

Type:SMV1005

◆ Product Description

- 1.15×0.65mm Max.(L×W),0.65mm Max. Height.
- Typical Capacitance:3.0~360 pF
- In addition to the standards versions shown here, custom inductors are also available to meet your exact requirements.

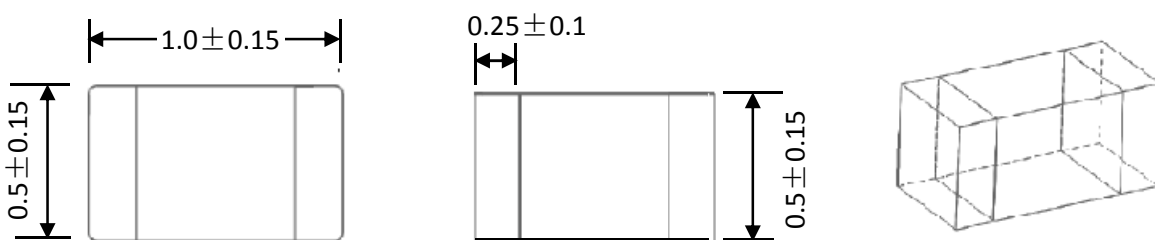
◆ Feature

- . SMD type suitable for high density mounting
- . Excellent clamping ratio and quick response time (<0.5ns)
- . Excellent solderability(Ni, Sn plating)

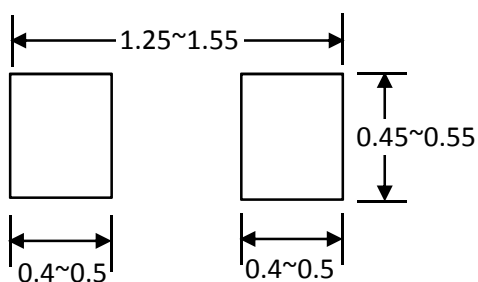
◆ Application

- . Transient voltage protection for IC and transistor
- . ESD and I/O protection
- . EFT and burst protection
- . Portable equipment protection,such as mobile phone ,PDA ,etc

◆ Dimensions (mm)



◆ Land Pattern (mm)



Type:SMV1005
◆ Specification

Suntek Part Number	System Code	Max.Working Voltage		Varistor Voltage	Max.Clamping Voltage		Rated Single Pulse Transient		Typical Capacitance
		DC	AC RMS	@1mA DC	8/20µs	ESD	Energy 10/1000µs	Peak Current 8/20µs	@0.5Vrms, 1 MHz
SMV1005A5R5C181□		5.5	4.0	10.0-14.0	18	23	0.05	20	180
SMV1005A5R5C231□		5.5	4.0	10.0-14.0	18	23	0.05	20	230
SMV1005A5R5C361□		5.5	4.0	10.0-14.0	18	23	0.05	20	360
SMV1005A090C121□		9.0	6.4	11.0-16.0	20	26	0.05	20	120
SMV1005A090C151□		9.0	6.4	11.0-16.0	20	26	0.05	20	150
SMV1005A090C231□		9.0	6.4	11.0-16.0	20	26	0.05	20	230
SMV1005A140C121□		14.0	10.0	16.0-22.0	30	39	0.05	20	120
SMV1005A140C161□		14.0	10.0	16.0-22.0	30	39	0.05	20	160
SMV1005E5R5C180□		5.5	4.0	10.0-14.0	18	23	0.005	3	18
SMV1005E5R5C300□		5.5	4.0	10.0-14.0	18	23	0.005	5	30
SMV1005E5R5C500□		5.5	4.0	10.0-14.0	18	23	0.01	10	50
SMV1005E5R5C800□		5.5	4.0	10.0-14.0	18	23	0.02	10	80
SMV1005E5R5C101□		5.5	4.0	10.0-14.0	18	23	0.05	20	100
SMV1005E090C180□		9.0	6.4	11.0-16.0	20	26	0.005	3	18
SMV1005E090C300□		9.0	6.4	11.0-16.0	20	26	0.005	5	30
SMV1005E090C500□		9.0	6.4	11.0-16.0	20	26	0.01	10	50
SMV1005E090C800□		9.0	6.4	11.0-16.0	20	26	0.02	15	80
SMV1005E090C101□		9.0	6.4	11.0-16.0	20	26	0.05	20	100
SMV1005E140C180□		14.0	10.0	16.0-22.0	30	39	0.005	3	18
SMV1005E140C300□		14.0	10.0	16.0-22.0	30	39	0.01	5	30
SMV1005E140C500□		14.0	10.0	16.0-22.0	30	39	0.02	10	50
SMV1005E140C800□		14.0	10.0	16.0-22.0	30	39	0.03	15	80
SMV1005E140C101□		14.0	10.0	16.0-22.0	30	39	0.05	20	100
SMV1005E180C150□		18.0	12.7	22.0-28.0	40	48	0.005	2	18
SMV1005E180C180□		18.0	12.7	22.0-28.0	40	48	0.01	5	30
SMV1005E180C300□		18.0	12.7	22.0-28.0	40	48	0.02	10	50
SMV1005E180C500□		18.0	12.7	22.0-28.0	40	48	0.02	10	80
SMV1005E180C800□		18.0	12.7	22.0-28.0	40	48	0.03	15	100
SMV1005E180C101□		18.0	12.7	22.0-28.0	40	48	0.05	20	15
SMV1005E260C180□		26.0	18.4	31.0-38.0	58	70	0.02	5	18
SMV1005E260C300□		26.0	18.4	31.0-38.0	58	70	0.03	10	30
SMV1005E260C500□		26.0	18.4	31.0-38.0	58	70	0.03	10	50
SMV1005H140C100□		14.0	10.0	16.0-22.0	30	39	0.005	2	10
SMV1005H140C120□		14.0	10.0	16.0-22.0	30	39	0.005	2	12
SMV1005H180C050□		18.0	12.7	22.0-28.0	40	48	0.005	2	5
SMV1005H180C100□		18.0	12.7	22.0-28.0	40	48	0.005	2	10
SMV1005H260C030□		26.0	18.4	31.0-38.0	58	70	0.003	1	3
SMV1005H260C100□		26.0	18.4	31.0-38.0	58	70	0.005	2	10
SMV1005H260C120□		26.0	18.4	31.0-38.0	58	70	0.005	2	12
SMV1005S5R5C030□		5.5	4.0	31.0-38.0	58	70	0.003	1	3
SMV1005S5R5C050□		5.5	4.0	22.0-28.0	40	48	0.003	1	5
SMV1005S5R5C100□		5.5	4.0	22.0-28.0	40	48	0.005	2	10
SMV1005S5R5C120□		5.5	4.0	22.0-28.0	40	48	0.005	2	12
SMV1005S090C030□		9.0	6.4	31.0-38.0	58	70	0.003	1	3

