247 |
| FPV160808G160PKT | | 16 | 11.3 | 22 | ±10% | 39@1A | 0.1 | 30 | 36~234 |
| FPV160808G180PKT | | 18 | 12.7 | 25 | ±10% | 44@1A | 0.1 | 30 | 34~221 |
| FPV160808G220PKT | | 22 | 15.6 | 30 | ±10% | 53@1A | 0.1 | 30 | 30~195 |
| FPV160808G240PKT | | 24 | 17 | 33 | ±10% | 58@1A | 0.1 | 30 | 28~182 |
| FPV160808G260PKT | | 26 | 18.4 | 36 | ±10% | 63@1A | 0.1 | 30 | 24~156 |
| FPV160808G300PKT | | 30 | 21.2 | 42 | ±10% | 74@1A | 0.1 | 30 | 20~130 |
| FPV160808G330PKT | | 33 | 23.3 | 45 | ±10% | 79@1A | 0.1 | 35 | 16~104 |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

| 规格型号 Part Number | 客户物料号 Customers P/N | 工作电压 Working Voltage | | 压敏电压 Varistor Voltage @ 1mA DC | | 最大限制电压 Maximum Clamping Voltage 8/20 μs | 能量耐量 Energy Absorption | 峰值电流 Peak Current | 标准电容量 Typical Capacitance @ 1MHz |
|---|---|---|---|---|---|---|---|---|---|
| | | 直流 DC | 交流 AC | $V_B$ | | | 10/1000μs | 8/20μs | |
| | | 伏特 Volts | 伏特 Volts | 伏特 Volts | $\Delta V_B$ | 伏特 Volts | 焦耳 Joules | 安培 Amps | pF |
| FPV201209G8R0PLT | | 8 | 5.7 | 12 | ±15% | 27@1A | 0.1 | 40 | 54~351 |
| FPV201209G9R0PLT | | 9 | 6.4 | 13 | ±15% | 30@1A | 0.1 | 40 | 52~338 |
| FPV201209G110PLT | | 11 | 7.8 | 16 | ±15% | 33@1A | 0.1 | 35 | 48~312 |
| FPV201209G120PLT | | 12 | 8.5 | 18 | ±15% | 34@1A | 0.1 | 35 | 44~286 |
| FPV201209G140PKT | | 14 | 10 | 20 | ±10% | 35@1A | 0.1 | 35 | 40~260 |
| FPV201209G160PKT | | 16 | 11.3 | 22 | ±10% | 39@1A | 0.1 | 35 | 38~247 |
| FPV201209G180PKT | | 18 | 12.7 | 25 | ±10% | 44@1A | 0.1 | 35 | 36~234 |
| FPV201209G220PKT | | 22 | 15.6 | 30 | ±10% | 53@1A | 0.1 | 35 | 32~208 |
| FPV201209G240PKT | | 24 | 17 | 33 | ±10% | 58@1A | 0.1 | 35 | 30~195 |
| FPV201209G260PKT | | 26 | 18.4 | 36 | ±10% | 63@1A | 0.1 | 35 | 28~182 |
| FPV201209G300PKT | | 30 | 21.2 | 42 | ±10% | 74@1A | 0.1 | 35 | 22~143 |
| FPV201209G330PKT | | 33 | 23.3 | 45 | ±10% | 79@1A | 0.1 | 35 | 18~117 |
| FPV201209G380PKT | | 38 | 27 | 51 | ±10% | 90@1A | 0.1 | 35 | 12~88 |
| FPV201209G420PKT | | 42 | 30 | 56 | ±10% | 99@1A | 0.1 | 35 | 14~96 |
| FPV201209G480PKT | | 48 | 34 | 62 | ±10% | 110@1A | 0.1 | 35 | 16~104 |
| FPV321611G8R0PLT | | 8 | 5.7 | 12 | ±15% | 27@1A | 0.1 | 40 | 100~650 |
| FPV321611G9R0PLT | | 9 | 6.4 | 13 | ±15% | 30@1A | 0.1 | 40 | 90~585 |
| FPV321611G110PLT | | 11 | 7.8 | 16 | ±15% | 33@1A | 0.1 | 35 | 80~420 |
| FPV321611G120PLT | | 12 | 8.5 | 18 | ±15% | 34@1A | 0.1 | 35 | 60~390 |
| FPV321611G140PKT | | 14 | 10 | 20 | ±10% | 35@1A | 0.1 | 35 | 54~351 |
| FPV321611G160PKT | | 16 | 11.3 | 22 | ±10% | 39@1A | 0.1 | 35 | 50~325 |
| FPV321611G180PKT | | 18 | 12.7 | 25 | ±10% | 44@1A | 0.1 | 35 | 48~312 |
| FPV321611G220PKT | | 22 | 15.6 | 30 | ±10% | 53@1A | 0.1 | 35 | 44~286 |
| FPV321611G240PKT | | 24 | 17 | 33 | ±10% | 58@1A | 0.1 | 35 | 42~273 |
| FPV321611G260PKT | | 26 | 18.4 | 36 | ±10% | 63@1A | 0.1 | 35 | 40~260 |
| FPV321611G300PKT | | 30 | 21.2 | 42 | ±10% | 74@1A | 0.1 | 35 | 36~234 |
| FPV321611G330PKT | | 33 | 23.3 | 45 | ±10% | 79@1A | 0.1 | 35 | 30~195 |

