



MYL 32L-431K MOV Varistor 32mm 510V Series For Electronic Inverter Welding

Our Product Introduction

Basic Information

- Place of Origin: Dongguan China
- Brand Name: linkun
- Certification: CE / ROHS / UL / TUV / SGS
- Model Number: MYG 32L-431K
- 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: Low Leakage Current
- Material: Zinc Oxide
- Varistor Voltage: 387~473V
- Max. Allowable Voltage: ACrms: 275V DC : 350(V)
- Max. Clamping Voltage/test VC : 710V IP:200(A) Current (8/20 μ s):
- Energy (2ms): 430(J)
- Withstanding Surge Current 1time(A) 25000 2times(A) 20000 (8/20 μ s):
- Capacitance (Reference) 3100(PF) (1kHz):
- Highlight: MOV 510V series Resistor,
MOV Resistor for electronic inverter welding,
32L-431K MOV Resistor



More Images



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Product Description

MYL1type varistor

(Varistor Type MYL1)

MYL1 type varistor is a semiconductor ceramic element made of zinc oxide as the main raw material, and its resistance value changes nonlinearly with the change of applied voltage. It has the characteristics of small size and large flow rate.

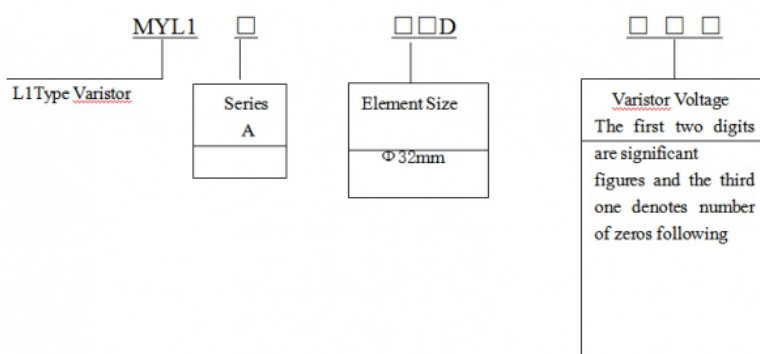
1,Features

Varistor voltage(200V-1800V)
Excellent non-linearity coefficient
Great with standing surge current
Fast response time

2,Recommended Applications

Protection of semiconductor
Protection of railway automatic signals
Surge protection of communication,measuring or controller instrument
Transient voltage surge suppressor units
Surge protection of vacuum switches

3,Explanation of Part Numbers



SPECIFICATION FOR APPROVAL

| SPECIFICATION | | NO. | |
|-----------------------|----------------------------|--|------------------------------------|
| PART NO. | 32D431K | PAGE 1 OF 2 | |
| | | DATE:September 04, 2023 | |
| 1.OUTLINE | | | |
| 1.1 | APPEARANCE | Without Any Crack, Marking Should Be Clear | |
| 1.2 | DIMENSIONS | DIMENSIONS (mm) | |
| | | D (max) | 34.0 |
| | | H (max) | 38.0 |
| | | T(m±1.5) | 5.5 |
| | | d(±0.02) | 1.2 |
| | | E(±1.0) | 25.0 |
| 2.ELETRICAL PARAMETER | | | |
| 2.1 | Max. Allowable Voltage | AC: 275(V) DC: 350(V) | At 1 mA DC |
| 2.2 | Varistor Voltage | 387-473(V) | VO.1 mA □ V1.0 mA |
| 2.3 | Rated Wattage | 1.5(W) | |
| 2.4 | Max. Clamping Voltage | IP: 200(A) VC: 710 (V) | Test Current Waveform 8/20μs |
| 2.5 | Withstanding Surge Current | 1time:25000(A) 2time:20000(A) | Test Current Waveform 8/20μs |
| 2.6 | Max. Energy | 430(J) | Test Current Waveform 10/1000μs |
| 2.7 | Typical Capacitance | 3100(pf) | @1KHz |
| 2.8 | Leakage Current | ≤200(μA) | At 80% of Varistor Voltage |

| | | | |
|------|---|---|---|
| 2.9 | Nonlinear Exponent(α) | ≥ 40 | |
| 2.10 | Temperature Coefficient Of Varistor Voltage | $\leq \pm 0.05\%/^{\circ}\text{C}$ MAX. | |
| 2.11 | Impulse Life | $\leq \pm 10\%$ (V1 mA) | Test Current Waveform 8/20 μs |

