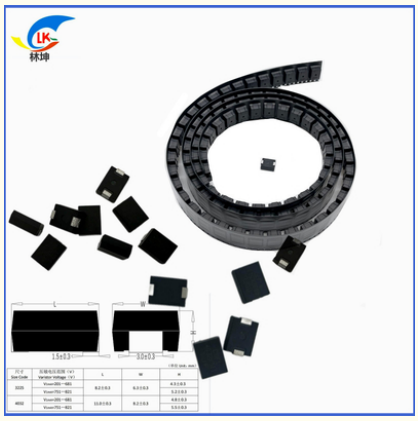
3225 SMD Zinc Oxide Varistor Voltage 3225K201-3225K681 For High Surge Current Suppression

Our Product Introduction

Basic Information

- Place of Origin: China
- Brand Name: Lin Kun
- Certification: UL,VDE,CSA
- Model Number: LK 3225K201-3225K681
- Minimum Order Quantity: 1820pcs
- Price: Negotiable
- Packaging Details: 1820 pcs/plate
- Delivery Time: 5-7 Days
- Payment Terms: T/T,Paypal, Western Union
- Supply Ability: 1000000PCS/Month



Product Specification

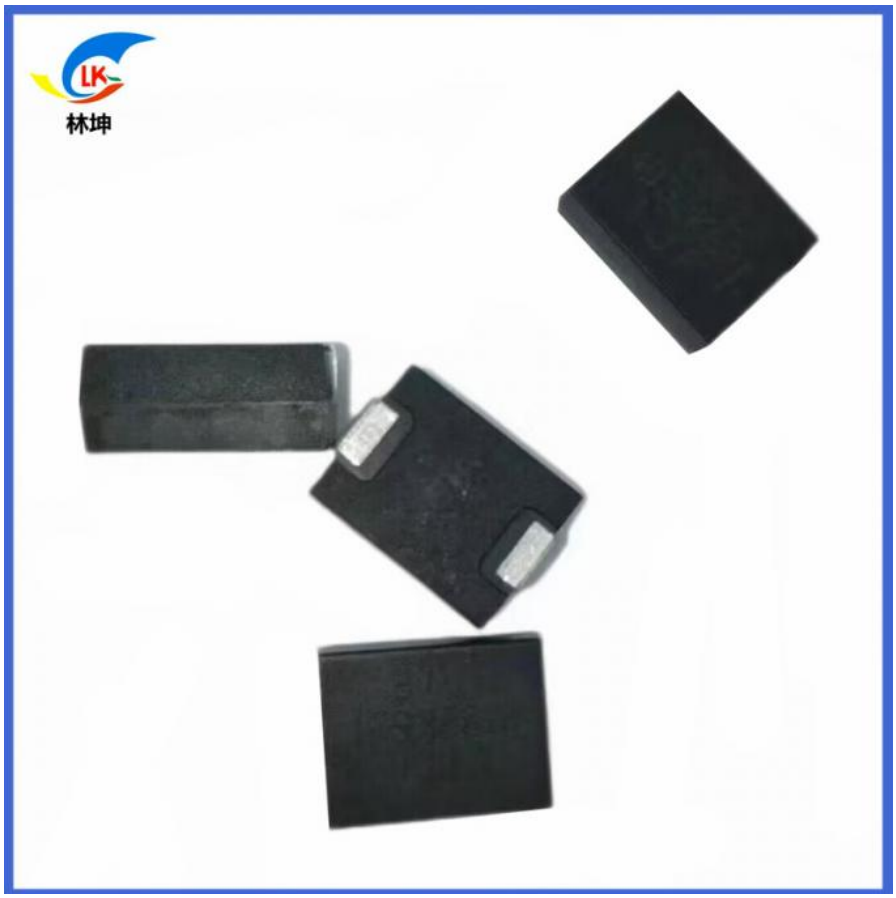
- Product Name: SMD Chip Varistor
- Part Number: 3225K201-3225K681
- Tolerance Of Varistor Voltage: ±10%
- Inch (mm) External Dimension L×W: 3225 8.2x6.3x4.3 mm)
- Varistor Voltage @1mA: 200V-680V
- Varistor Voltage (v): Ac : 130-420v
- Max. Allowable Voltage: Dc : 170v-560v
- Max. Clamping Voltage: IP: 10A) Vp: 340-1120 (V)
- Max.fiow Circulation Energy (40 Times): 2KV/1KV
- Typical Capacitance @1MHz: Cp : 150- 5(J)

More Images

Our Product Introduction

for more products please visit us on lk-thermistor.com

Product Description



1、 Feature

1.1 1.