| 规格型号 Part Number | 客户物料号 Customers P/N | 工作电压 Working Voltage | | 压敏电压 Varistor Voltage @ 1mA DC | | 最大限制电压 Maximum Clamping Voltage 8/20 μs | 能量耐量 Energy Absorption | 峰值电流 Peak Current | 标准电容量 Typical Capacitance @ 1MHz |
|---|---|---|---|---|---|---|---|---|---|
| | | 直流 DC | 交流 AC | $V_B$ | | | 10/1000μs | 8/20μs | |
| | | 伏特 Volts | 伏特 Volts | 伏特 Volts | $\Delta V_B$ | 伏特 Volts | 焦耳 Joules | 安培 Amps | pF |
| FPV321611G380PKT | | 38 | 27 | 51 | ±10% | 90@1A | 0.1 | 35 | 26~169 |
| FPV321611G420PKT | | 42 | 30 | 56 | ±10% | 99@1A | 0.1 | 35 | 22~143 |
| FPV321611G480PKT | | 48 | 34 | 62 | ±10% | 110@1A | 0.1 | 35 | 18~108 |
| FPV321611G560PKT | | 56 | 40 | 72 | ±10% | 127@1A | 0.1 | 35 | 16~104 |
| FPV321611G600PKT | | 60 | 45 | 76 | ±10% | 134@1A | 0.1 | 35 | 14~91 |
| FPV321611G650PKT | | 65 | 46 | 82 | ±10% | 144@1A | 0.1 | 35 | 13~84 |
| FPV321611G680PKT | | 68 | 48 | 86 | ±10% | 151@1A | 0.1 | 35 | 12~78 |
| FPV321611G850PKT | | 85 | 60 | 100 | ±10% | 190@1A | 0.1 | 35 | 12~78 |
| **高耐能系列 High energy absorb series** | | | | | | | | | |
| FPV201209E8R0PLT | | 8 | 5.7 | 12 | ±15% | 27@1A | 0.3 | 120 | 350~650 |
| FPV201209E9R0PLT | | 9 | 6.4 | 13 | ±15% | 30@1A | 0.3 | 120 | 315~585 |
| FPV201209E110PLT | | 11 | 7.8 | 16 | ±15% | 33@1A | 0.3 | 120 | 308~572 |
| FPV201209E120PLT | | 12 | 8.5 | 18 | ±15% | 34@1A | 0.3 | 120 | 294~546 |
| FPV201209E140PKT | | 14 | 10 | 20 | ±10% | 35@1A | 0.3 | 120 | 280~420 |
| FPV201209E160PKT | | 16 | 11.3 | 22 | ±10% | 39@1A | 0.3 | 120 | 266~494 |
| FPV201209E180PKT | | 18 | 12.7 | 25 | ±10% | 44@1A | 0.3 | 100 | 252~468 |
| FPV201209E220PKT | | 22 | 15.6 | 30 | ±10% | 53@1A | 0.3 | 100 | 224~416 |
| FPV201209E240PKT | | 24 | 17 | 33 | ±10% | 58@1A | 0.3 | 100 | 210~390 |
| FPV201209E260PKT | | 26 | 18.4 | 36 | ±10% | 63@1A | 0.3 | 100 | 196~364 |
| FPV201209E300PKT | | 30 | 21.2 | 42 | ±10% | 74@1A | 0.3 | 100 | 154~286 |
| FPV201209E330PKT | | 33 | 23.3 | 45 | ±10% | 79@1A | 0.3 | 35 | 168~312 |
| FPV321611E8R0PLT | | 8 | 5.7 | 12 | ±15% | 27@1A | 0.4 | 150 | 700~1300 |
| FPV321611E9R0PLT | | 9 | 6.4 | 13 | ±15% | 30@1A | 0.4 | 150 | 665~1235 |
| FPV321611E110PLT | | 11 | 7.8 | 16 | ±15% | 33@1A | 0.4 | 150 | 560~1040 |
| FPV321611E120PLT | | 12 | 8.5 | 18 | ±15% | 34@1A | 0.4 | 150 | 420~780 |
| FPV321611E140PKT | | 14 | 10 | 20 | ±10% | 35@1A | 0.4 | 150 | 378~702 |

| 规格型号 Part Number | 客户物料号 Customers P/N | 工作电压 Working Voltage | | 压敏电压 Varistor Voltage @ 1mA DC | | 最大限制电压 Maximum Clamping Voltage 8/20 μs | 能量耐量 Energy Absorption | 峰值电流 Peak Current | 标准电容量 Typical Capacitance @ 1MHz |
|---|---|---|---|---|---|---|---|---|---|
| | | 直流 DC | 交流 AC | $V_B$ | | | 10/1000μs | 8/20μs | |
| | | 伏特 Volts | 伏特 Volts | 伏特 Volts | $\Delta V_B$ | 伏特 Volts | 焦耳 Joules | 安培 Amps | pF |
| FPV321611E160PKT | | 16 | 11.3 | 22 | ±10% | 39@1A | 0.4 | 150 | 364~676 |
| FPV321611E180PKT | | 18 | 12.7 | 25 | ±10% | 44@1A | 0.4 | 150 | 350~650 |
| FPV321611E220PKT | | 22 | 15.6 | 30 | ±10% | 53@1A | 0.4 | 150 | 322~598 |
| FPV321611E240PKT | | 24 | 17 | 33 | ±10% | 58@1A | 0.4 | 150 | 294~546 |
| FPV321611E260PKT | | 26 | 18.4 | 36 | ±10% | 63@1A | 0.4 | 120 | 280~420 |
| FPV321611E300PKT | | 30 | 21.2 | 42 | ±10% | 74@1A | 0.4 | 120 | 252~468 |
| FPV321611E330PKT | | 33 | 23.3 | 45 | ±10% | 79@1A | 0.4 | 120 | 210~390 |
| FPV321611E380PKT | | 38 | 27 | 51 | ±10% | 90@1A | 0.4 | 120 | 175~325 |
| FPV321611E420PKT | | 42 | 30 | 56 | ±10% | 99@1A | 0.4 | 120 | 154~286 |
| FPV321611E480PKT | | 48 | 34 | 62 | ±10% | 110@1A | 0.4 | 120 | 126~234 |
| FPV321611E560PKT | | 56 | 40 | 72 | ±10% | 120@1A | 0.4 | 120 | 115.5~214.5 |
| FPV321611E600PKT | | 60 | 45 | 76 | ±10% | 134@1A | 0.4 | 120 | 105~195 |
| FPV321611E680PKT | | 68 | 48 | 86 | ±10% | 151@1A | 0.4 | 120 | 94.5~175.5 |
| FPV321611E850PKT | | 85 | 60 | 100 | ±10% | 176@1A | 0.4 | 120 | 84~156 |
| FPV322513E110PKT | | 11 | 7.8 | 16 | ±10% | 33@2.5A | 1.5 | 300 | 700~1300 |
| FPV322513E180PKT | | 18 | 12.7 | 25 | ±10% | 44@2.5A | 1.5 | 300 | 700~1300 |
| FPV322513E220PKT | | 22 | 15.6 | 30 | ±10% | 53@2.5A | 1.5 | 300 | 630~1170 |
| FPV322513E240PKT | | 24 | 17 | 33 | ±10% | 58@2.5A | 1.5 | 300 | 595~1150 |
| FPV322513E260PKT | | 26 | 18.4 | 36 | ±10% | 63@2.5A | 1.5 | 280 | 560~1040 |
| FPV322513E300PKT | | 30 | 21.2 | 42 | ±10% | 74@2.5A | 1.5 | 280 | 562~988 |
| FPV322513E330PKT | | 33 | 23.3 | 45 | ±10% | 79@2.5A | 1.5 | 280 | 490~910 |
| FPV322513E380PKT | | 38 | 27 | 51 | ±10% | 90@2.5A | 1.5 | 280 | 455~845 |
| FPV322513E420PKT | | 42 | 30 | 56 | ±10% | 99@2.5A | 1.5 | 280 | 406~754 |
| FPV322513E450PKT | | 45 | 32 | 60 | ±10% | 105@2.5A | 1.5 | 280 | 385~715 |
| FPV322513E480PKT | | 48 | 34 | 62 | ±10% | 110@2.5A | 1.5 | 280 | 357~663 |

