

Multilayer Chip Varistor-VS Series

叠层片式压敏电阻器-VS 系列

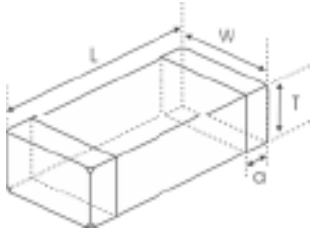


Introduction and Characteristics 产品介绍及特性

FEATURES	特征
◆SMD type suitable for high density mounting	◆ SMD 结构适合高密度安装
◆Excellent clamping ratio and quick response time(< 0.5ns)	◆优异的限压比，响应时间短(0.5ns).
◆Excellent solderability(Ni,Sn plating)	◆良好的焊接性能(镍、锡电镀)

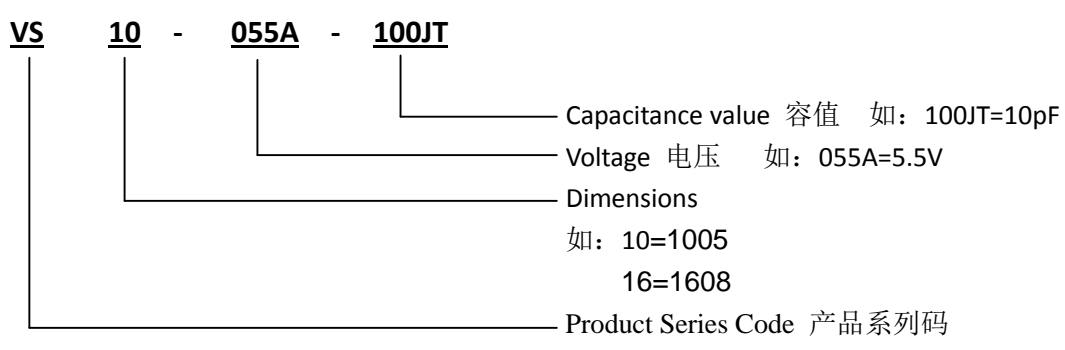
APPLICATIONS	用途
◆Transient voltage protection for IC and transistor	◆ IC 和晶体管的过电压保护
◆ESD and I/O protection	◆ESD 和 I/O 保护
◆EFT and burst protection	◆EFT 保护
◆Portable equipment protection,such as mobile phone,PDA,etc.	◆手机、PDA 等便携式设备保护

SHAPE AND DIMENSIONS 外观尺寸



SIZE 尺寸	L mm	W mm	T mm	a mm
1005(0402)	1.0±0.15	0.5±0.15	0.5±0.15	0.25±0.1
1608(0603)	1.6±0.15	0.8±0.15	0.8±0.15	0.3±0.2
2012(0805)	2.0±0.2	1.25±0.2	0.85±0.2	0.5±0.3

PRODUCT IDENTIFICATION 产品型号



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SPECIFICATIONS 规格特性

VS 1005(0402) TYPE

Part Number 型号	Max.Working Voltage 最大工作电压		Varistor Voltage 压敏电压	Max.Clamping Voltage 限制电压		Rated Single Pulse Transient 额定脉冲耐量		Typical Capacitance 电容
	DC	AC RMC		@1mA DC	8/20 μ s	ESD	Energy 10/1000 μ s	
Units 单位	Volts	Volts	Volts	Volts	Volts	Joules	Amps	pF
VS10-055A-180JT	5.5	4.0	10.0-14.0	23	23	0.005	3	18
VS10-055A-300JT	5.5	4.0	10.0-14.0	23	23	0.005	5	30
VS10-055A-400JT	5.5	4.0	10.0-14.0	23	23	0.005	5	40
VS10-055A-500JT	5.5	4.0	10.0-14.0	23	23	0.01	10	50
VS10-055A-700JT	5.5	4.0	10.0-14.0	18	23	0.01	10	70
VS10-055A-800JT	5.5	4.0	10.0-14.0	18	23	0.02	10	80
VS10-055A-101JT	5.5	4.0	10.0-14.0	18	23	0.05	20	100
VS10-090A-180JT	9.0	6.4	11.0-16.0	20	26	0.005	3	18
VS10-090A-300JT	9.0	6.4	11.0-16.0	20	26	0.005	5	30
VS10-090A-500JT	9.0	6.4	11.0-16.0	20	26	0.01	10	50
VS10-090A-800JT	9.0	6.4	11.0-16.0	20	26	0.02	15	80
VS10-090A-101JT	9.0	6.4	11.0-16.0	20	26	0.05	20	100
VS10-140A-180JT	14.0	10.0	16.0-22.0	30	39	0.005	3	18
VS10-140A-300JT	14.0	10.0	16.0-22.0	30	39	0.01	5	30
VS10-140A-500JT	14.0	10.0	16.0-22.0	30	39	0.02	10	50
VS10-140A-800JT	14.0	10.0	16.0-22.0	30	39	0.03	15	80
VS10-140A-101JT	14.0	10.0	16.0-22.0	30	39	0.05	20	100
VS10-180A-150JT	18.0	12.7	22.0-28.0	40	48	0.005	2	15
VS10-180A-180JT	18.0	12.7	22.0-28.0	40	48	0.01	5	18
VS10-180A-300JT	18.0	12.7	22.0-28.0	40	48	0.02	10	30
VS10-180A-500JT	18.0	12.7	22.0-28.0	40	48	0.02	10	50
VS10-180A-800JT	18.0	12.7	22.0-28.0	40	48	0.03	15	80
VS10-220A-150JT	22.0	15.6	26.0-34.0	45	54	0.005	2	15
VS10-220A-180JT	22.0	15.6	26.0-34.0	45	54	0.01	5	18
VS10-220A-300JT	22.0	15.6	26.0-34.0	45	54	0.02	10	30
VS10-220A-500JT	22.0	15.6	26.0-34.0	45	54	0.02	10	50
VS10-260A-180JT	26.0	18.4	31.0-38.0	58	70	0.02	5	18
VS10-260A-300JT	26.0	18.4	31.0-38.0	58	70	0.03	10	30

