



Lightning Protection MOV Zinc Oxide Varistor 53mm MYL53-112K 1100V Disc Copper

Our Product Introduction

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Basic Information

- Place of Origin: Dongguan China
- Brand Name: linkun
- Certification: CE / ROHS / UL / TUV / SGS
- Model Number: Metal Oxide Varistor MYL 53D112K
- Minimum Order Quantity: Negotiation
- Price: Negotiation
- Packaging Details: Export Package / Negotiation
- Delivery Time: Negotiation
- Payment Terms: T/T, L/C, Western Union
- Supply Ability: 24 million per year



Product Specification

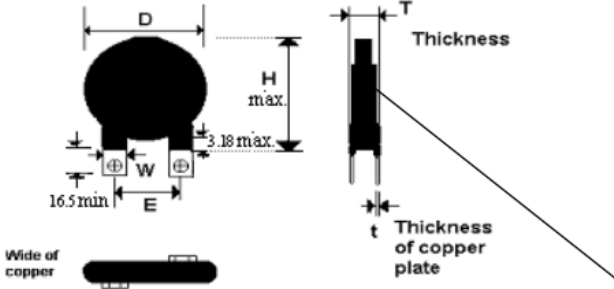
- Features: Strong Surge Withstand Capacity
- Application: Power Inverter / New Energy
- MAX ALLOWABLE VOLTAGE: DC: 895(V)
- VARISTOR VOLTAGE: 990~1210(V)
- MAX CLAMPING VOLTAGE: In: 50000(A) IMax: 70000(A)
- MAX ENERGY: 2050(J)
- TYPICAL CAPACITANCE: 2700(pf)
- LEAKAGE CURRENT: $\leq 20(\mu A)$
- NONLINEAR EXPONENT (α) : ≥ 21
- Material: Zinc Oxide
- IMPULSE LIFE: $\leq \pm 10\%(V1mA)$
- Highlight: Lightning Protection MOV Zinc Oxide Varistor, 53mm MOV Zinc Oxide Varistor, 1100V Zinc Oxide MOV Varistor



More Images



SPECIFICATION FOR APPROVAL

		SPECIFICATION		NO.											
PART NO.		53D112K		PAGE 1 OF 2											
				DATE: 2023 9 03											
UL				CSA											
1.OUTLINE															
1.1	APPEARANCE			WITHOUT ANY CRACK, MARKING SHOULD BE CLEAR											
1.2	DIMENSIONS			DIMENSIONS (mm)											
				D (Max)	60										
				H (Max)	78.2										
				T (Max)	11.9										
				W (±0.05)	9.7										
				t	0.7										
				E (±1.0)	25.4										
				Φ (M4)	4.3										
2.ELETRICAL PARAMETER															
2.1	MAX ALLOWABLE VOLTAGE		AC: 680(V) DC: 895(V)	At 1mA DC											
2.2	VARISTOR VOLTAGE		990~1210 (V)	V0.1mA □ V1mA ■											
2.3	MAX CLAMPING VOLTAGE		IP: 500(A) Vc: 1815(V)	Test Current Waveform 8/20μs											
2.4	WITHSTANDING SURGE CURRENT		In: 50000(A) IMax: 70000(A)	Test Current Waveform 8/20μs											
2.5	MAX ENERGY		2050(J)	Test Current Waveform 10/1000μs											
2.6	TYPICAL CAPACITANCE		2700(pf)	@1KHz											
2.7	LEAKAGE CURRENT		≤ 20(μA)	At 80% of Varistor Voltage											
2.8	NONLINEAR EXPONENT (α)		≥ 21	α=log	<table><tr><td>I₁</td><td></td><td>log</td><td>V₁</td><td></td></tr><tr><td>I₂</td><td></td><td></td><td>V₂</td><td></td></tr></table>	I ₁		log	V ₁		I ₂			V ₂	
I ₁		log	V ₁												
I ₂			V ₂												
2.9	TEMPERATURE COEFFICENT OF VARISTOR VOLTAGE		≤±0.05% °C max	<table><tr><td>Vc85°C- Vc25°C</td><td rowspan="2">x</td><td rowspan="2">1 60</td><td rowspan="2">x100(°C)</td></tr><tr><td>Vcat25°C</td></tr></table>	Vc85°C- Vc25°C	x	1 60	x100(°C)	Vcat25°C						
Vc85°C- Vc25°C	x	1 60	x100(°C)												
Vcat25°C															
2.10	IMPULSE LIFE		≤±10% (V1mA)	Test Current Waveform 8/20μs											