| 规格型号 Part Number | 客户物料号 Customers P/N | 工作电压 Working Voltage | | 压敏电压 Varistor Voltage @ 1mA DC | | 最大限制电压 Maximum Clamping Voltage 8/20 μs | 能量耐量 Energy Absorption | 峰值电流 Peak Current | 标准电容量 Typical Capacitance @ 1MHz |
|---|---|---|---|---|---|---|---|---|---|
| | | 直流 DC | 交流 AC | $V_B$ | | | 10/1000μs | 8/20μs | |
| | | 伏特 Volts | 伏特 Volts | 伏特 Volts | $\Delta V_B$ | 伏特 Volts | 焦耳 Joules | 安培 Amps | pF |
| FPV322513E560PKT | | 56 | 40 | 72 | ±10% | 127@2.5A | 1.5 | 250 | 315~585 |
| FPV322513E600PKT | | 60 | 45 | 76 | ±10% | 134@2.5A | 1.5 | 250 | 294~546 |
| FPV322513E650PKT | | 65 | 46 | 82 | ±10% | 144@2.5A | 1.5 | 250 | 273~507 |
| FPV322513E680PKT | | 68 | 48 | 86 | ±10% | 151@2.5A | 1.5 | 250 | 252~468 |
| FPV322513E850PKT | | 85 | 60 | 100 | ±10% | 176@2.5A | 1.5 | 250 | 210~390 |
| FPV453215E180PKT | | 18 | 12.7 | 25 | ±10% | 44@5A | 2.5 | 500 | 1050~1950 |
| FPV453215E220PKT | | 22 | 15.6 | 30 | ±10% | 53@5A | 2.5 | 500 | 840~1560 |
| FPV453215E240PKT | | 24 | 17 | 33 | ±10% | 58@5A | 2.5 | 500 | 630~1170 |
| FPV453215E260PKT | | 26 | 18.4 | 36 | ±10% | 63@5A | 2.5 | 500 | 560~1040 |
| FPV453215E300PKT | | 30 | 21.2 | 42 | ±10% | 74@5A | 2.5 | 500 | 525~975 |
| FPV453215E330PKT | | 33 | 23.3 | 45 | ±10% | 79@5A | 2.5 | 500 | 490~910 |
| FPV453215E380PKT | | 38 | 27 | 51 | ±10% | 90@5A | 2.5 | 500 | 455~845 |
| FPV453215E420PKT | | 42 | 30 | 56 | ±10% | 99@5A | 2.5 | 500 | 420~780 |
| FPV453215E480PKT | | 48 | 34 | 62 | ±10% | 110@5A | 2.5 | 500 | 385~715 |
| FPV453215E560PKT | | 56 | 40 | 72 | ±10% | 127@5A | 2.5 | 500 | 350~650 |
| FPV453215E600PKT | | 60 | 45 | 76 | ±10% | 134@5A | 2.5 | 500 | 315~585 |
| FPV453215E680PKT | | 68 | 48 | 86 | ±10% | 151@5A | 2.5 | 500 | 280~520 |
| FPV453215E850PKT | | 85 | 60 | 100 | ±10% | 190@5A | 2.5 | 500 | 245~455 |
| FPV5750E180SKB | | 18 | 12.7 | 25 | ±10% | 44@5A | 2.5 | 600 | 2800-5200 |
| FPV5750E220SKB | | 22 | 15.6 | 30 | ±10% | 53@5A | 2.5 | 600 | 2450-4550 |
| FPV5750E240SKB | | 24 | 17 | 33 | ±10% | 58@5A | 2.5 | 600 | 2100-3900 |
| FPV5750E260SKB | | 26 | 18.4 | 36 | ±10% | 63@5A | 2.5 | 600 | 1750-3250 |
| FPV5750E300SKB | | 30 | 21.2 | 42 | ±10% | 74@5A | 2.5 | 600 | 1540-2860 |
| FPV5750E330SKB | | 33 | 23.3 | 45 | ±10% | 79@5A | 2.5 | 600 | 1400-2600 |
| FPV5750E380SKB | | 38 | 27 | 51 | ±10% | 90@5A | 2.5 | 600 | 1260-2340 |

| 规格型号 Part Number | 客户物料号 Customers P/N | 工作电压 Working Voltage | | 压敏电压 Varistor Voltage @ 1mA DC | | 最大限制电压 Maximum Clamping Voltage 8/20 μs | 能量耐量 Energy Absorption | 峰值电流 Peak Current | 标准电容量 Typical Capacitance @ 1MHz |
|---|---|---|---|---|---|---|---|---|---|
| | | 直流 DC | 交流 AC | $V_B$ | | | 10/1000μs | 8/20μs | |
| | | 伏特 Volts | 伏特 Volts | 伏特 Volts | $\Delta V_B$ | 伏特 Volts | 焦耳 Joules | 安培 Amps | pF |
| FPV5750E420SKB | | 42 | 30 | 56 | ±10% | 99@5A | 2.5 | 600 | 1120-2080 |
| FPV5750E480SKB | | 48 | 34 | 62 | ±10% | 110@5A | 2.5 | 600 | 980-1820 |
| FPV5750E560SKB | | 56 | 40 | 72 | ±10% | 127@5A | 2.5 | 600 | 700-1300 |
| FPV5750E600SKB | | 60 | 45 | 76 | ±10% | 134@5A | 2.5 | 600 | 560-1040 |
| FPV5750E680SKB | | 68 | 48 | 86 | ±10% | 151@5A | 2.5 | 600 | 490-910 |
| FPV8063E18SKB | | 18 | 14 | 22 | ±10% | 44@1A | 0.4 | 100 | 1015~1885 |
| FPV8063E22SKB | | 22 | 17 | 27 | ±10% | 53@1A | 0.5 | 100 | 840~1560 |
| FPV8063E26SKB | | 26 | 20 | 33 | ±10% | 63@1A | 0.6 | 100 | 686~1274 |
| FPV8063E31SKB | | 31 | 25 | 39 | ±10% | 69@1A | 0.7 | 100 | 595~1105 |
| FPV8063E38SKB | | 38 | 30 | 47 | ±10% | 90@1A | 0.9 | 100 | 504~936 |
| FPV8063E45SKB | | 45 | 35 | 56 | ±10% | 99@1A | 1.1 | 100 | 434~806 |
| FPV8063E56SKB | | 56 | 40 | 68 | ±10% | 127@1A | 1.3 | 100 | 364~676 |
| FPV8063E65SKB | | 65 | 50 | 82 | ±10% | 144@5A | 1.8 | 400 | 210~390 |
| FPV8063E85SKB | | 85 | 60 | 100 | ±10% | 176@5A | 2.2 | 400 | 175~325 |
| FPV8063E100SKB | | 100 | 75 | 120 | ±10% | 211@5A | 2.5 | 400 | 147~273 |
| FPV8063E125SKB | | 125 | 95 | 150 | ±10% | 264@5A | 3.4 | 400 | 94.5~175.5 |
| FPV8063E150SKB | | 150 | 115 | 180 | ±10% | 317@5A | 3.6 | 400 | 77~143 |
| FPV8063E170SKB | | 170 | 130 | 205 | ±10% | 361@5A | 4.2 | 400 | 70~130 |
| FPV8063E200SKB | | 200 | 150 | 240 | ±10% | 427@5A | 4.9 | 400 | 63~117 |
| FPV8063E225SKB | | 225 | 175 | 270 | ±10% | 475@5A | 5.6 | 400 | 52.5~97.5 |
| FPV8063E240SKB | | 240 | 190 | 310 | ±10% | 600@5A | 6.0 | 400 | 49~91 |
| FPV8063E300SKB | | 300 | 230 | 360 | ±10% | 634@5A | 7.2 | 400 | 42~78 |
| FPV8063E320SKB | | 320 | 250 | 390 | ±10% | 686@5A | 8.2 | 400 | 38.5~71.5 |
| FPV8063E350SKB | | 350 | 275 | 430 | ±10% | 757@5A | 8.6 | 400 | 35~65 |
| FPV8063E385SKB | | 385 | 300 | 470 | ±10% | 827@5A | 9.6 | 400 | 31.5~58.5 |