SPECIFICATION FOR APPROVAL

| SPECIFICATION | | | NO. | | | |
|------------------------------|---------------------------------|---|--|-------------|-----------|-------|
| PART NO. | 32D431K | PAGE 2 OF 2 | | | | |
| | | DATE:September 04, 2023 | | | | |
| 3. Mechanical Requirements | | | | | | |
| 3.1 | Tensile of Terminations | No Outstanding Damage | 1Kgf, 10Sec | | | |
| 3.2 | Bending of Terminations | No Outstanding Damage | 0.5Kgs,90°,3Times | | | |
| 3.3 | Vibration | No Outstanding Damage | Freq: 10-55hz Amp: 0.75 mm, 1Min | | | |
| 3.4 | Solderability | Min.95% of The Terminal Should Be Covered With Solder Uniformly | Solder Temp:230±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 Environmental Requirements | | | | | | |
| 4.1 | High Temperature Storage | V1mA /V1mA ≤±5% | Ambient Temp:125±2°C Duration: 1000h | | | |
| 4.2 | Low Temperature Storage | V1mA /V1mA ≤±5% | Ambient Temp:-40±2°C Duration: 1000h | | | |
| 4.3 | High Humidity Storage/Damp Heat | V1mA /V1mA ≤±5% | Ambient Temp:40±2°C 90-95%R.H. Duration: 1000h | | | |
| 4.4 | Temperature Cycle | V1mA/V1mA ≤±5% | Step | Temperature | Period | |
| | | | | 1 | -40°C | 30min |
| | | | | 2 | Room Temp | 15min |
| | | | | 3 | 125°C | 30min |
| | | | | 4 | Room Temp | 15min |
| 4.5 | High Temperature Load | V1mA/V1mA ≤±10% | Ambient Temp:85±2°C Duration:1000h Load:Max Allowable Voltage | | | |
| 4.6 | High Humidity load | V1mA/V1mA ≤±10% | Ambient Temp:125±2°C Duration:1000h Load:Max Allowable Voltage | | | |
| 4.7 | Operating Temperature Range | -40°C +85°C | -40°C +85°C | | | |
| 4.8 | Storage Temperature Range | -40°C +125°C | -40°C +125°C | | | |

5. Electrical Characteristics

| Type | Varistor Voltage | Max. Allowable Voltage | | Max. Clamping Voltage/test Current (8/20 μs) | | Energy (2ms) | withstanding surge current (8/20 μs) | | Capacitance (Reference) (1kHz) |
|---------|------------------|------------------------|-------|--|-------|--------------|--|-----------|--------------------------------|
| | V | ACrms(V) | DC(V) | Vc(v) | Ip(A) | J | 1time(A) | 2times(A) | PF |
| 32D431K | 387~473 | 275 | 350 | 710 | 200 | 430 | 25000 | 20000 | 3100 |

Operating Temperature Range: -40 to 85 $^{\circ}\text{C}$

Storage Temperature Range: -40 to 125 $^{\circ}\text{C}$

Low Leakage Current 32D 40D MOV Metal Oxide Varistor Wide Working Voltage Range

SPD varistor manufacturers believe that the application of varistors can significantly protect low-voltage electrical equipment. Generally speaking, in order to prevent lightning strikes, we need to take various lightning protection measures according to

the specifications, and then install varistors at the user's power supply end to realize the resistance adjustment of the power supply end. If there is a large voltage at the power supply terminal, the varistor will be broken down to ensure that the voltage at both ends remains at a normal value, thereby protecting the electrical equipment. In addition, the phase line or neutral line is used to introduce lightning overvoltage, which can be broken down by two varistors, and the voltage at both ends will remain at a normal value. At the same time, the fuse will be blown to ensure that no continuous current flows through the varistor, thereby protecting the varistor.