Advanced packaging technology, packaging materials meet UL94-V0

1.2

Compact structure, small size, space saving

1.3

Superior high temperature and high humidity performance

1.4

Strong ability to suppress high surge and high current

1.5

SMD tray packaging, suitable for lead-free reflow soldering/wave soldering automatic placement

1.6

Comply with RoSH, REACH，H.F

2、 Application

2.1 LED circuit protection

2.2 Industrial equipment

2.3 Communication equipment

2.4 Automotive Electronics

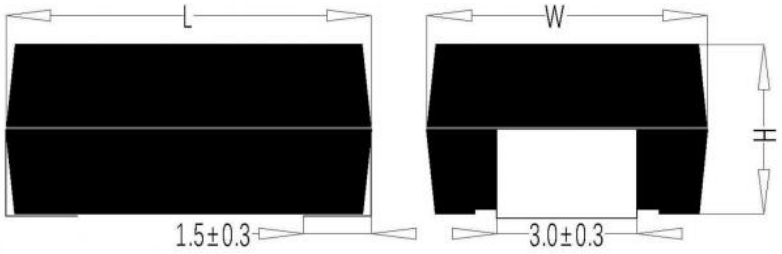
3、 Part No. Explain

序号	名称	说明
①	品牌别	林坤电子
②	尺寸别	4032：11.0*8.2mm ;3225:8.2*6.3mm
③	公差别	K:代表±10%；
④	电性别	471::470V（V1mA 压敏电压)；
⑤	料盘卷装	15 寸料盘:4302:1500pcs/卷、3225:1820pcs/卷。

4、 General Technical data

Parameter Name	Parameter value	Unit
Operating temperature	-40 — +125	℃
Storage temperature	-40 — +125	℃
Voltage Proof	≥2.5	KV_{RMS}
Insulation Resistance	≥100	MΩ

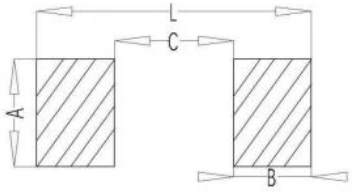
5、 Structure and Dimensions



（Unit：mm）

Size Code	Varistor Voltage（V）	L	W	H
3225	V_{1mA}=201—681	8.2±0.3	6.3±0.3	4.3±0.3
	V_{1mA}=751—821			5.2±0.3
4032	V_{1mA}=201—681	11.0±0.3	8.2±0.3	4.8±0.3
	V_{1mA}=751—821			5.5±0.3

6、 Dimensions



（unit：mm）

Model number	A	B	C	L
3225	3.5	2.8	4.5	10.1
4032	3.5	2.8	6.5	12.1

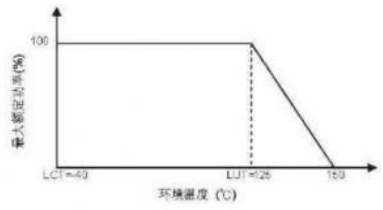
7、 Electrical Characteristics

Part No.	Varistor Voltage (@1mA DC)	Max. Allowable Voltage		Max. Clamping Voltage (8/20μs)		Max. Impulse Current (8/20 μs)	Max. flow Circulation Energy (40 Times)	Max. Energy (10/1000 μs)	Rated Power	Typical capacitance Reference @1KHZ
	V_{1mA} (V)	V_{AC} (V)	V_{DC} (V)	Vp (V)	Ip (A)	I max (A)	(KV) (KA)	W max (J)	P (W)	C(pF)
3225K201	200(180-220)	130	170	340	10	1200/1750	2KV/1KA	11.0	0.25	200
3225K221	220(198-242)	140	180	360	10	1200/1750	2KV/1KA	12.0	0.25	180
3225K241	240(216-264)	150	200	395	10	1200/1750	2KV/1KA	13.0	0.25	170
3225K271	270(243-297)	175	225	455	10	1200/1750	2KV/1KA	15.0	0.25	150
3225K301	300(270-330)	195	250	500	10	1200/1750	2KV/1KA	17.0	0.25	150
3225K331	330(297-363)	210	275	550	10	1200/1750	2KV/1KA	18.0	0.25	150
3225K361	360(324-396)	230	300	595	10	1200/1750	2KV/1KA	20.0	0.25	115
3225K391	390(351-429)	250	320	650	10	1200/1750	2KV/1KA	21.0	0.25	105
3225K431	430(387-473)	275	350	710	10	1200/1750	2KV/1KA	23.0	0.25	95
3225K471	470(423-517)	300	385	775	10	1200/1750	2KV/1KA	25.0	0.25	90
3225K511	510(459-561)	320	410	845	10	1200/1750	2KV/1KA	25.0	0.25	85
3225K561	560(504-616)	350	450	930	10	1200/1750	2KV/1KA	26.0	0.25	80
3225K621	620(558-682)	395	510	1020	10	1200/1750	2KV/1KA	28.0	0.25	78
3225K681	680(612-748)	420	560	1120	10	1200/1750	2KV/1KA	30.0	0.25	75