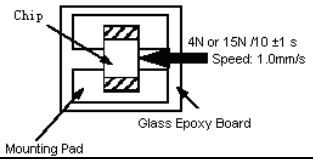
| 规格型号 Part Number | 客户物料号 Customers P/N | 工作电压 Working Voltage | | 压敏电压 Varistor Voltage @ 1mA DC | | 最大限制电压 Maximum Clamping Voltage 8/20 μs | 能量耐量 Energy Absorption | 峰值电流 Peak Current | 标准电容量 Typical Capacitance @ 1MHz |
|---|---|---|---|---|---|---|---|---|---|
| | | 直流 DC | 交流 AC | $V_B$ | | | 10/1000μs | 8/20μs | |
| | | 伏特 Volts | 伏特 Volts | 伏特 Volts | $\Delta V_B$ | 伏特 Volts | 焦耳 Joules | 安培 Amps | pF |
| FPV1080E18SKT | | 18 | 14 | 22 | ±10% | 44@2.5A | 0.9 | 250 | 3150~5850 |
| FPV1080E22SKT | | 22 | 17 | 27 | ±10% | 53@2.5A | 1.1 | 250 | 2800~5200 |
| FPV1080E26SKT | | 26 | 20 | 33 | ±10% | 63@2.5A | 1.3 | 250 | 2450~4550 |
| FPV1080E31SKT | | 31 | 25 | 39 | ±10% | 69@2.5A | 1.6 | 250 | 2100~3900 |
| FPV1080E38SKT | | 38 | 30 | 47 | ±10% | 90@2.5A | 2.0 | 250 | 1960~3640 |
| FPV1080E45SKT | | 45 | 35 | 56 | ±10% | 99@2.5A | 2.5 | 250 | 1750~3250 |
| FPV1080E56SKT | | 56 | 40 | 68 | ±10% | 127@2.5A | 3.0 | 250 | 1400~2600 |
| FPV1080E65SKT | | 65 | 50 | 82 | ±10% | 144@10A | 4.2 | 1200 | 1330~2470 |
| FPV1080E85SKT | | 85 | 60 | 100 | ±10% | 176@10A | 4.8 | 1200 | 1190~3310 |
| FPV1080E100SKT | | 100 | 75 | 120 | ±10% | 211@10A | 5.9 | 1200 | 1050~1950 |
| FPV1080E125SKT | | 125 | 95 | 150 | ±10% | 264@10A | 7.6 | 1200 | 945~1755 |
| FPV1080E150SKT | | 150 | 115 | 180 | ±10% | 317@10A | 8.4 | 1200 | 630~1170 |
| FPV1080E170SKT | | 170 | 130 | 205 | ±10% | 361@10A | 9.5 | 1200 | 490~910 |
| FPV1080E180SKT | | 180 | 140 | 220 | ±10% | 387@10A | 10.0 | 1200 | 350~650 |
| FPV1080E200SKT | | 200 | 150 | 240 | ±10% | 422@10A | 11.0 | 1200 | 280~520 |
| FPV1080E225SKT | | 225 | 175 | 270 | ±10% | 475@10A | 13.0 | 1200 | 210~390 |
| FPV1080E300SKT | | 300 | 230 | 360 | ±10% | 634@10A | 17.0 | 1200 | 140~260 |
| FPV1080E320SKT | | 320 | 250 | 390 | ±10% | 686@10A | 19.0 | 1200 | 126~234 |
| FPV1080E350SKT | | 350 | 275 | 430 | ±10% | 757@10A | 21.0 | 1200 | 73.5~136.5 |
| FPV1080E385SKT | | 385 | 300 | 470 | ±10% | 827@10A | 23.0 | 1200 | 63~117 |
| **高速系列 High speed series** | | | | | | | | | |
| FPV100505S3R3PLT | | 3.3 | 2.5 | 7 | ±15% | 15@1A | 0.05 | 10 | 56~126 |
| FPV100505S5R6PLT | | 5.6 | 4 | 11 | ±15% | 24@1A | 0.05 | 10 | 36~81 |
| FPV100505S8R0PLT | | 8 | 5.7 | 14 | ±15% | 31@1A | 0.05 | 10 | 24~54 |
| FPV100505S9R0PLT | | 9 | 6.4 | 15 | ±15% | 33@1A | 0.05 | 10 | 20.8~46.8 |

