



SMD 0805 Chip Varistor Multilayer SV0805N9R0G0A For Integrated Circuits Protection

Our Product Introduction

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Basic Information

- Place of Origin: Shenzhen Guangdong China
- Brand Name: SOCAY
- Certification: REACH RoHS ISO
- Model Number: SV0805N9R0G0A
- Minimum Order Quantity: 4000PCS
- Price: Negotiable
- Delivery Time: 5-8 work days



Product Specification

- Component Name: Multilayer Chip Varistor
- Component Package: SMD0805
- Vdc (Max.): 9V
- Vv (Min.): 10.8V
- Vv (Max.): 16.2V
- Vc (Max.): 35.6V
- Imax: 50A
- Vrms (Max.): 6V
- Highlight: **SMD 0805 Chip Varistors,
Chip Varistors Multilayer**



More Images



Product Description

SMD0805 Chip Varistor SV0805N9R0G0A Typically Applied Protect Integrated Circuits

Chip Varistor DATASHEET: [SV0805N9R0G0A_v2201.1.pdf](#)

Description:

The Chip Varistor SV0805N9R0G0A is based on Multilayer fabrication technology. These components are designed to suppress a variety of transient events, including those specified in IEC 61000-4-2 or other standards used for Electromagnetic Compliance (EMC). The SV0805N9R0G0A is typically applied to protect integrated circuits and other components at the circuit board level. It can operate over a wider temperature range than zener diodes.

Chip Varistor Electrical Characteristics (25±5):

Symbol	Minimum	Typical	Maximum	Units
VRMS	—	—	6	V
VDC	—	—	9	V
VV	10.8	—	16.2	V
VC	—	—	35.6	V
I _{max}	—	—	50	A
W _{max}	—	—	0.2	J

VRMS - Maximum AC operating voltage the varistor can maintain and not exceed 10μA leakage current.

VDC - Maximum DC operating voltage the varistor can maintain and not exceed 10μA leakage current.

VV - Voltage across the device measure at 1mA DC current.

Equivalent to VB "breakdown voltage".

VC - Maximum peak current across the varistor with 8/20μs waveform and 2A pulse current.

I_{max} - Maximum peak current which may be applied with 8/20μs waveform without device failure.

W_{max} - Maximum energy which may be dissipated with the 10/1000μs waveform without device failure.

Chip Varistor Features:

Rectangle, sizes serialization for hybrid integrated circuit or printed circuit surface mount components

There are many side electrode lead-out material, particularly suitable for surface mount technology for solderability and resistance to soldering heat of the stringent requirements

Fast response (<1ns)

Low leakage current, low clamping voltage

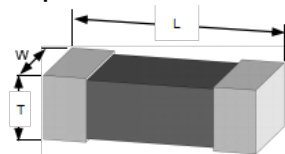
Suitable for reflow, wave soldering and hot air hand soldering

Chip Varistor Applications:

Application for Mother Board, Notebook, Cellular Phone, PDA, handheld device, DSC, DV, Scanner, and Set- Top Box...etc.

Suitable for Push-Button, Power Line and Low Frequency single line over-voltage protect.

Chip Varistor Construction & Dimensions:



Size EIA (EIAJ)	Length (L)		Width (W)		Thickness (T)	
	Inches	Millimeters	Inches	Millimeters	Inches	Millimeters
0805 (2012)	0.079±0.008	2.00±0.20	0.049±0.008	1.25±0.20	0.055 Max	1.40 Max

Chip Varistor IR Soldering:

Rapid heating, partial heating or rapid cooling will easily cause defect of the component. So preheating and gradual cooling process is suggested. IR soldering has the highest yields due to controlled heating rates and solder liquidus times. Make sure that the element is not subjected to a thermal gradient steeper than 4 degrees per second. 2 degrees per second is the ideal gradient. During the soldering process, pre-heating to within 100 degrees of the solder peak temperature is essential to minimize thermal shock.

Chip Varistor Environmental & Reliability Testing:

Characteristic	Test method and description

High Temperature Storage	The specimen shall be subjected to 125 ± 2 for 1000 ± 2 hours in a thermostatic bath without load and then stored at room temperature and humidity for 1 to 2 hours. The change of varistor voltage shall be within 10%.			
Temperature Cycle	The temperature cycle of specified temperature shall be repeated five times and then stored at room temperature and humidity for one two hours. The change of varistor voltage shall be within 10% and mechanical damage shall be examined.	Step	Temperture	Period
		1	-40 ± 3	$30\text{min}\pm 3$
		2	Room Temperature	1~2hours
		3	125 ± 2	$30\text{min}\pm 3$
		4	Room Temperature	1~2hours
High Temperature Load	After being continuously applied the maximum allowable voltage at 85 for 1000hours, the specimen shall be stored at room temperature and humidity for one or hours, the change of varistor voltage shall be within 10%.			
Damp Heat Load/ Humidity Load	The specimen should be subjected to 40 ,90 to 95%RH environment, and the maximum allowable voltage applied for 1000 hours, then stored at room temperature and humidity for one or two hours. The change of varistor voltage shall be within 10%.			
Low Temperature Storage	The specimen should be subjected to -40 , without load for 1000 hours and then stored at room temperature for one two hours. The change of varistor voltage shall be within 10%.			

Quantity of Products in The Taping Package:

SIZE EIA (EIAJ)	0805 (2012)
Standard Packing Quantity (PCS / reel)	4,000
The contents of a box : 0805 Series: 6 reels / inner box	Label and Marking: The paper label shall be plastered on the obvious side of the reel, and the information show as right side