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SPECIFICATIONS 规格特性

VS 1608(0603) TYPE

P15art Number 2 型号	Max.Working Voltage 最大工作电压		Varistor Voltage 压敏电压	Max.Clamping Voltage 限制电压		Rated Single Pulse Transient 额定脉冲耐量		Typical Capacitance 电容 @0.5 Vrms, 1MHZ
	DC	AC RMC		@1mA DC	8/20µs	ESD	Energy 10/1000µs	
Units 单位	Volts	Volts	Volts	Volts	Volts	Joules	Amps	pF
VS16-055A-180JT	5.5	4.0	10.0-14.0	18	23	0.005	3	18
VS16-055A-300JT	5.5	4.0	10.0-14.0	18	23	0.005	5	30
VS16-055A-500JT	5.5	4.0	10.0-14.0	18	23	0.01	10	50
VS16-055A-800JT	5.5	4.0	10.0-14.0	18	23	0.02	10	80
VS16-055A-101JT	5.5	4.0	10.0-14.0	18	23	0.05	20	100
VS16-090A-180JT	9.0	6.4	11.0-16.0	20	26	0.005	3	18
VS16-090A-300JT	9.0	6.4	11.0-16.0	20	26	0.005	5	30
VS16-090A-500JT	9.0	6.4	11.0-16.0	20	26	0.01	10	50
VS16-090A-800JT	9.0	6.4	11.0-16.0	20	26	0.02	15	80
VS16-090A-101JT	9.0	6.4	11.0-16.0	20	26	0.05	20	100
VS16-140A-180JT	14.0	10.0	16.0-22.0	30	39	0.005	3	18
VS16-140A-300JT	14.0	10.0	16.0-22.0	30	39	0.01	5	30
VS16-140A-500JT	14.0	10.0	16.0-22.0	30	39	0.02	10	50
VS16-140A-800JT	14.0	10.0	16.0-22.0	30	39	0.03	15	80
VS16-140A-101JT	14.0	10.0	16.0-22.0	30	39	0.05	20	100
VS16-180A-180JT	18.0	12.7	22.0-28.0	40	48	0.005	5	18
VS16-180A-300JT	18.0	12.7	22.0-28.0	40	48	0.02	10	30
VS16-180A-500JT	18.0	12.7	22.0-28.0	40	48	0.02	10	60
VS16-180A-800JT	18.0	12.7	22.0-28.0	40	48	0.03	15	80
VS16-180A-101JT	18.0	12.7	22.0-28.0	40	48	0.05	20	100
VS16-220A-180JT	22.0	15.6	26.0-34.0	45	54	0.005	5	18
VS16-220A-300JT	22.0	15.6	26.0-34.0	45	54	0.02	10	30
VS16-220A-500JT	22.0	15.6	26.0-34.0	45	54	0.02	10	50
VS16-220A-800JT	22.0	15.6	26.0-34.0	45	54	0.03	15	80
VS16-220A-101JT	22.0	15.6	26.0-34.0	45	54	0.05	20	100
VS16-260A-180JT	26.0	18.4	31.0-38.0	58	70	0.02	5	18
VS16-260A-300JT	26.0	18.4	31.0-38.0	58	70	0.03	10	30
VS16-260A-500JT	26.0	18.4	31.0-38.0	58	70	0.03	10	50

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SPECIFICATIONS 规格特性

VS 2012(0805) TYPE

P15art Number 2 型号	Max.Working Voltage 最大工作电压		Varistor Voltage 压敏电压	Max.Clamping Voltage 限制电压		Rated Single Pulse Transient 额定脉冲耐量		Typical Capacitance 电容
	DC	AC RMC		8/20 μ s	ESD	Energy 10/1000 μ s	Peak Current 8/20 μ s	
Test Condition 测试条件	< 20 μ A		@1mA DC	8/20 μ s	ESD	Energy 10/1000 μ s	Peak Current 8/20 μ s	@0.5 Vrms, 1MHZ
Units 单位	Volts	Volts	Volts	Volts	Volts	Joules	Amps	pF
VS20-055A-180JT	5.5	4.0	10.0-14.0	18	23	0.005	3	18
VS20-180A-101JT	18.0	12.7	22.0-28.0	40	48	0.05	20	100
VS20-220A-101JT	22.0	15.6	26.0-34.0	45	54	0.05	20	100
VS20-260A-800JT	26.0	18.4	31.0-38.0	58	70	0.05	20	80
VS20-300A-500JT	30.0	21.3	37.0-46.0	65	78	0.05	15	50

※*1: Vc, Maximum peak voltage across the varistor measured at a specified pulse current and waveform.

Energy Rating Pulse & Waveform

0.00- 0.05 Joule 1A, 8/20 μ s

0.10 Joule 2A, 8/20 μ s

0.20- 0.50 Joule 5A, 8/20 μ s

※*2: Vc, Maximum peak voltage across the varistor measured at 30ns after initiation of pulse on IEC61000-4-2 30A/8KV.