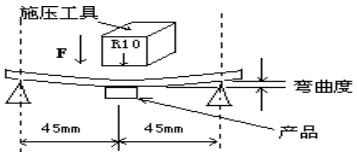
| 规格型号 Part Number | 客户物料号 Customers P/N | 工作电压 Working Voltage | | 压敏电压 Varistor Voltage @ 1mA DC | | 最大限制电压 Maximum Clamping Voltage 8/20 μs | 能量耐量 Energy Absorption | 峰值电流 Peak Current | 标准电容量 Typical Capacitance @ 1MHz |
|---|---|---|---|---|---|---|---|---|---|
| | | 直流 DC | 交流 AC | $V_B$ | | | 10/1000μs | 8/20μs | |
| | | 伏特 Volts | 伏特 Volts | 伏特 Volts | $\Delta V_B$ | 伏特 Volts | 焦耳 Joules | 安培 Amps | pF |
| FPV100505S110PLT | | 11 | 7.8 | 18 | ±15% | 40@1A | 0.05 | 10 | 19.2~43.2 |
| FPV100505S120PLT | | 12 | 8.5 | 20 | ±15% | 44@1A | 0.05 | 10 | 16~36 |
| FPV100505S140PKT | | 14 | 10 | 22 | ±10% | 49@1A | 0.05 | 10 | 14.4~32.4 |
| FPV100505S160PKT | | 16 | 11.3 | 24 | ±10% | 53@1A | 0.05 | 10 | 12~27 |
| FPV100505S180PKT | | 18 | 12.7 | 27 | ±10% | 60@1A | 0.05 | 10 | 12~27 |
| FPV160808S3R3PLT | | 3.3 | 2.5 | 7 | ±15% | 15@1A | 0.05 | 10 | 144~324 |
| FPV160808S5R6PLT | | 5.6 | 4 | 11 | ±15% | 24@1A | 0.05 | 10 | 88~198 |
| FPV160808S8R0PLT | | 8 | 5.7 | 14 | ±15% | 31@1A | 0.05 | 10 | 64~144 |
| FPV160808S9R0PLT | | 9 | 6.4 | 15 | ±15% | 33@1A | 0.05 | 10 | 56~126 |
| FPV160808S110PLT | | 11 | 7.8 | 18 | ±15% | 40@1A | 0.05 | 10 | 48~108 |
| FPV160808S120PLT | | 12 | 8.5 | 20 | ±15% | 44@1A | 0.05 | 10 | 44~99 |
| FPV160808S140PKT | | 14 | 10 | 22 | ±10% | 49@1A | 0.05 | 10 | 40~90 |
| FPV160808S160PKT | | 16 | 11.3 | 24 | ±10% | 53@1A | 0.05 | 10 | 36~81 |
| FPV160808S180PKT | | 18 | 12.7 | 27 | ±10% | 60@1A | 0.05 | 10 | 32~72 |
| FPV160808S220PKT | | 22 | 15.6 | 32 | ±10% | 71@1A | 0.05 | 10 | 24~54 |
| FPV160808S240PKT | | 24 | 17 | 35 | ±10% | 77@1A | 0.05 | 10 | 20~45 |
| FPV160808S260PKT | | 26 | 18.4 | 38 | ±10% | 84@1A | 0.05 | 10 | 20~45 |
| FPV160808S300PKT | | 30 | 21.2 | 44 | ±10% | 97@1A | 0.05 | 10 | 16~36 |
| FPV160808S680PKT | | 68 | 48 | 88 | ±10% | 194@1A | 0.05 | 10 | 13.6~30.6 |
| FPV201209S3R3PLT | | 3.3 | 2.5 | 7 | ±15% | 15@1A | 0.05 | 10 | 176~396 |
| FPV201209S5R6PLT | | 5.6 | 4 | 11 | ±15% | 24@1A | 0.05 | 10 | 112~252 |
| FPV201209S8R0PLT | | 8 | 5.7 | 14 | ±15% | 31@1A | 0.05 | 10 | 80~180 |
| FPV201209S9R0PLT | | 9 | 6.4 | 15 | ±15% | 33@1A | 0.05 | 10 | 72~162 |
| FPV201209S110PLT | | 11 | 7.8 | 18 | ±15% | 40@1A | 0.05 | 10 | 56~126 |
| FPV201209S120PLT | | 12 | 8.5 | 20 | ±15% | 44@1A | 0.05 | 10 | 48~108 |

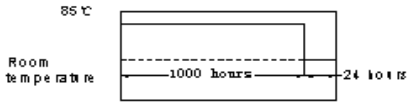
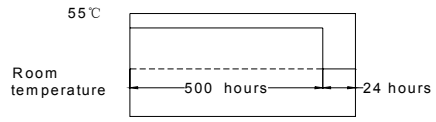
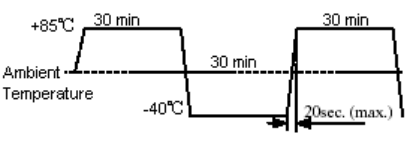
| 规格型号 Part Number | 客户物料号 Customers P/N | 工作电压 Working Voltage | | 压敏电压 Varistor Voltage @ 1mA DC | | 最大限制电压 Maximum Clamping Voltage 8/20 μs | 能量耐量 Energy Absorption 10/1000μs | 峰值电流 Peak Current 8/20μs | 标准电容量 Typical Capacitance @ 1MHz |
|---|---|---|---|---|---|---|---|---|---|
| | | 直流 DC | 交流 AC | VB | | | | | |
| | | 伏特 Volts | 伏特 Volts | 伏特 Volts | ΔVB | 伏特 Volts | 焦耳 Joules | 安培 Amps | pF |
| FPV201209S140PLT | | 14 | 10 | 22 | ±10% | 49@1A | 0.05 | 10 | 44~99 |
| FPV201209S160PLT | | 16 | 11.3 | 24 | ±10% | 53@1A | 0.05 | 10 | 40~90 |
| FPV201209S180PKT | | 18 | 12.7 | 27 | ±10% | 60@1A | 0.05 | 10 | 36~81 |
| FPV201209S220PKT | | 22 | 15.6 | 32 | ±10% | 71@1A | 0.05 | 10 | 32~72 |
| FPV201209S240PKT | | 24 | 17 | 35 | ±10% | 77@1A | 0.05 | 10 | 28~63 |
| FPV201209S260PKT | | 26 | 18.4 | 38 | ±10% | 84@1A | 0.05 | 10 | 24~54 |
| FPV201209S300PKT | | 30 | 21.2 | 44 | ±10% | 97@1A | 0.05 | 10 | 20~45 |
| **超低电容量 Ultra-low capacitance** | | | | | | | | | |
| FPV100505S180PMT030 | | 18 | 12.7 | 120 | ±20% | 250@1A | 0.01 | 6 | 2.3~4.3 |
| FPV100505S180PMT070 | | 18 | 12.7 | 27 | ±20% | 60@1A | 0.01 | 6 | 4.8~8.8 |
| FPV160808S180PMT030 | | 18 | 12.7 | 120 | ±20% | 250@1A | 0.01 | 6 | 2.3~4.3 |
| FPV160808S180PMT070 | | 18 | 12.7 | 27 | ±20% | 60@1A | 0.01 | 6 | 4.8~8.8 |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

## 4 可靠性试验项目 Reliability Testing Items

| 序号 No. | 项目 Items | 要求 Requirements | 试验方法及备注 Test Methods and Remarks |
|---|---|---|---|
| 1 | 工作温度范围 Operating Temperature Range | -55℃～+125℃ | |
| 2 | 可焊 Solder ability | 至少 90%端电极表面被焊锡覆盖。<br>At least 90% of terminal electrode should be covered with solder | 预热温度:120～150℃<br>Preheating temperature:120 to 150℃<br>预热时间:60s<br>Preheating time: 60s<br>焊料：95.5%锡，3.0%银，0.5%铜的焊料<br>Solder ：95.5%Sn、3.0%Ag、0.5%:Cu， of the solder.<br>焊锡温度:245±5℃<br>Solder temperature: 450±5℃<br>浸锡时间:5±1s<br>Duration : 5±1s<br>浸入松香助焊剂约 3～5s<br>Immersion into the colophony flux for 3 to 5 sec<br>浸入速度:25mm/sec<br>Immersion speed: 25mm/sec |
| 3 | 耐焊接热 Resistance to Soldering | 瓷体没有破裂之类的损伤<br>No damage such as crucks should be caused in chip element.<br>至少75%端电极表面被焊锡覆盖。<br>At least 75% of terminal electrode is covered by new solder<br>压敏电压变化在±10%之内<br>Varistor voltage change within±10% | 预热温度:120～150℃<br>Preheating temperature: 120 to 150℃预热时间:60s<br>Preheating time: 60s<br>焊料：95.5%锡、3.0%银、0.5%铜的焊料<br>Solder ：95.5%Sn、3.0%Ag、0.5%:Cu of the solder.<br>浸锡温度:260±5℃<br>Solder temperature: 260±5℃<br>浸锡时间:10±1s<br>Duration : 10±1s<br>浸入松香助焊剂约 3～5s<br>Immersion into the colophony flux for 3 to 5 sec.<br>浸入速度:25mm/sec<br>Immersion speed: 25mm/sec |

