UL VDE Metal Oxide Mov 10D511K Varistor Epoxy Resin Film 510V For Power Supply

Our Product Introduction

Basic Information

- Place of Origin: Shenzhen, Guangdong, China
- Brand Name: SOCAY
- Certification: UL,VDE,REACH,RoHS,ISO
- Model Number: 10D511k
- Minimum Order Quantity: 100PCS
- Price: Negotiable
- Delivery Time: 5-8 work days

Product Specification

- Item: MOV Varistor
- Package Size: Φ25mm
- VAC: 320V
- VDC: 415V
- Varistor Voltage: 510(459~561)V
- IP: 25A
- VC: 845V
- Rated Power: 0.4W
- Typ. Capacitance: 200pF
- Withstanding Surge Current: 2.5KA (1 Time)
- Highlight: **UL Mov 10D511K**, **Mov 10D511K 510V**, **10D511K Varistor**

Product Description

UL VDE Varistor Varistor Varistor Metal Oxide 10D511K Epoxy Resin Film Varistor 510V For Power Supply

DATASHEET: 25D Series_v2306.1.pdf

Type Number		Maximum Allowable voltage		Varistor Voltage	Maximum Clamping Voltage		Withstanding Surge Current 8/20μS		Rated Power	Energy (10/1000 μs)	Capacitance
Standard	High Surge	V_{AC} (V)	V_{DC} (V)	V 1mA (V)	I_P (A)	V_C (V)	Standard (A)	High Surge (A)	(W)	(J)	@1KHZ (pF)
							1 Time	1 Time			
25D101K	25D101KJ	60	85	100(90-110)	150	165	10000	20000	1.4	100	6300
25D201K	25D201KJ	130	170	200(185-225)	150	330	15000	20000	1.0	215	2000
25D221K	25D221KJ	140	180	220(198-242)	150	360	15000	20000	1.0	235	1800
25D241K	25D241KJ	150	200	240(216-264)	150	395	15000	20000	1.0	245	1650
25D271K	25D271KJ	175	225	270(243-297)	150	455	15000	20000	1.0	260	1500
25D301K	25D301KJ	190	250	300(270-330)	150	505	15000	20000	1.0	275	1300
25D331K	25D331KJ	210	275	330(297-363)	150	550	15000	20000	1.0	295	1200
25D361K	25D361KJ	230	300	360(324-396)	150	595	15000	20000	1.0	305	1100
25D391K	25D391KJ	250	320	390(351-429)	150	650	15000	20000	1.0	335	1000
25D431K	25D431KJ	275	350	430(387-473)	150	710	15000	20000	1.0	365	930
25D471K	25D471KJ	300	385	470(423-517)	150	775	15000	20000	1.0	390	850
25D511K	25D511KJ	320	415	510(459-561)	150	845	15000	20000	1.0	440	780
25D561K	25D561KJ	350	460	560(504-616)	150	920	15000	20000	1.0	490	715
25D621K	25D621KJ	385	505	620(558-682)	150	1025	15000	20000	1.0	540	650
25D681K	25D681KJ	420	560	680(612-748)	150	1120	15000	20000	1.0	570	600
25D751K	25D751KJ	460	615	750(675-825)	150	1240	15000	20000	1.0	590	530
25D781K	25D781KJ	485	640	780(702-858)	150	1290	15000	20000	1.0	620	510
25D821K	25D821KJ	510	670	820(738-902)	150	1355	15000	20000	1.0	655	500
25D911K	25D911KJ	550	745	910(819-1001)	150	1500	15000	20000	1.0	726	440
25D102K	25D102KJ	625	825	1000(900-1100)	150	1650	15000	20000	1.0	685	650
25D112K	25D112KJ	680	895	1100(990-1210)	150	1815	15000	20000	1.0	770	600
25D122K	25D122KJ	750	990	1200(1080-1320)	150	1980	15000	20000	1.0	770	550

About Varistor

The most used voltage limiting device is the varistor MOV/MLV, which is mainly made of zinc oxide and a variety of trace metal oxides, which are mixed and moulded.

Description:
The 25D series radial leaded varistors provides an ideal circuit protection solution for lower DC voltage applications by offering higher surge ratings than ever before available in such small discs.
The maximum peak surge current rating can reach up to 20KA (8/20 μs pulse) to protect against high peak surges, including indirect lightning strike interference, system switching transients and abnormal fast transients from the power source.