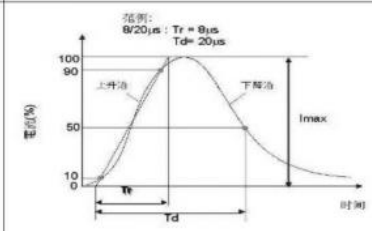
Part No.	Varistor Voltage (@1mA DC)	Max. Allowable Voltage		Max. Clamping Voltage (8/20 μs)		Max. Impulse Current (8/20 μs)	Max. flow Circulation Energy (40 Times)	Max. Energy (10/1000 μs)	Rated Power	Typical capacitance Reference @1KHZ
	V_{1mA} (V)	V_{AC} (V)	V_{DC} (V)	V_p (V)	I_p (A)	I max (A)	(KV) (KA)	W max (J)	P (W)	C(pF)
4032K201	200(180-220)	130	170	340	25	2500/3500	4KV/2KA	25.0	0.4	500
4032K221	220(198-242)	140	180	360	25	2500/3500	4KV/2KA	27.0	0.4	450
4032K241	240(216-264)	150	200	395	25	2500/3500	4KV/2KA	30.0	0.4	420
4032K271	270(243-297)	175	225	455	25	2500/3500	4KV/2KA	35.0	0.4	370
4032K301	300(270-330)	195	250	500	25	2500/3500	4KV/2KA	40.0	0.4	330
4032K331	330(297-363)	210	275	550	25	2500/3500	4KV/2KA	42.0	0.4	300
4032K361	360(324-396)	230	300	595	25	2500/3500	4KV/2KA	45.0	0.4	280
4032K391	390(351-429)	250	320	650	25	2500/3500	4KV/2KA	50.0	0.4	260
4032K431	430(387-473)	275	350	710	25	2500/3500	4KV/2KA	55.0	0.4	230
4032K471	470(423-517)	300	385	775	25	2500/3500	4KV/2KA	60.0	0.4	210
4032K511	510(459-561)	320	410	845	25	2500/3500	4KV/2KA	67.0	0.4	200
4032K561	560(504-616)	350	450	930	25	2500/3500	4KV/2KA	69.0	0.4	180
4032K621	620(558-682)	395	510	1020	25	2500/3500	4KV/2KA	70.0	0.4	160
4032K681	680(612-748)	420	560	1120	25	2500/3500	4KV/2KA	72.0	0.4	150