<table>
<tr><th>序号<br>No.</th><th>项目<br>Items</th><th>要求<br>Requirements</th><th>试验方法及备注<br>Test Methods and Remarks</th></tr>
<tr><td>4</td><td>端电极强度<br>Adhesion of electrode</td><td>端电极与瓷体不应受损，无可见机械损伤。<br>The termination and body should be no damage.</td><td>
<table>
<tr><th>规格型号<br>Part Number</th><th>施加力<br>Applied force</th><th>保持时间<br>Keep time</th></tr>
<tr><td>1005</td><td>4N</td><td>10±1S</td></tr>
<tr><td>1608</td><td>5N</td><td>10±1S</td></tr>
<tr><td>2012</td><td>6N</td><td>10±1S</td></tr>
<tr><td>3216</td><td>10N</td><td>10±1S</td></tr>
<tr><td>3225 、 4532 、 5750、8063、1080</td><td>15N</td><td>10±1S</td></tr>
</table>


</td></tr>
<tr><td>5</td><td>耐低温<br>Low temperature resistance</td><td>无可见机械损伤，<br>No mechanical damage.<br>压敏电压变化在±5%之内<br>Varistor voltage change within±5%</td><td>测试温度:-55±2℃<br>Temperature: -55±2℃<br>测试时间:500 $^{+24}_{-0}$ h<br>Testing time: 500 $^{+24}_{-0}$ h</td></tr>
<tr><td>6</td><td>抗弯强度<br>Bending strength</td><td>无可见机械损伤，<br>No mechanical damage.<br>压敏电压变化在±10%之内<br>Varistor voltage change within±10%</td><td>弯度:2mm<br>Warp: 2mm<br>测试基板:玻璃环氧树脂基板<br>Testing board: glass epoxy-resin substrate<br>厚度:0.8mm<br>Thickness: 0.8mm<br> 
</td></tr>
<tr><td>7</td><td>跌落<br>Drop</td><td>无可见机械损伤，<br>No mechanical damage.<br>压敏电压变化在±5%之内<br>Varistor voltage change within±5%</td><td>从高度为 1 米的空中自由落到混凝土地板重复 10 次。<br>Drop 10 times on a concrete floor from a high of 1m.</td></tr>
<tr><td>8</td><td>振动<br>Vibration</td><td>无可见机械损伤，<br>No mechanical damage.<br>压敏电压变化在±5%之内<br>Varistor voltage change within±5%</td><td>振幅:1.5mm<br>Amplitude modulation: 1.5mm<br>测试时间:沿三个垂直方向各做 2 小时<br>Test time: A period of 2h in each of 3 mutually perpendicular directions.<br>频率范围:10Hz ～ 55Hz ～ 10Hz （1 分钟）<br>Frequency range: 10Hz to 55Hz to 10Hz for 1min.</td></tr>
</table>

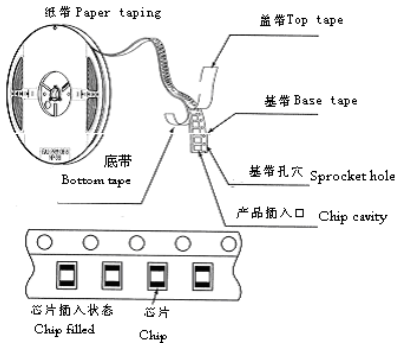
| 序号<br>No. | 项目<br>Items | 要求<br>Requirements | 试验方法及备注<br>Test Methods and Remarks |
|---|---|---|---|
| 9 | 耐高温<br>High temperature resistance | 无可见机械损伤，<br>No mechanical damage.<br>压敏电压变化在±5%之内<br>Varistor voltage change within±5% | 施加电压：工作电压<br>Applied voltage: Working voltage<br>测试时间:1000 $^{+24}_{-0}$ h<br>Testing time: 1000 $^{+24}_{-0}$ h<br>测试温度:85±2℃<br>Temperature: 85±2℃<br>  |
| 10 | 恒定湿热<br>Static Humidity | 无可见机械损伤，<br>No mechanical damage.<br>压敏电压变化在±5%之内<br>Varistor voltage cha<br>nge within±5% | 湿度:90～95% RH，温度:55±2℃<br>测试时间:500 $^{+24}_{-0}$ h<br>Humidity: 90 to 95% RH<br>Temperature: 55±2℃<br>Testing time: 500 $^{+24}_{-0}$ h<br>  |
| 11 | 温度循环<br>Thermal Shock | 无可见机械损伤，<br>No mechanical damage.<br>压敏电压变化在±5%之内<br>Varistor voltage change within±5% | 温度：-40℃，30±3 分钟<br>+85℃，30±3 分钟<br>Temperature: -40℃ for 30±3min<br>+85℃ for 30±3min<br>转换时间：5±3 分钟<br>Transforming interval : 5 ±3min 20 sec<br>循环次数：32<br>Number of cycles: 32<br>  |

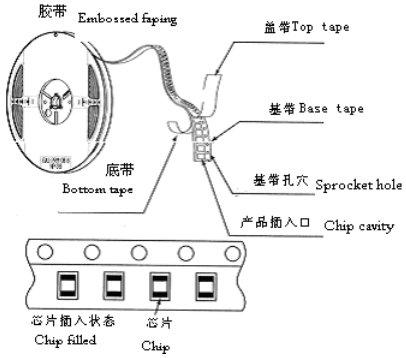
**注：以上要求测试电性能的项目，应试验后在标准条件下放置 24 小时后测试。**

**Note:When there are questions concerning, measurement shall be made after 24±2hrs of recovery under the standard condition.**

