



Voltage Dependent Resistor

压敏电阻

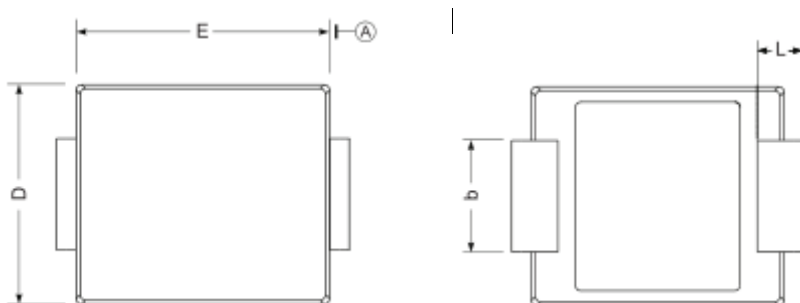
方形贴片 Series

1. Appearance 外形尺寸

1-1. Marking 标志 3225-471
 2032

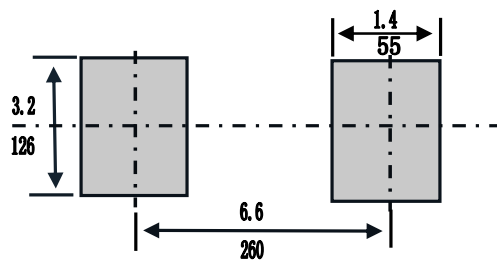


1-2. Dimensional Drawing (mm) 尺寸



UNIT		A	E	D	E1	A1	C	L	b
mm	max	2.62	7.0	6.2	8.0	0.21	0.31	1.6	3.25
	min	2.00	6.5	5.6	7.6	0.05	0.15	0.9	2.75
mil	max	103	276	244	315	8.3	12	63	128
	min	79	256	220	299	2.0	5.9	35	108

1-3. Recommended solder pad layout (mm) 焊盘布局



unit: $\frac{\text{mm}}{(\text{mil})}$

2. Part numbering 命名方式

WLRSV	3225	471	K	H
Plastic Varistors	Product Size 产品尺寸 mm	Varistor Voltage 压敏电压 V	Tolerance 压敏电压允差	High flux energy 高通流能量
塑封压敏电阻	8.0±0.5*6.2±0.5	470	±10%	

3. Electrical characteristics 电气参数

(Ta=25°C)

SMD Types 产品型号	Maximum Allowable Voltage 可容许最大电压		Withstanding Surge Current (8/20 μs) 突波电流耐量		Energy 能量 (10/1000μs)	Rated Power 额定功率
	V _{ACRMS} [V]	V _{DC} [V]	1 time[A]	2 times[A]	(1 time)[J]	[mW]
WLRSV3225-221K	140	180	1000	700	7.5	100
WLRSV3225-241K	150	200	1000	700	9.0	100
WLRSV3225-271K	175	225	1000	700	9.5	100
WLRSV3225-331K	210	270	1000	700	10.5	100
WLRSV3225-361K	230	300	1000	700	11.0	100
WLRSV3225-391K	250	320	1000	700	12.0	100
WLRSV3225-431K	275	350	1000	700	13.5	100
WLRSV3225-471K	300	385	1000	700	15.0	100
WLRSV3225-511K	320	415	1000	700	15.0	100
WLRSV3225-561K	350	460	1000	700	17.0	100
WLRSV3225-221KH	140	180	1500	1000	7.5	100
WLRSV3225-241KH	150	200	1500	1000	9.0	100
WLRSV3225-271KH	175	225	1500	1000	9.5	100
WLRSV3225-331KH	210	270	1500	1000	10.5	100
WLRSV3225-361KH	230	300	1200	800	11.0	100
WLRSV3225-391KH	250	320	1200	800	12.0	100
WLRSV3225-431KH	275	350	1200	800	13.5	100
WLRSV3225-471KH	300	385	1200	800	15.0	100
WLRSV3225-511KH	320	415	1200	800	15.0	100
WLRSV3225-561KH	350	460	1200	800	17.0	100