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 | 32D 2011K 390K 431K 470K 471K 511K 561K 680K 681K 821K 102K 112K 122K 142K |
| 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:

ZINC OXIDE VARISTOR



32D Specification

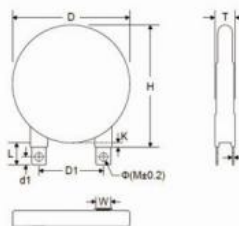
| MYG-LK PartNumber | Maximum Allowable Voltage 最大允许电压 | | Varistor Voltage 压敏电阻器动作电压 | Clamping Voltage (Mka) 抑制电压 @ (8/20)us | | Maximum Peak Current 最大电流耐量 (8/20)us | | Maximum Energy 最大吸收能量 (10/1000)us | Rated Power 消耗功率 | Typical Capacitance (Reference) 参考电容值 |
|----------------------|-------------------------------------|------|-------------------------------|---|-----|--|-------|---|---------------------|---|
| | AC rms | DC | | VC | IP | 1time | 2time | | | |
| Standard | (V) | | V1.0mA(V) | (V) | (A) | (A) | | (J) | (W) | @1KHz (pF) |
| 32D201K | 130 | 170 | 200(185-225) | 340 | 200 | 25000 | 20000 | 250 | 1.2 | 5200 |
| 32D241K | 150 | 200 | 240(216-264) | 395 | | | | 290 | | 5100 |
| 32D271K | 175 | 225 | 270(243-297) | 455 | | | | 300 | | 4800 |
| 32D331K | 210 | 275 | 330(297-363) | 550 | | | | 360 | | 4300 |
| 32D361K | 230 | 300 | 360(324-396) | 595 | | | | 380 | | 3900 |
| 32D391K | 250 | 320 | 390(351-429) | 650 | | | | 400 | | 3200 |
| 32D431K | 275 | 350 | 430(387-473) | 710 | | | | 430 | | 3100 |
| 32D471K | 300 | 385 | 470(423-517) | 775 | | | | 460 | | 2800 |
| 32D511K | 320 | 415 | 510(459-561) | 845 | | | | 510 | | 2700 |
| 32D621K | 385 | 505 | 620(558-682) | 1025 | | | | 570 | | 2400 |
| 32D681K | 420 | 560 | 680(612-748) | 1120 | | | | 600 | | 2200 |
| 32D751K | 460 | 615 | 750(675-825) | 1240 | | | | 620 | | 2000 |
| 32D781K | 485 | 640 | 780(702-858) | 1290 | | | | 660 | | 1900 |
| 32D821K | 510 | 670 | 820(738-902) | 1355 | | | | 700 | | 1800 |
| 32D911K | 550 | 745 | 910(819-1001) | 1500 | | | | 750 | | 1300 |
| 32D951K | 575 | 765 | 950(855-1045) | 1570 | | | | 780 | | 1200 |
| 32D102K | 625 | 825 | 1000(900-1100) | 1650 | | | | 810 | | 1100 |
| 32D112K | 680 | 895 | 1100(990-1210) | 1815 | | | | 910 | | 1000 |
| 32D122K | 750 | 990 | 1200(1080-1320) | 1980 | | | | 960 | | 920 |
| 32D142K | 880 | 1140 | 1400(1260-1540) | 2310 | | | | 1020 | 1.1 | 800 |
| 32D162K | 1000 | 1280 | 1600(1440-1760) | 2640 | | | | 1080 | 1.1 | 700 |