# 5 产品包装 Packaging

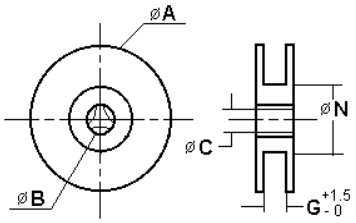
## 1）编带图 Taping drawings



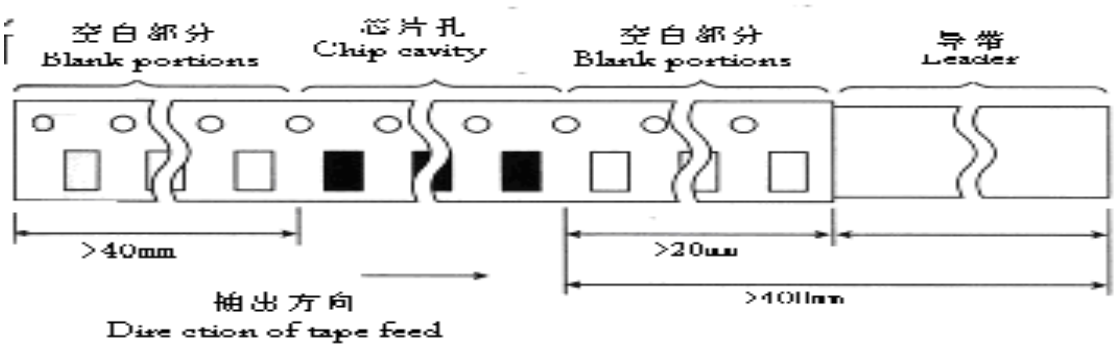




## 2）卷盘尺寸 Reel dimensions (Unit:mm)

| | A | B | C | N | G |
|---|---|---|---|---|---|
| CF-8 | 178 ±2.0 | 22.0 ±2.0 | 12.5 ±1.5 | 57 ±2.0 | 8 |
| CF-12 | 330 ±2.0 | 22.0 ±2.0 | 12.5 ±1.5 | 98 ±2.0 | 12 |
| CF-16 | 330 ±2.0 | 22.0 ±2.0 | 12.5 ±1.5 | 110 ±2.0 | 16 |

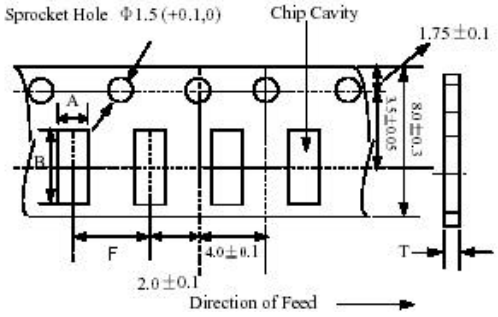



## 3） 导带及空格部分 Leader and blank portion



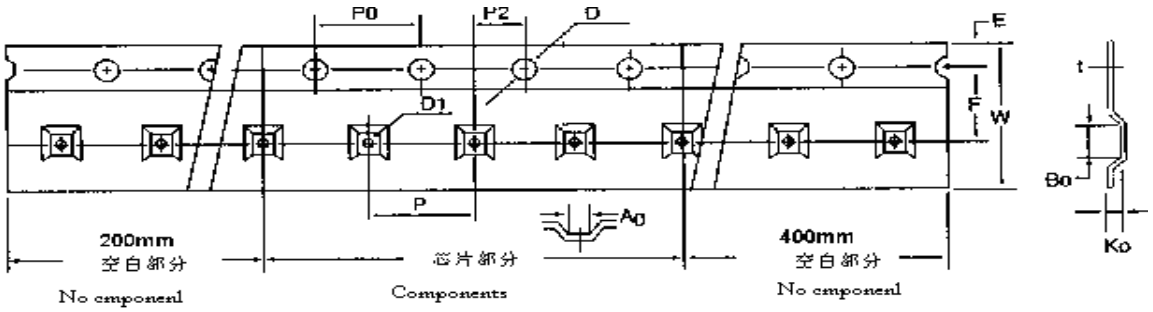

## 4）编带尺寸 Taping dimensions (Unit: mm)

### 纸带 Paper tape



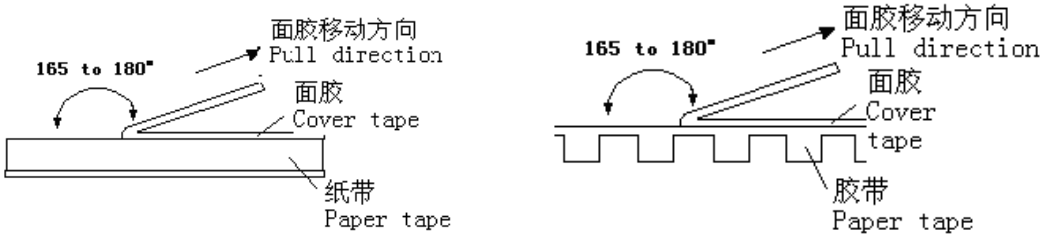

| Part NO. | A | B | F | T |
|---|---|---|---|---|
| 100505 | 0.65±0.1 | 1.15±0.1 | 2.0±0.05 | 0.8max |
| 160808 | 1.1±0.2 | 1.9±0.2 | 4.0±0.2 | 1.1max |
| 201209 | 1.5±0.2 | 2.3±0.2 | 4.0±0.2 | 1.1max |

**5） 塑料胶带 Embossed tape**




| | 1080 | 4532 | 3225 | 3216 | 2012 |
|---|---|---|---|---|---|
| W | 16.0+/-0.3 | 12.0+/-0.2 | 8.1+/-0.2 | 8.1+/-0.2 | 8.1+/-0.2 |
| P | 12.0+/-0.10 | 8.0+/-0.10 | 4.0+/-0.10 | 4.0+/-0.10 | 4.0+/-0.10 |
| E | 1.75+/-0.10 | 1.75+/-0.10 | 1.75+/-0.10 | 1.75+/-0.10 | 1.75+/-0.10 |
| F | 7.50+/-0.10 | 5.50+/-0.10 | 3.50+/-0.10 | 3.50+/-0.10 | 3.50+/-0.10 |
| D | 1.50+/-0.05 | 1.55+/-0.05 | 1.55+/-0.05 | 1.55+/-0.05 | 1.55+/-0.05 |
| D1 | 1.50+/-0.10 | 1.50+/-0.10 | 1.00+/-0.10 | 1.00+/-0.10 | 1.00+/-0.10 |
| $P_0$ | 4.0+/-0.10 | 4.0+/-0.10 | 4.0+/-0.10 | 4.0+/-0.10 | 4.0+/-0.10 |
| $P_0$10 | 40.0+/-0.20 | 40.0+/-0.20 | 40.0+/-0.20 | 40.0+/-0.20 | 40.0+/-0.20 |
| P2 | 2.0+/-0.05 | 2.0+/-0.05 | 2.0+/-0.05 | 2.0+/-0.05 | 2.0+/-0.05 |
| $A_0$ | 8.4+/-0.10 | 3.66+/-0.10 | 2.80+/-0.10 | 1.90+/-0.10 | 1.52+/-0.10 |
| $B_0$ | 10.5+/-0.10 | 4.95+/-0.10 | 3.50+/-0.10 | 3.51+/-0.10 | 2.41+/-0.10 |
| t | 0.3+/-0.10 | 0.23+/-0.10 | 0.23+/-0.10 | 0.23+/-0.10 | 0.23+/-0.10 |
| $K_0$ | 1.9+/-0.10 | 1.74+/-0.10 | 1.55+/-0.10 | 1.27+/-0.10 | 1.35+/-0.10 |

**6）剥离力检验 Peeling off force**




① 盖带的剥离力：沿面胶移动方向拉时要求剥离力为 0.1N～0.7N。

Peeling force should be 0.1~0.7N pulling in the direction of arrow.