3. Electrical characteristics 电气性能 (Ta=25°C)

SMD Types 产品型号	Varistor Voltage at 1 mA 压敏电压	Max Clamping Voltage at Class Current 最大抑制电压	Class Current 电流等级 (8/20 μ s)	Capacitance 电容量
	[V]($\pm 10\%$)	[V]	[A]	@1kHz [pF]
WLRSV3225-221K	220	380	5	70
WLRSV3225-241K	240	415	5	70
WLRSV3225-271K	270	475	5	65
WLRSV3225-331K	330	580	5	65
WLRSV3225-361K	360	620	5	50
WLRSV3225-391K	390	675	5	50
WLRSV3225-431K	430	745	5	45
WLRSV3225-471K	470	810	5	40
WLRSV3225-511K	510	875	5	40
WLRSV3225-561K	560	940	5	35
WLRSV3225-221KH	220	380	5	70
WLRSV3225-241KH	240	415	5	70
WLRSV3225-271KH	270	475	5	65
WLRSV3225-331KH	330	580	5	65
WLRSV3225-361KH	360	620	5	50
WLRSV3225-391KH	390	675	5	50
WLRSV3225-431KH	430	745	5	45
WLRSV3225-471KH	470	810	5	40
WLRSV3225-511KH	510	875	5	40
WLRSV3225-561KH	560	940	5	35

4. Features 特点

- Improved component design in a compact case. 改善产品的设计空间
- High surge current capability of up to 1.75 kA. 提供更高的产品通流量
- Superior performance at high temperature. 在更高温下使用
- Better stability and reliability under hot and humid conditions
在湿热条件下有更好的稳定性和可靠性
- SMD mountable disk varistors, suitable for lead-free reflow / wave soldering.
片式封装结构更适合回流焊和波峰焊

5. Applications 应用领域

- Power supplies for telecommunication systems. 通讯设备功率电源
- Protection for LED circuits. LED 电路保护
- Protection for consumer, industrial equipment. 消费类、工业类设备保护
- Protection for automotive electronics. 自动化设备保护

6. Applicable standards 参照标准

- UL1449
- TUV
- CQC (GB/T10193, GB/T10194, GB4943.1, GB8898)

7. General technical data 技术要求

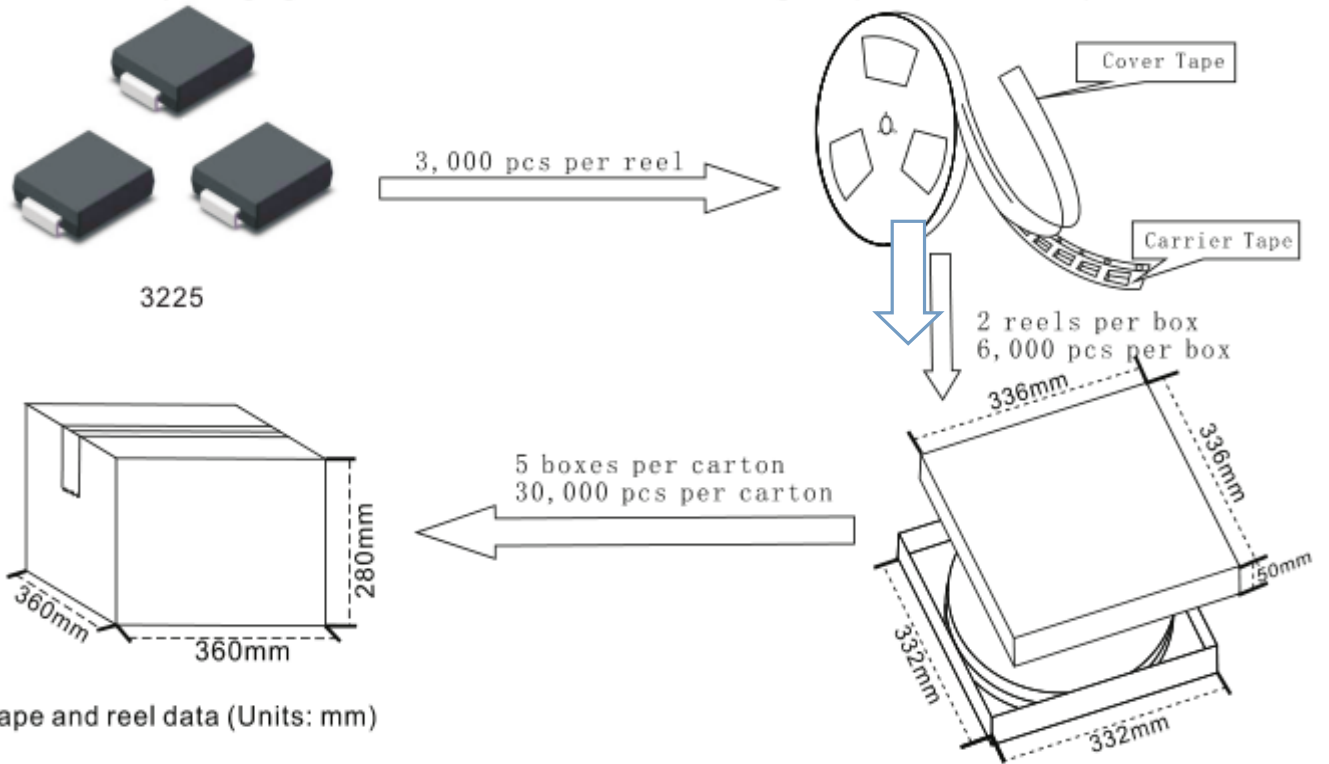
Parameter 项目	Value 范围	Unit 单位
Operating temperature 工作温度	-55 to +125	°C
Storage temperature 贮存温度	-25 to +45	°C
Electric strength 电气强度	≥2.5	kV _{RMS}
Insulation resistance 绝缘电阻	≥100	MΩ