SPECIFICATION FOR APPROVAL

SPECIFICATION		NO.	
PART NO.	53D112K	PAGE 2 OF 2	
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		CSA	
3.Mechanical Requirements			
3.1	Tensile of Terminations	No Outstanding Damage	1Kgf; 10Sec.
3.2	Bending of Terminations	No Outstanding Damage	0.5Kgf; 90° ,3 Times
3.3	Vibration	No Outstanding Damage	Freq:10-55hz; Amp:0.75mm,1Min.
3.4	Solderability	Min. 95% of The Terminal Should Be Covered With Solder Uniformly	Solder Temp:260±5°C Immersed Time: 2±0.5Sec.
3.5	Resistance of soldering heat	V1mA/V1mA ≤ ±5%	Solder Temp: 260±5°C Immersed Time: 10±1Sec.
4.Enviromental Requirements			

4.1	High Temperature Storage	$\Delta V_{1mA}/V_{1mA} \leq \pm 5\%$	Ambient Temp: 125 \pm 2 $^{\circ}$ C Duration:1000h
4.2	Low Temperature Storage	$\Delta V_{1mA}/V_{1mA} \leq \pm 5\%$	Ambient Temp: -40 \pm 2 $^{\circ}$ C Duration:1000h
4.3	High Humidity Storage/Damp Heat	$\Delta V_{1mA}/V_{1mA} \leq \pm 5\%$	Ambient Temp: 40 \pm 2 $^{\circ}$ C 90-95% R.H. Duration:1000h
4.4	Temperature Cycle	$\Delta V_{1mA}/V_{1mA} \leq \pm 5\%$	Step
			1 -40 $^{\circ}$ C 30 min
			2 Room Temp 15 min
			3 125 $^{\circ}$ C 30 min
4.5	High Temperature Load	$\Delta V_{1mA}/V_{1mA} \leq \pm 10\%$	4 Room Temp 15 min
			Ambient temp:85 \pm 2 $^{\circ}$ C Duration:1000h Load: MAX. Allowable Voltage
4.6	High Humidity Load	$\Delta V_{1mA}/V_{1mA} \leq \pm 10\%$	Ambient Temp:40 \pm 2 $^{\circ}$ C90-95% R.H. Duration:1000H Load: MAX. AllowableVoltage
4.7	Operating Temperature Range	-40 $^{\circ}$ C ~ +85 $^{\circ}$ C	-40 $^{\circ}$ C ~ +85 $^{\circ}$ C
4.8	Storage Temperature Range	-40 $^{\circ}$ C ~ +125 $^{\circ}$ C	-40 $^{\circ}$ C ~ +125 $^{\circ}$ C

Strong Surge Withstand Capacity 53D MOV Metal Oxide Varistor Wide Working Voltage Range

SPD varistor manufacturers believe that semiconductor devices are also one of the new components introduced into automobiles, mainly used to protect the electrical system of automobiles and avoid damage to the system by overvoltage and surge energy. The application of varistors in automobiles can avoid the use of various techniques to adjust the electrical system. The low-voltage high-energy zinc oxide varistor (MYN1) is directly used to adjust the voltage and current of the ab terminal of the power supply to protect the entire electrical system. Even if the battery is disconnected from the power supply or the load drops sharply, and there is a large surge energy at both ends of AB, the varistor can also protect semiconductor devices and various electronic devices from surge impact, thereby reducing the volume and weight of the vehicle, and reducing driving fuel consumption.

The application of varistors in automobiles can not only protect automobiles, but also improve automobile manufacturing technology and performance. SPD varistor manufacturers believe that rheostats can also protect the voltage and suppress the overvoltage of electronic ignition. When the ignition system is in normal working condition, the ignition ring will generate counter electromotive force. If the voltage across the secondary L2 calculated by the turns ratio exceeds 20kV, the high voltage will cause instantaneous breakdown of the spark plug, and the ignition will start normally. However, if the ignition system fails and the ignition is not normal, the induced voltage will cause a high overvoltage at the primary end of the ignition system, thereby shortening the life. By applying varistors and directly connecting varistors at both ends of the composite tube, it is possible to protect the ignition system, suppress overvoltage, and protect the automotive electrical system.