8、 Electrical curve parameter

Power derating curve

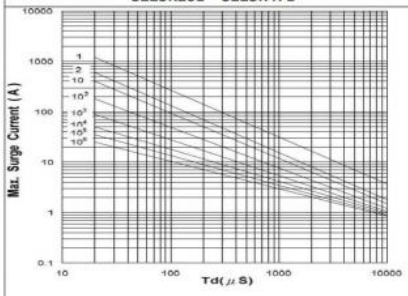


Standard Waveform of Impulse Current

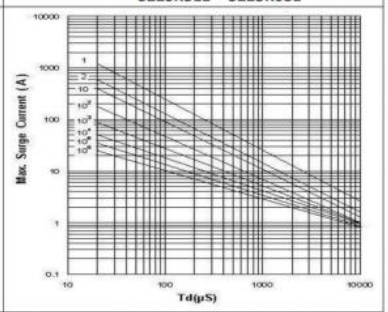


8.1 **Maximum impulse current derating curve**

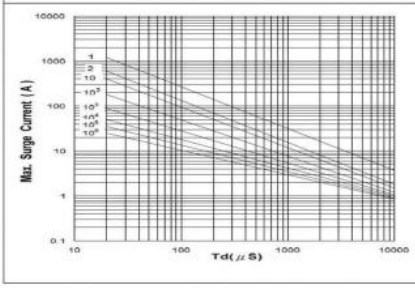
3225K201 – 3225K471



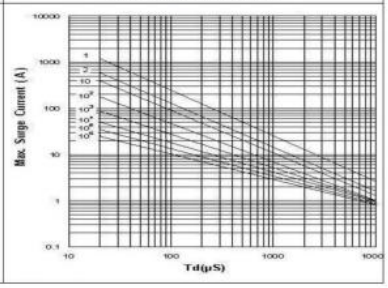
3225K511 – 3225K681



4032K201 – 4032K471

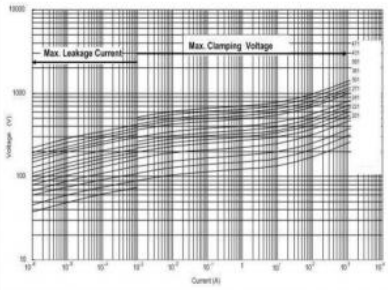


4032K511 – 4032K751

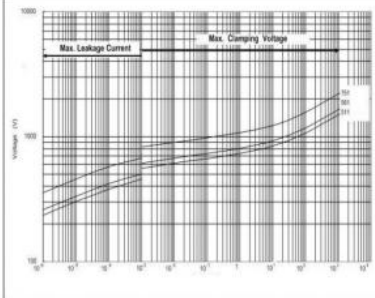


8.2 Maximum leakage current and maximum allowable voltage

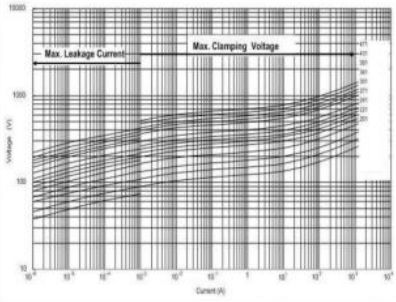
3225K201 – 3225K471



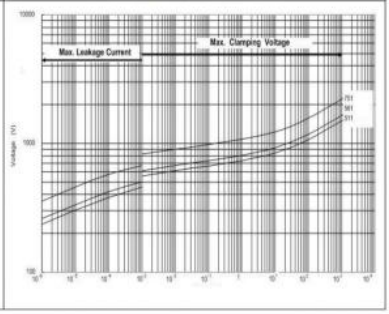
3225K511 – 3225K751



4032K201 – 4032K471

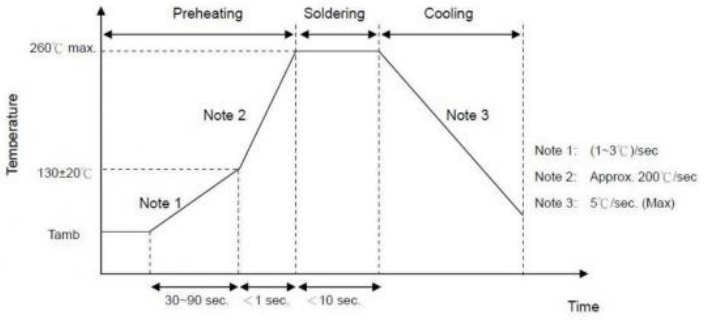


4032K511 – 4032K751

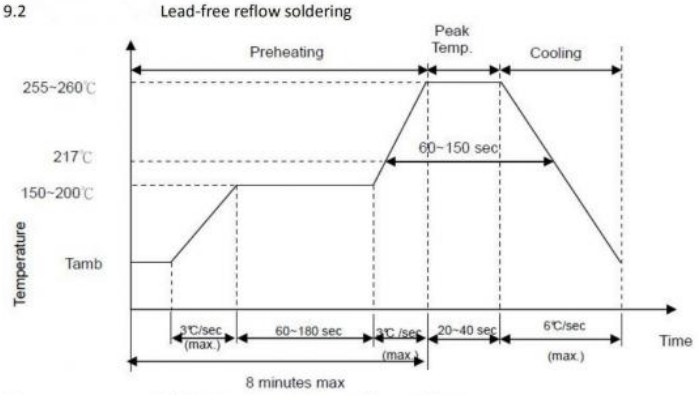


9、 Recommended soldering conditions

9.1 Wave soldering



9.2 Lead-free reflow soldering



9.3 Soldering iron heavy industry welding conditions

Item	Temperature
Soldering iron tip temperature	360℃（max）
Welding time	3s(max)
Diameter of soldering iron tip	Φ3mm(max)