② 剥离速度：300mm/min

Speed of peeling off: 300mm/min.

③ 在胶带、纸带剥落时，面胶不能有破损，不能粘纸带。

The cover bond should not be damaged and bond the tape when it peeled off.

**7）包装数量（单位：粒）Packaging number (Unit: Pcs )**

| 类型 SIZE | 1080 | 453215 | 322513 | 321611 | 201209 | 160808 | 100505 |
|---|---|---|---|---|---|---|---|
| 每卷数量 REEL | 2500 | 3000 | 3000 | 3000 | 4000 | 4000 | 10000 |
| 每盒数量 BOX | 10000 | 12000 | 30000 | 30000 | 40000 | 40000 | 100000 |
| 每箱数量 CASE | 30000 | 36000 | 180000 | 180000 | 240000 | 240000 | 600000 |

**8) 标签粘贴位置 Label stick station**

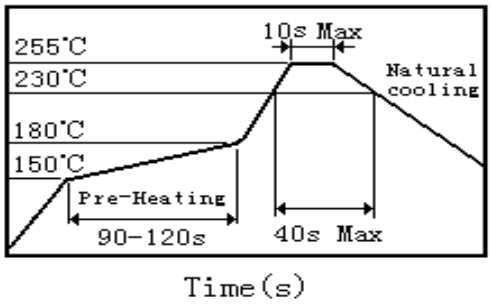
| 卷盘标签 | 纸盒标签 | 纸盒标签 | 外箱标签 |
|---|---|---|---|
|  |  |  |  |

# 6 推荐焊接条件 Recommend Soldering Conditions

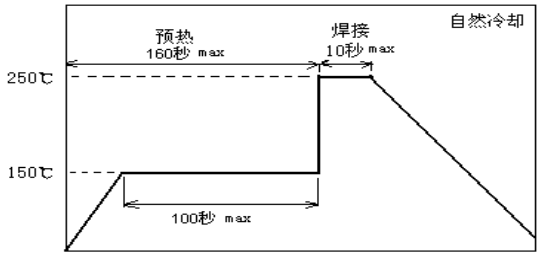
**② 焊接要求 Soldering conditions**

- 预热时，产品表温与焊料温度的温差最大不允许超出 150℃，焊接完冷却时，产品表温与溶剂温度之间的温差最大不超过 100℃。预热不足有可能引发产品表面裂纹，从而导致产品品质下降。
- Pre-heating should be in such a way that the temperature difference between solder and ferrite surface is limited to 150℃ max. Also cooling into solvent after soldering should be in such way that the temperature difference is limited to 100℃ max. Un-enough pre-heating may cause cracks on the ferrite, resulting in the deterioration of product quality.
- 产品要在以下画出的曲线允许的范围内进行焊接。其它焊接条件可能引起产品电极的腐蚀。当焊接重复时，允许的时间为第一次做的累计时间。
- Products should be soldered within the following allowable range indicated by the slanted line. The excessive soldering conditions may cause the corrosion of the electrode. When soldering is repeated, allowable time is the accumulated time.

**1） 回流焊曲线 Reflow soldering profile**




**3）波峰焊曲线 Flow soldering profile**

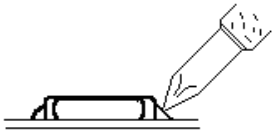



**4）手工焊接 Iron soldering**

烙铁温度：350℃　Perform soldering at 350℃ on 30W max

功率：最大为 30W　Time: < 5S

烙铁停留时间：〈 5S（注意不要将烙铁碰到产品端电极）Take care not to apply the tip of the soldering iron to the terminal electrodes



**5）清洗条件 Cleaning Conditions**

清洗温度：60℃（最高） Cleaning temperature : 60℃ max

清洗时间：1 分钟（最少） Cleaning time: 1 minute min.

超声波功率：最大为 200W Ultrasonic output power: 200W max

# 7 存储要求 Storage Requirements

**1）存储期限 Storage period**

距电感公司出厂检验时间 6 个月内，产品可以使用检验时间可以通过包装外侧标记的检验号确认。若时间超过 6 个月，应检查焊接性能后方可使用。

Products which inspected in INDUCTOR COMPANY over 6 months ago should be examined and used, which can be Confirmed with inspection No. marked on the container. Solder ability should be checked if this period is exceeded.

**2）存储条件 Storage conditions**

⑴ 存放货物的库房应满足以下条件：温度：-10 ～ +40℃，相对湿度：30 ～ 70%。

Products should be storage in the warehouse on the following conditions:

Temperature : -10~+40℃ Humidity: 30~70% relative humidity

⑵ 禁止将产品保管在腐蚀性物质中，如硫磺、氯气或酸，否则将引起端头氧化，导致降低焊接性。

Don’t keep products in corrosive gases such as sulfur, chlorine gas or acid , or it may case oxidization of Electrodes resulting in poor solder ability.

⑶ 为了避免受潮气、灰尘等物质的影响，产品应保管于货架上。

Products should be storaged on the palette for the prevention of the influence from humidity, dust and so on.

⑷ 产品保管在库房中，应避免热冲击、振动以及直接光照等等。

Products should be storaged in the warehouse without heat shock, vibration, direct sunlight and so on.

⑸ 产品应密封包装。

Products should be storaged under the airtight packaged condition.

# 8 ODS（消耗臭氧层物质）的使用情况 Usage Of ODS

1）对于以下所列物质，我公司在生产过程中绝不使用。

ODS：$CCl_4$（四氯化碳）、HCFC 等。

For ODS listed below , we don’t use in process。

ODS: $CCl_4$, HCFC, etc.

# 9 注意事项 Notes

1）若本次承认的为“整体无铅”产品，则表明该产品符合RoHS指令的要求。

If the parcel label on product is "Unitary lead free" that indicate the products in accord with ROHS appointed requests.

（2）本承认书保证我司产品作为一个单体时的质量情况，当我司产品被安装到贵司产品上时请保证贵司的产品已根据贵司的规范进行了有效评价和确认。

This product specification guarantees the quality of our product as a single unit, Please make sure that your product has been evaluated and confirmed against your specifications when our product is mounted to your product.

（3）如果贵司对我司产品的试用已超过了本测试规范所界定的产品功能，对于此所引发的失效我司将不予保证。

We can’t warrant against failure caused by any use of our product that deviates from the intended use as described in this product specification.