TABLE 1

| Symbol | Unit : mm Dimension |
|----------|------------------------|
| H(max.) | 40.0 |
| L(min.) | 14.5 |
| D(max.) | 36.0 |
| D1(±1.0) | 25.4 |
| T(max.) | TABLE 2 |
| d(±0.25) | 0.5 |
| d1(±0.3) | 3.7 |
| K(max.) | 3.2 |
| W(±0.5) | 7.0 |
| ΦM(±0.2) | 3.2 |

TABLE 2

| Model | T(max.) | Model | Unit : mm T(max.) |
|-------|---------|-------|----------------------|
| 101K | 5.8 | 511K | 8.0 |
| 121K | 6.0 | 561K | 8.5 |
| 151K | 6.3 | 621K | 8.7 |
| 181K | 6.1 | 681K | 9.0 |
| 201K | 6.2 | 751K | 9.4 |
| 221K | 6.3 | 781K | 9.6 |
| 241K | 6.4 | 821K | 9.8 |
| 271K | 6.6 | 911K | 10.4 |
| 301K | 6.8 | 951K | 10.6 |
| 331K | 6.9 | 102K | 11.2 |
| 361K | 7.1 | 112K | 11.8 |
| 391K | 7.3 | 122K | 12.3 |
| 431K | 7.5 | 142K | 13.3 |
| 471K | 7.8 | 162K | 14.3 |



(图1 : 32D系列简图)





Production Process / Quality Control



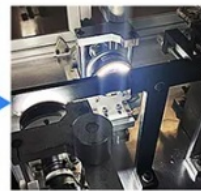
1. Lead Forming



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



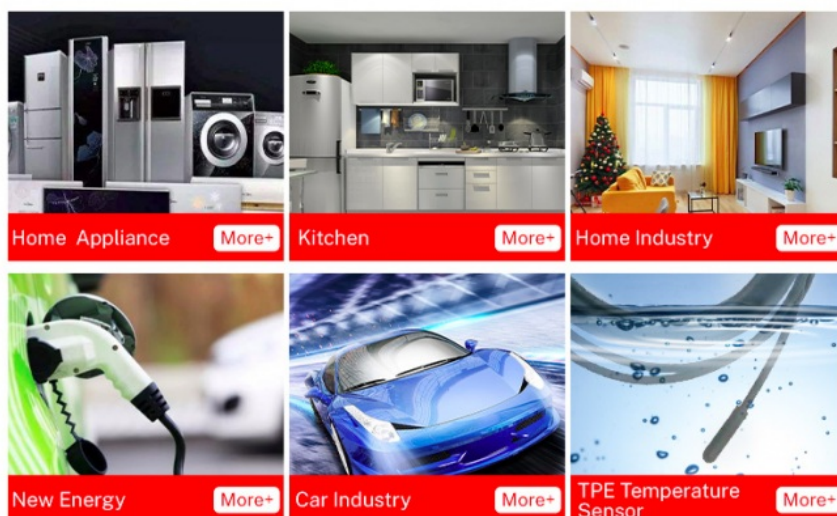
11. FQC and Packing

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



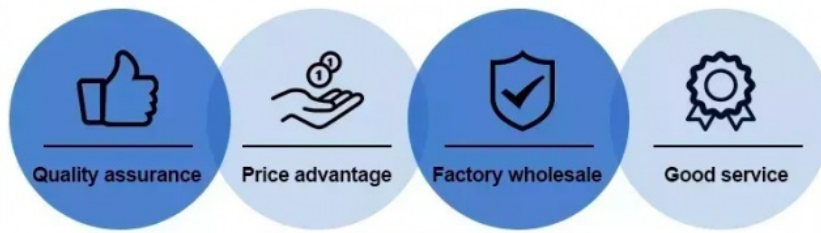
CERTIFICATES



OUR PARTNERS



Our advantage:



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