Basic properties of varistors:

- (1) Protection characteristics. When the impact strength of the impact source (or the impact current $I_{sp}=U_{sp}/Z_s$) does not exceed the specified value, the limited voltage of the varistor is not allowed to exceed the impact withstand voltage (U_{rp}) that the protected object can withstand. .
- (2) Impact resistance characteristics, that is, the varistor itself should be able to withstand the specified impact current, impact energy, and the average power when multiple impacts occur one after another.
- (3) There are two life characteristics. One is the continuous working voltage life, that is, the varistor can meet the specified working time (hours) under the specified ambient temperature and system voltage conditions. The second is the impact life, that is, the number of times it can reliably withstand the specified impact.

Model Number	53D 181K 241K 431K 471K 511K 561K 681K 751K 781K 821K 911K 102K 112K 152K 182K
Package	Varistors
D/C	Newest
Condition	New & Original
Lead time	Within 1 day
Unit Price	Contact us for latest price
More details	Please contact us

Applications

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

Competitive Advantage:

Factory supply directly
Completed certificates such as UL,VDE,SGS,etc and high quality available
Quick delivery
Best after-sales services
OEM & ODM available

Specifications:

Part Number	Vac (V)	Vdc (V)	V1mA(V)	Ip(A)	Vac (V)	I(A)Standard	I(A)High Surge	(J)Standard	(J)High Surge	Rated power(W)	C@ 1K Hz (pf)
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20D180 K(J)	11	14	18(15-21.6)	20	36	2000	3000	11	13	0.2	285 00
20D220 K(J)	14	18	22(19.5- 26)	20	43	2000	3000	14	16	0.2	185 00
20D270 K(J)	17	22	27(24-31)	20	53	2000	3000	16	19	0.2	130 00
20D330 K(J)	20	26	33(29.5- 36.5)	20	65	2000	3000	23	24	0.2	115 00
20D390 K(J)	25	31	39(35-43)	20	77	2000	3000	26	28	0.2	850 0
20D470 K(J)	30	38	47(42-52)	20	93	2000	3000	30	34	0.2	740 0
20D560 K(J)	35	45	56(50-62)	20	110	2000	3000	41	41	0.2	650 0
20D680 K(J)	40	56	68(61-75)	20	135	2000	3000	46	49	0.2	580 0
20D820 K(J)	50	65	82(74-90)	10 0	135	6500	10000	38	56	1.0	490 0
20D101 K(J)	60	85	100(90- 110)	10 0	165	6500	10000	45	70	1.0	400 0
20D121 K(J)	75	100	120(108- 132)	10 0	200	6500	10000	55	85	1.0	330 0
20D151 K(J)	95	125	150(135- 165)	10 0	250	6500	10000	70	106	1.0	270 0
20D181 K(J)	115	150	180(162- 198)	10 0	300	6500	10000	85	130	1.0	220 0
20D201 K(J)	130	170	200(180- 220)	10 0	340	6500	10000	95	140	1.0	200 0
20D221 K(J)	140	180	220(198- 242)	10 0	360	6500	10000	100	155	1.0	180 0
20D241 K(J)	150	200	240(216- 264)	10 0	395	6500	10000	108	168	1.0	165 0
20D271 K(J)	175	225	270(243- 297)	10 0	455	6500	10000	127	190	1.0	150 0
20D301 K(J)	190	250	300(270- 330)	10 0	500	6500	10000	136	210	1.0	130 0
20D331 K(J)	210	275	330(297- 363)	10 0	550	6500	10000	150	228	1.0	120 0
20D361 K(J)	230	300	360(324- 396)	10 0	595	6500	10000	163	255	1.0	110 0
20D391 K(J)	250	320	390(351- 429)	10 0	650	6500	10000	180	275	1.0	100 0
20D431 K(J)	275	350	430(387- 473)	10 0	710	6500	10000	190	305	1.0	930
20D471 K(J)	300	385	470(423- 517)	10 0	775	6500	10000	220	350	1.0	850
20D511 K(J)	320	415	510(459- 561)	10 0	845	6500	10000	220	360	1.0	780
20D561 K(J)	350	460	560(504- 616)	10 0	925	6500	10000	220	380	1.0	710
20D621 K(J)	385	505	620(558- 682)	10 0	1025	6500	10000	220	390	1.0	650
20D681 K(J)	420	560	680(612- 748)	10 0	1120	6500	10000	230	400	1.0	600
20D751 K(J)	460	615	750(675- 825)	10 0	1240	6500	10000	255	420	1.0	530
20D781 K(J)	485	640	780(702- 858)	10 0	1290	6500	10000	265	440	1.0	510
20D821 K(J)	510	670	820(738- 902)	10 0	1355	6500	10000	282	460	1.0	500
20D911 K(J)	550	745	910(819- 1001)	10 0	1500	6500	10000	310	510	1.0	440
20D102 K(J)	625	825	1000(900- 1100)	10 0	1650	6500	10000	342	565	1.0	400
20D112 K(J)	680	895	1100(990- 1210)	10 0	1815	6500	10000	383	620	1.0	360
20D122 K(J)	750	990	1200(1080- 1320)	10 0	1980	6500	10000	408	660	1.0	350
20D142 K(J)	880	1140	1400(1260- 1540)	10 0	2310	6500	10000	532	784	1.0	340
20D162 K(J)	1000	1280	1600(1440- 1760)	10 0	2640	6500	10000	606	896	1.0	330
20D182 K(J)	1100	1465	1800(1620- 1980)	10 0	2970	6500	10000	625	990	1.0	320