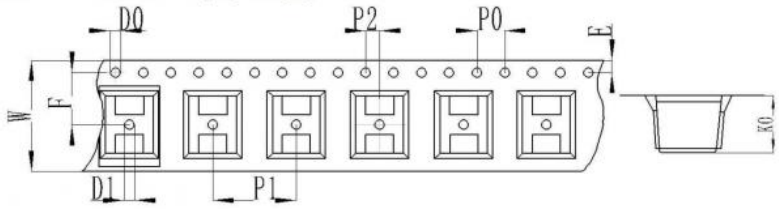
10、 Reliability

Item	Standard	Test condition / Method	Specifications
Vibration	IEC 61051-1	Frequency range:10-55-10Hz Amplitude:0.75mm and 1.5mm Direction: 3 mutually perpendicular directions,2 hrs each.	| △V/V1mA | ≤ 5% No visible damage
Solderability	IEC60068-2-20	Dip in solder pot with condition 245±3℃，3±0.3 sec	Solder coverage≥95%
Resistance to Soldering Heat	IEC60068-2-20	Dip in solder pot with condition 260±3℃，10±1 sec	| △V/V1mA | ≤ 5%
High temperature storage	IEC 60068-2-2	Oven condition 125±5℃ x 1000±24 hrs，measure after complete test 1-2H	| △V/V1mA | ≤ 5%
Damp Heat, Steady State	IEC60068-2-78	1. 40±2℃ , 90-95% RH ,1000hrs 2. 40±2℃ , 90-95% RH , at MAV ,1000hrs	No visible damage | △V/V1mA | ≤ 10% IR≥100MΩ
Rapid change of Temperature	IEC60068-2-14	The conditions shown below shall be repeated 5 cycles Step 1: -40±3, 30±3 Step 2: Room temperature, 5±3 Step 3: +125±2, 30±3 Step 4: Room temperature, 5±3	No visible damage | △V/V1mA | ≤ 5%
'High Temperature load	IEC61051-4.20	125±2℃, 1000±24hrs at Max VaC, measure after 1-2H	| △V/V1mA | ≤ 10%
Voltage temperature coefficient	Specification Standard	$\frac{V_{1mA\ at\ 125℃} - V_{1mA\ at\ 25℃}}{V_{1mA\ at\ 25℃}} \times \frac{1}{100} \times 100\ (\%/℃)$	-0.05≤Tc≤0.05(%/℃)
Voltage	IEC61051-4.8	Metal balls method, 2500 Vac 1min	No visible damage

11、 Packing

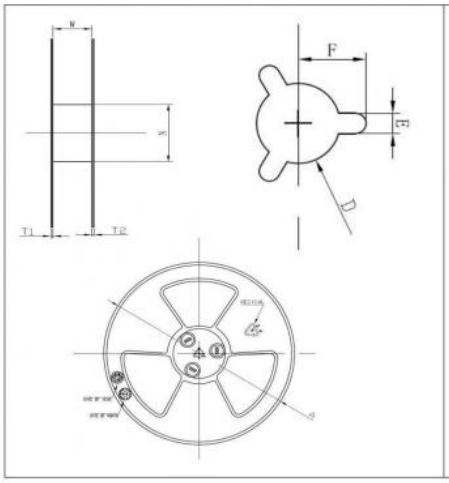
（单位 Unit：mm）

11.1 Taping Packaging



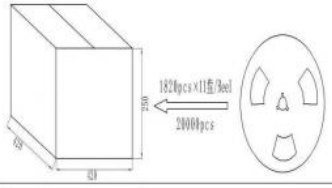
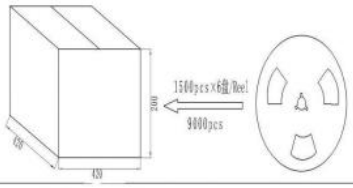
3225	Symbol	w	F	E	P0	P1	P2
	Spec	**16.0±0.3**	7.5±0.1	1.75±0.1	4.00±0.1	12.0±0.1	2.00±0.1
	Symbol	D0	D1	K0	PCS/Reel		
	Spec	1.50±0.1	1.50±0.1	4.5±0.1	1820		
4032	Symbol	w	F	E	P0	P1	P2
	Spec	**24.0±0.3**	11.5±0.1	1.75±0.1	4.0±0.1	12.0±0.1	2.0±0.1
	Symbol	D0	D1	K0	PCS/Reel		
	Spec	1.5±0.1	1.5±0.1	5.3±0.1	1500		

