SMD 0603 Surface Mount Varistor SV0603N300G0A For Notebook Cellular Phone PDA

Our Product Introduction

Basic Information

- Place of Origin: Shenzhen Guangdong China
- Brand Name: SOCAY
- Certification: REACH RoHS ISO
- Model Number: SV0603N300G0A
- Minimum Order Quantity: 4000PCS
- Price: Negotiable
- Delivery Time: 5-8 work days

Product Specification

- Name: Multilayer Chip Varistor
- Package: SMD0603
- Vdc (Max.): 30V
- Vv (Min.): 36V
- Vv (Max.): 45V
- Vc (Max.): 99V
- Imax: 30A
- Vrms (Max.): 25V
- Highlight: **SMD 0603 Surface Mount Varistor**, **Notebook Surface Mount Varistor**

More Images

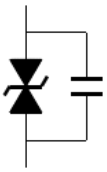
Product Description

0603 Surface Mount Varistor SV0603N300G0A Excellent Low And Stable Leakage Current

Surface Mount Varistor DATASHEET: SV0603N300G0A_v89.1.pdf

Description:
The Surface Mount Varistor SV0603N300G0A 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 SV0603N300G0A 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.

Surface Mount Varistor Equivalent Circuits:



Electrical Characteristics (25±5):

Symbol	Minimum	Typical	Maximum	Units
VRMS	—	—	25	V
VDC	—	—	30	V
VV	36	—	45	V
VC	—	—	99	V
Imax	—	—	30	A
Wmax	—	—	0.1	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 1A pulse current.
Imax - Maximum peak current which may be applied with 8/20μs waveform without device failure.
Wmax - Maximum energy which may be dissipated with the 10/1000μs waveform without device failure.

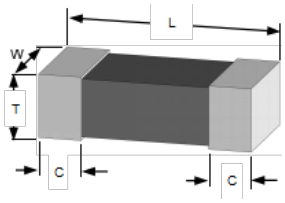
Surface Mount Varistor Features:

SMD type zinc oxide based ceramic chip
Lead free plating termination provided good solderability characteristic
Insulator overcoat keeps excellent low and stable leakage current
Quick response time (<1ns)
Low clamping voltage
High transient current capability
Meet IEC 61000-4-2 standard
Compact size for EIA 0603

Surface Mount 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.

Surface Mount Varistor Construction & Dimensions:



Size EIA (EIAJ)	**0603 (1608)**	
Symbol	**Inches**	**Millimeters**
L	0.063±0.006	1.60±0.15
W	0.031±0.004	0.80±0.10

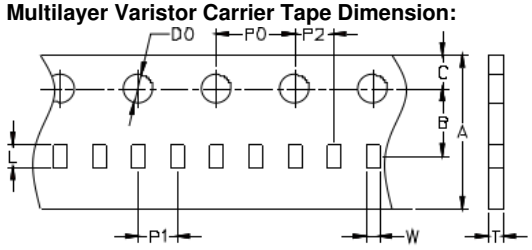
T	0.031±0.008	0.80±0.20
C	0.012±0.008	0.30±0.20

Precaution for handling of substrate:
Do not exceed to bend the board after soldering thes product extremely. (reference examples)
Mounting place must be as far as possible from the position, which is close to the break line of board or on the line of large holes of board.
Do not bend extremely the board, in mounting another component. If necessary, use back-up pin (support pin) to prevent from bending extremely.
Do not break the board by hand. We recommend to use the machine or the jig to break it.

Surface Mount Varistor Soldering Parameters:

Reflow Condition		Pb-Free assembly	
Pre Heat	**-Temperature Min ($T_{s(min)}$)**	+150°C	
	-Temperature Max ($T_{s(max)}$)	+200°C	
	-Time (min to max) (T_S)	60 -180 Seconds	
Average ramp up rate (Liquidus Temp T_L) to peak		3°C/Second Max	
$T_{S(max)}$ to T_L - Ramp-up Rate		3°C/Second Max	
Reflow	**- Temperature (T_L) (Liquidus)**	+217°C	
	- Time (min to max) (T_L)	60 -150 Seconds	
Peak Temperature (T_P)		260 +0/-5°C	
Time within 5°C of actual peak Temperature (T_P)		20-40 Seconds	
Ramp-down Rate		6°C/Second Max	
Time 25°C to peak Temperature (T_P)		8 minutes Max	

Multilayer Varistor Carrier Tape Dimension:



Size EIA (EIAJ)	**0603 (1608)**	
Symbol	**Inches**	**Millimeters**
A	0.315±0.012	8.00±0.30
B	0.138±0.002	3.50±0.05
C	0.069±0.002	1.75±0.10
D0	0.061±0.002	1.55±0.05
P0	0.157±0.004	4.00±0.10
P1	0.079±0.002	4.00±0.10
P2	0.079±0.002	2.00±0.05
W	0.041±0.006	1.05±0.15
L	0.075±0.006	1.90±0.15
T	0.037±0.002	0.95±0.05

Quantity of Products in the Taping Package:

SIZE EIA (EIAJ)	0603 (1608)
Standard Packing Quantity (PCS / reel)	4,000

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