Production Process / Quality Control



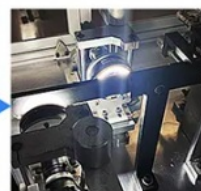
1. Lead Forming



2. The combination of lead and chip



3. Soldering



4. Soldering Inspection



5. Epoxy Resin Coating



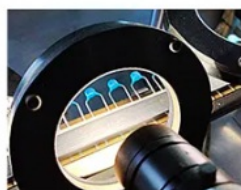
6. Baking



7. Laser Printing



8. Electrical Performance Test



9. Appearance Inspection



10. Lead Cutting or Pulling out



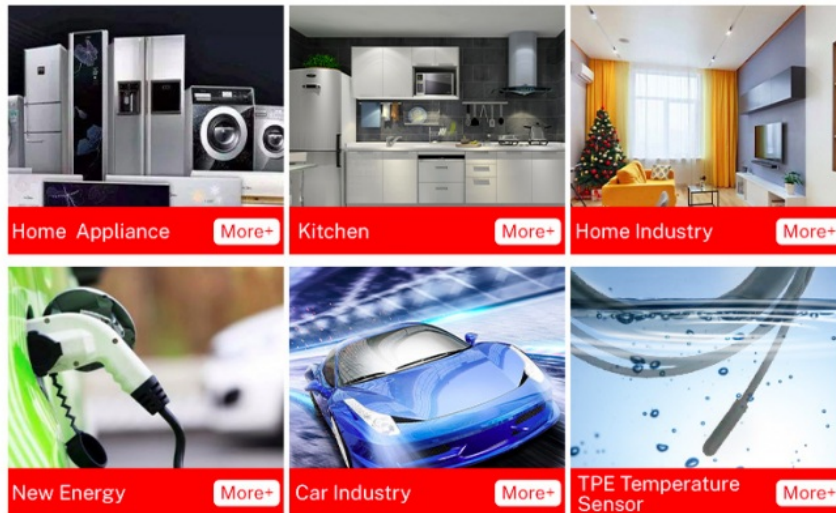
11. FQC and Packing

Application

1. Varistor voltage: refers to the voltage value across the varistor at a specified temperature and DC (generally 1mA or 0.1mA). Recorded as V1mA or V0.1mAo

2. Maximum continuous voltage: refers to the maximum effective value of sinusoidal AC voltage or the maximum DC voltage value that can be continuously applied to both ends of the varistor for a long time under the specified ambient temperature
3. Limiting voltage: refers to the maximum peak voltage at both ends of the varistor when a specified surge current (8,20 μ s) passes through it.
4. Rated power: refers to the maximum average impact power that can be applied to the varistor under the specified ambient temperature.
5. Maximum energy: the maximum impact energy that can be applied to the varistor under the condition that the varistor voltage does not change more than $\pm 10\%$ and the impulse current waveform is 10, 1000 μ s or 2ms.
6. Current capacity (maximum inrush current)

PRODUCT CATEGORIES



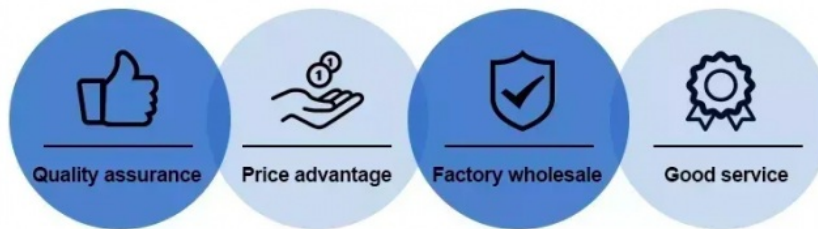
CERTIFICATES



OUR PARTNERS



Our advantage:



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