8. Storage condition 贮存条件

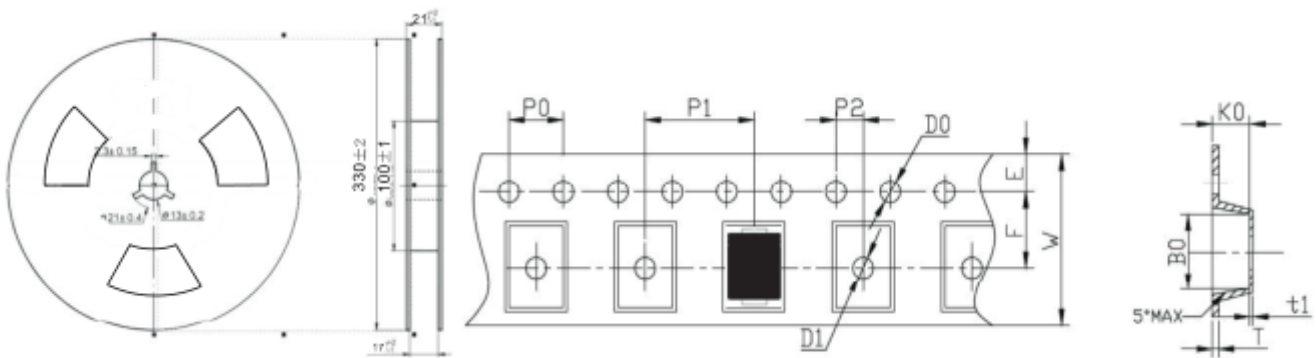
- As far as possible, the components should be employed within 24 months after delivery from factory. 从工厂入库到使用时间不大于 24 个月
- They should be left in their original packing to avoid soldering problems due to oxidized contacts. 为防止出现焊接问题产品尽量在使用前保持原包装
- Storage temperature: - 25 up to + 45° C. 贮存温度在-25~45° C.
- Relative humidity: < 75 % 相对湿度 <75%。

9. The method of packaging and dimension are shown as below figure.
(Dimension in mm) 编带尺寸

1. The method of packaging and dimension are shown as below figure. (Dimension in mm)



2. Tape and reel data (Units: mm)



尺寸测量位	W	E	F	D0	D1	P0	P1	P2	T	t1	A0	B0	K0	10P0
规范值	16.0	1.75	7.5	1.55	1.50	4.0	8.0	2.0	0.28	0.08	6.22	8.31	2.49	40.0±
mm	±0.3	±0.1	±0.1	±0.05	±0.25	±0.1	±0.1	±0.05	±0.02	以上	±0.1	±0.1	±0.1	0.2