11.2 **15 inch plastic tray size**

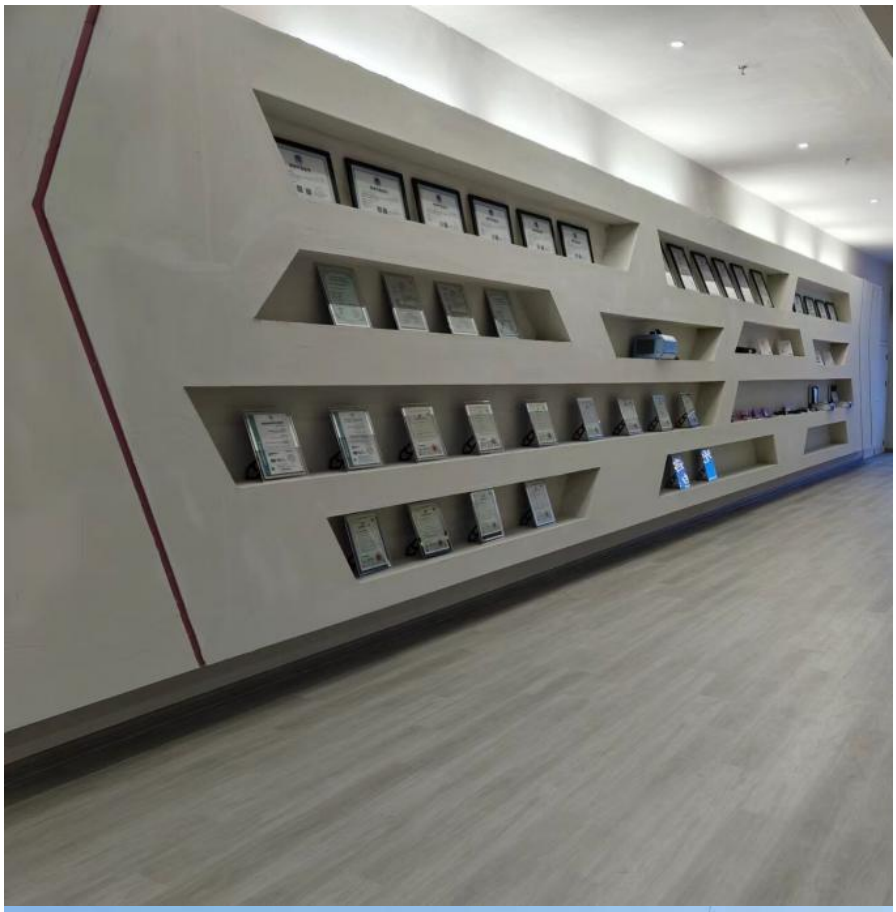


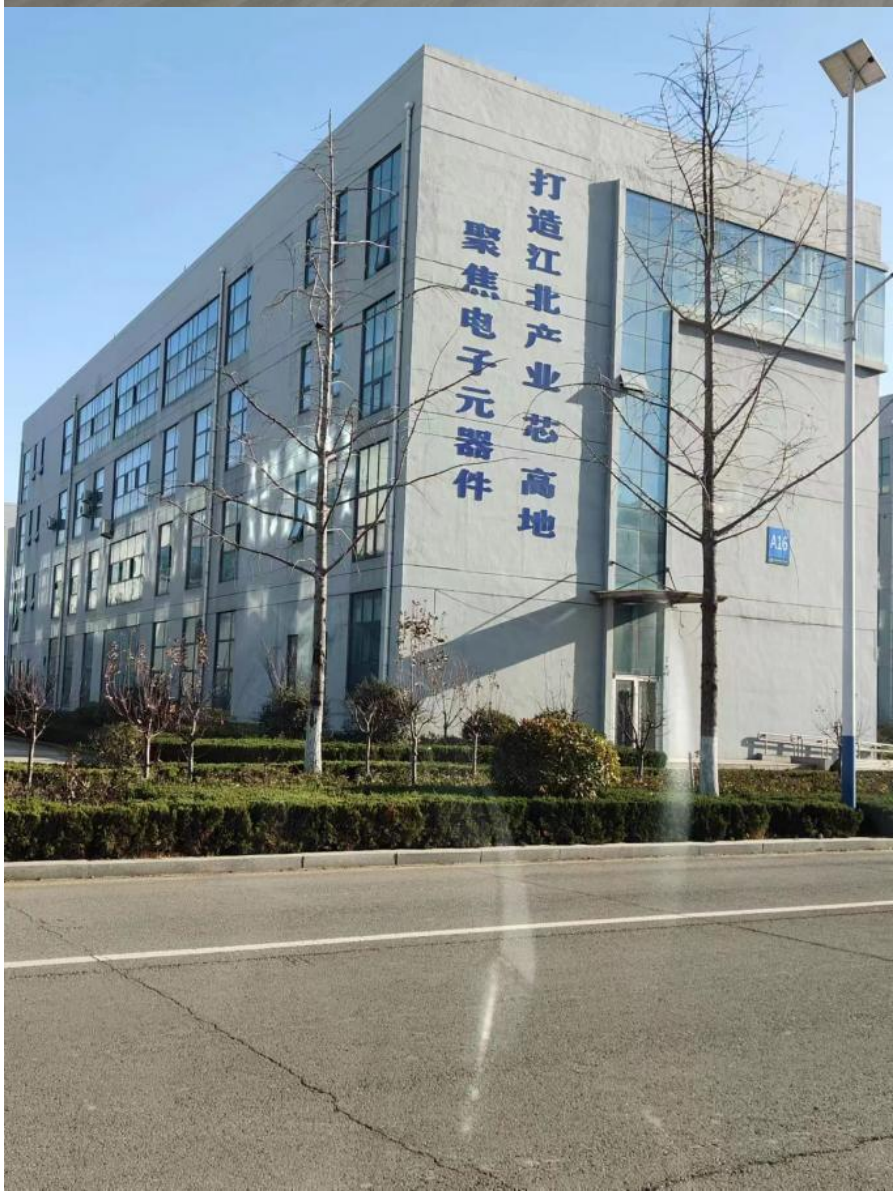
LKEC	3225	4032
W	16.4±0.3	24.4±0.3
N	Φ100±3.0	Φ100±3.0
T1	2.2±0.3	2.2±0.3
T2	2.2±0.3	2.2±0.3
A	Φ380±3.0	Φ380±3.0
D	13.3±0.3	13.3±0.3
E	2.3±0.5	2.3±0.5
F	10.75±0.5	10.75±0.5

12、 Carton Packing

3225	4032
	
Weight：20kg/Box	Weight：16kg/Box

roduct Description




打造江北产业芯高地
聚焦电子元器件

The **QV0402~2220H Series SMD Varistor Element** is a surface mounted varistor device that is available in a wide range of sizes from 0402 to 2220, and with a varistor voltage @1mA DC from 12V to 102V. This surface mounted varistor element also offers an external dimension of 1206 0.12×0.06 (3.2×1.6) and 1812 0.18×0.12 (4.5×3.2) inch (mm). It comes with a peak current (8/20μs) IP of 20 to 1200 (A), making it suitable for a large variety of applications. With its excellent electrical characteristics and high reliability, this QV Series SMD Varistor Element is a great choice for any surface mounted varistor application.

Features:

Surface Mounted Varistor Element
Surface Mounted Varistor Device
SMD Varistor Device
Varistor Voltage: 12V-102V at 1mA DC
External Dimension: 1206 (0.12×0.06 inches / 3.2×1.6 mm) and 1812 (0.18×0.12 inches / 4.5×3.2 mm)
Max. Working Voltage: DC 5.5V-85V and AC 4V-60V
Tolerance of Varistor Voltage: ±10% and ±15%
Size: 0402- 2220

Technical Parameters:

Parameter	Value
Product Name	SMD Chip Varistor
Varistor Voltage @1mA DC	12V-102V
Size	0402-2220
Max. Working Voltage (DC)	5.5V-85V
Max. Working Voltage (AC)	4V-60V
Max. Clamping Voltage (8/20μs)	Vc : 24-175 (V) IP : 20-5(A)
Part Number	QV0402 2220H Series
Typical Capacitance @1MHz	Cp : 150- 5(J)
Peak Current (8/20μs)	IP : 20- 1200 (A)
External Dimension (inch/mm)	1206 0.12×0.06 (3.2×1.6) 1812 0.18×0.12 (4.5×3.2)
Tolerance of Varistor Voltage	±10% ±15%