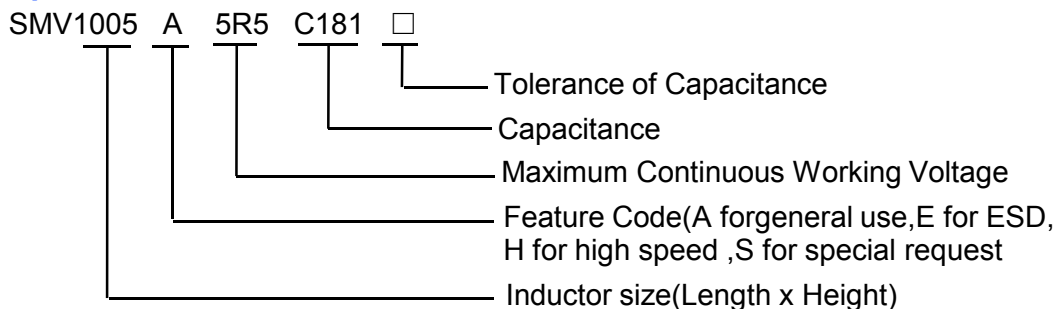
Please refer to the sales offices on our website for a representative near you

Type:SMV1005
◆ Specification

Suntek Part Number	System Code	Max.Working Voltage		Varistor Voltage	Max.Clamping Voltage		Rated Single Pulse Transient		Typical Capacitance
		DC	AC RMS	@1mA DC	8/20μs	ESD	Energy 10/1000μs	Peak Current 8/20us	@0.5Vrms,1M Hz
		<20 μ A							
SMV1005S090C050□		9.0	6.4	22.0-28.0	40	48	0.003	1	5
SMV1005S090C100□		9.0	6.4	22.0-28.0	40	48	0.005	2	10
SMV1005S090C120□		9.0	6.4	22.0-28.0	40	48	0.005	2	12
SMV1005S140C030□		14.0	10.0	31.0-28.0	58	70	0.003	1	3
SMV1005S140C050□		14.0	10.0	22.0-28.0	40	48	0.003	1	5
SMV1005S180C030□		18.0	12.7	31.0-38.0	58	70	0.003	1	3

Ultra low capacitance type(C=0.5pF,1pF or 2pF)

Suntek Part Number	System Code	Max.Working Voltage		Varistor Voltage	Typical Capacitance	Min.Cut-off Frequency (MHz)
		DC	AC RMS	@1mA DC	@0.5Vrms,1MHz	@-3db
		<20 μ A				
SMV1005E260C0R5□		26.0	18.4	100-160	0.5	2000
SMV1005E260C010□		26.0	18.4	100-160	1	1250
SMV1005E260C020□		26.0	18.4	60-80	2	600
SMV1005S5R5C0R5□		5.5	4.0	100-160	0.5	2000
SMV1005S5R5C010□		5.5	4.0	100-160	1	1250
SMV1005S5R5C020□		5.5	4.0	60-80	2	600
SMV1005S090C0R5□		9.0	6.4	100-160	0.5	2000
SMV1005S090C010□		9.0	6.4	100-160	1	1250
SMV1005S090C020□		9.0	6.4	60-80	2	600
SMV1005S140C0R5□		14.0	10.0	100-160	0.5	2000
SMV1005S140C010□		14.0	10.0	100-160	1	1250
SMV1005S140C020□		14.0	10.0	60-80	2	600
SMV1005S180C0R5□		18.0	12.7	100-160	0.5	2000
SMV1005S180C010□		18.0	12.7	100-160	1	1250
SMV1005S180C020□		18.0	12.7	60-80	2	600

※Description of Part Name


- Note:
- Operating Temperature is -55°C~+125°C.
 - V_c, Maximum peak voltage across the varistor measured at a specified pulse current and waveform.
 Energy Rating Pulse & Waveform
 0.00-0.05 Joule 1A, 8/20μs
 0.1 Joule 2A, 8/20μs
 0.2-0.5 Joule 5A, 8/20μs
 - V_c, Maximum peak voltage across the varistor measured at a 30ns after initiation of pulse on IEC61000-4-2 30A/8KV.
 - : Please specify the capacitance tolerance code (N=±30%, Y=+100%~-50%, G=Maximum)

Please refer to the sales offices on our website for a representative near you