Selection of varistor:
When selecting a varistor, the specific conditions of the circuit must be considered. Generally, the following principles should be followed:
1. Selection of varistor voltage V1mA
According to the selection of the power supply voltage, the power supply voltage continuously applied to both ends of the varistor must not exceed the specified
The "maximum continuous operating voltage" value listed in the grid. That is, the maximum DC operating voltage of the varistor must
Greater than the DC operating voltage VIN of the power line (signal line), that is, VDC≥VIN; for the varistor selection of the 220V AC power supply, the fluctuation range of the grid operating voltage must be fully considered. When selecting the varistor voltage value of the varistor, the Leave enough margin. The general fluctuation range of domestic power grid is 25%. It is more appropriate to choose a varistor with a varistor voltage of 470V ~ 620V. Choosing a varistor with a higher varistor voltage can reduce the failure rate and extend the service life, but the residual voltage will slightly increase.
2. Selection of traffic flow
The nominal discharge current of the varistor should be greater than the surge current required to withstand or the maximum surge current that may occur during equipment operation. The nominal discharge current should be calculated based on the value of more than 10 impacts in the varistor surge life rating curve, which is about 30% of the maximum impact flow (i.e. 0.3 IP).
3. Selection of clamping voltage
The clamping voltage of the varistor must be less than the maximum voltage that the protected component or equipment can withstand (ie, safety voltage).
4. Selection of capacitor Cp
For high-frequency transmission signals, the capacitance Cp should be smaller, and vice versa
5. Internal resistance matching (Resistance Match)
The relationship between the internal resistance R (R ≥ 2Ω) of the protected component (line) and the transient internal resistance Rv of the varistor: R ≥ 5 Rv; for protected components with small internal resistance, the signal transmission rate will not be affected if the signal transmission rate is not affected. Below, try to use large capacitance varistor.

Applications:

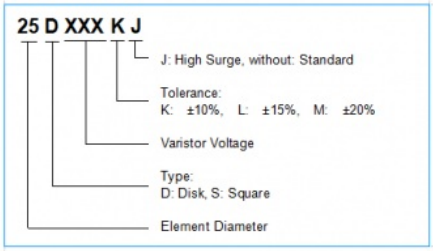
u Transistor, diode, IC, thyristor or triac semiconductor protection u Surge protection in consumer electronics u Surge protection in industrial electronics u Surge protection in electronic home appliances, gas and petroleum appliances u Relay and electromagnetic valve surge absorption

Operating Temperature	-40 ~ +85
Storage Temperature	-40 ~ +85
Working Surface Temperature	+115
Insulation Resistance	> 100MΩ
Coating (Epoxy Resin)	Flame-Retardant to UL 94 V-0

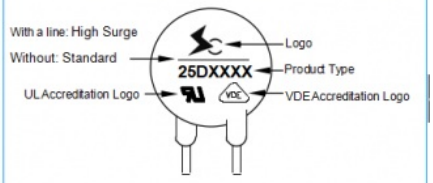
Coating	Epoxy Resin
Lead Wire	The Copper Wire
Electrode	Silver Solder
Disk	Zinc Oxide

Dimension	Part Number	Bag	Small Carton	Carton
25D	25DXXXXX	100 PCS	1000 PCS	2000 PCS

Part Numbering



Part Marking



Package Dimensions Unit: mm

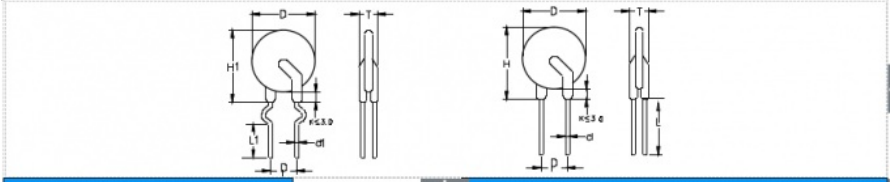


TABLE1

Symbol	Dimensions
H(max.)	31.0
H1(max.)	31.0
L(min.)	20.0
L1(min.)	20.0
D(max.)	29.0
P(±1.0)	10.0
T(max.)	TABLE2
d(±0.05)	1.0
d1(±0.05)	1.0

TABLE2

Model	T(max.)	Model	T(max.)
101K	5.7	511K	7.8
201K	5.5	561K	8.1
221K	5.6	621K	8.5
241K	5.7	681K	8.6
271K	5.9	751K	9.1
301K	6.1	781K	9.3
331K	6.3	821K	9.6
361K	6.6	911K	10.2
391K	6.8	102K	10.8
431K	7.1	112K	11.5
471K	7.4	122K	8.8

1.FAQ

Q1. Can I have a sample order ?
A: Yes, we welcome sample order to test and check quality. Mixed samples are acceptable.
Q2. What about the lead time?
A:Sample needs 1 days, mass production time needs 1-2 weeks for order quantity more than
Q3. Do you have any MOQ ?
A: MOQ depend on the type of product, 1pc for sample checking is available
Q4. How do you ship the goods and how long does it take to arrive?
A: We usually ship by DHL, UPS, FedEx or TNT. It usually takes 3-5 days to arrive. Airline and sea shipping also optional.
Q5. How to proceed an order ?
A: Firstly let us know your requirements or application.
Secondly We quote according to your requirements or our suggestions.
Thirdly customer confirms the samples and places deposit for formal order.
Fourthly We arrange the production.

+8618126201429 sylvia@socay.com socaydiode.com

4/F, Block C, HeHengXing Science & Technology Park, 19 MinQing Road, LongHua District, Shenzhen City, GuangDong Province, China