Applications:

Lin Kun SMD Varistor is a surface mount varistor device, which is widely used in various applications. It is a surface mounted varistor component with high-quality and reliable performance. The brand name Lin Kun is UL, VDE, and CSA certified and has a minimum order quantity of 4000/3000/2000pcs/plate. This SMD varistor has a peak current of 20-1200 (A) for 8/20μs and a maximum clamping voltage of 24-175 (V) for 8/20μs. Its part number is QV0402 2220H Series and the maximum working voltage is DV: 5.5V-85V and AC: 4V-60V, and the varistor voltage @1mA DC is 12V-102V. The price of the SMD Varistor is negotiable and it has a fast delivery time of 5-7 days. The payment terms are T/T, Paypal, and Western Union. The supply ability of the SMD Varistor is 1000000PCS/Month.

Customization:

Lin Kun SMD Surface Mount Varistors

Brand Name: Lin Kun
Model Number: SMD Surface Mount Varistors
Place of Origin: China
Certification: UL, VDE, CSA
Minimum Order Quantity: 4000/3000/2000pcs/plate
Price: Negotiable
Packaging Details: 4000/3000/2000pcs/plate

Delivery Time: 5-7 Days
Payment Terms: T/T, Paypal, Western Union
Supply Ability: 1000000PCS/Month
Varistor Voltage @1mA DC: 12V-102V
Max. Clamping Voltage (8/20μs): Vc : 24-175 (V) IP : 20-5(A)
Inch (mm) External Dimension L×W: 1206 0.12×0.06 (3.2×1.6) 1812 0.18×0.12 (4.5×3.2)
Peak Current (8/20μs): IP : 20- 1200 (A)
Tolerance of Varistor Voltage: ±10%, ±15%
Highlights

Surface Mount Device Varistor

Surface Mounted Varistor Device

Lin Kun

UL, VDE, CSA

4000/3000/2000pcs/plate

5-7 Days

T/T, Paypal, Western Union

1000000PCS/Month

12V-102V

24-175V

20-5A

1206 0.12×0.06 (3.2×1.6)

1812 0.18×0.12 (4.5×3.2)

20- 1200 (A)

±10%, ±15%

Support and Services:

SMD Varistor Technical Support and Service

We provide technical support and service for SMD Varistor products to our customers. Our support team is staffed with product experts who are available to answer your questions, provide product information, and help with troubleshooting and installation.
We also have a library of technical documents and resources available to our customers, including user manuals, product datasheets, and application notes. If you need additional assistance, our team is available to provide personalized technical support.
We provide a complete satisfaction guarantee for all SMD Varistor products. If you're not completely satisfied with your purchase, we'll work to find the best solution for you.

Packing and Shipping:

SMD Varistor Packaging and Shipping:

The SMD Varistor is packaged in moisture-proof and sealed bags. The bags are then placed in a cardboard box for shipping. The box is marked with the product name and part number. The box is then secured with packing tape, placed in an outer corrugated shipping box, and labeled with the destination address.

FAQ:

SMD Varistor

Brand Name: Lin Kun
Model Number: SMD Surface Mount Varistors
Place of Origin: China
Certification: UL,VDE,CSA
Minimum Order Quantity: 4000/3000/2000pcs/plate
Price: Negotiable
Packaging Details: 4000/3000/2000pcs/plate
Delivery Time: 5-7 Days
Payment Terms: T/T,Paypal, Western Union
Supply Ability: 1000000PCS/Month

Questions & Answers

Q1: What is SMD Varistor?

A1: SMD Varistor is a surface-mount varistor that is used to protect circuits from transient overvoltage or to suppress EMI/RFI noise.

Q2: What are the application of SMD Varistor?

A2: SMD Varistor can be used in consumer electronics, automotive, telecom, medical, lighting, and many other applications.

Q3: What is the Brand Name of SMD Varistor?

A3: The Brand Name of SMD Varistor is Lin Kun.

Q4: What certifications do SMD Varistors have?

A4: SMD Varistors have certifications of UL,VDE,CSA.

Q5: What is the minimum order quantity for SMD Varistors?
A5: The minimum order quantity for SMD Varistors is 4000/3000/2000pcs/plate.

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