

General military (General Army)

High voltage multilayer chip varistor



1. Features

- Rectangular, serialized in size and specifications, suitable for overvoltage protection of electronic circuits in various military electronic equipment;
- Fast response speed ($<1\text{ns}$);
- Low leakage current ($<30\mu\text{A}$);
- National military standard production line production;
- Working temperature range: $-55^{\circ}\text{C} \sim 125^{\circ}\text{C}$.

7. Executive standard

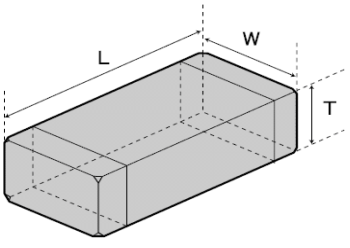
- Detailed specification: Q/CT 06B-2018 "Detailed Specification of J Series Ordinary Military Multilayer Chip Varistor"

8. Product model specifications

J-	FHV-	201	G	5R6	N	2222	T
Grade	Series	Nominal Capacity	Product type	DC working Voltage (unit: V)	Pad coating	Size code	Packaging
Military	FHV: Chip varistor	200=20 pF 201=200pF X= No requirement	G: Overvoltage protection type H: High-energy type E: Anti-static type	5R6=5.6V 140=14V	N: Ag/Ni/Sn S: silver	2222	T : Tape and reel B: Bulk

*Note: The naming of the “voltage” column of the high-voltage chip varistor in the model specifications adopts the naming method of the wafer varistor, that is, the varistor voltage; unlike conventional chip varistors, the naming of the “voltage” column in the model specifications adopts the operating voltage. Please pay attention when selecting the type.

9. Size specification

	Size code	Size (mm)		
		L	W	T
	0806	2.00±0.30	1.60±0.30	≤1.90
	1206	3.20±0.30	1.60±0.30	≤1.90
	1210	3.20±0.30	2.50±0.30	≤2.50
	1812	4.50±0.40	3.20±0.30	≤3.40
	2220	5.70±0.50	5.08±0.50	≤3.60
	3220	8.20±0.50	5.08±0.50	≤3.60
	3838	10.00±0.50	9.00±0.50	≤3.80

10. Product type code

Product type	Overvoltage protection type	High-energy type
Code	G	H

11. Nominal varistor voltage

The nominal varistor voltage is expressed in volts (V). It is distinguished by three digits. The first and second digits represent the effective number, and the last digit is set as the number of “0” after it. For example: 380=38V.

12. Nominal capacitance

The nominal capacitance is expressed in pF, which is distinguished by three digits. The first and second digits represent the effective number, and the last digit is set as the number of “0” after it. X indicates that there is no capacity requirement; for example: 431=430pF

13. Specification sheet

Specification model	Operating voltage		Varistor voltage	Limit voltage		Peak current	Energy tolerance
	V _{AC} (V)	V _{DC} (V)	V _{1mA} (V)	V _c (V) (MAX)		I _p (A) (MAX)	ET(J) (MAX)
				8/20μs		8/20μs	10/1000μs
				(A)	(V)		
J-FHV0806G241NX	150	200	240±10%	5	415	50	0.5
J-FHV0806G271NX	175	225	270±10%	5	475	50	0.5
J-FHV1206G241NX	150	200	240±10%	5	415	50-100	0.5
J-FHV1206G271NX	175	225	270±10%	5	475	50-100	0.5
J-FHV1206G331NX	210	275	330±10%	5	550	40	0.5
J-FHV1206G361NX	230	300	360±10%	5	595	40	0.5
J-FHV1206G391NX	250	320	390±10%	5	650	40	0.5

J-FHV1206G431NX	275	350	430±10%	5	710	40	0.5
J-FHV1206G471NX	300	385	470±10%	5	775	40	0.5
J-FHV1210G181NX	115	150	180±10%	5	300	200	0.8
J-FHV1210G201NX	130	170	200±10%	5	340	200	0.8
J-FHV1210G221NX	140	180	220±10%	5	360	200	0.8
J-FHV1210G241NX	150	200	240±10%	5	415	200	0.8
J-FHV1210G271NX	175	225	270±10%	5	475	200	0.8
J-FHV1210G331NX	210	275	330±10%	5	550	50-100	0.8
J-FHV1210G361NX	230	300	360±10%	5	595	50-100	0.8
J-FHV1210G391NX	250	320	390±10%	5	675	50-100	0.8
J-FHV1210G431NX	275	350	430±10%	5	745	50-100	0.8
J-FHV1210G471NX	300	385	470±10%	5	810	50-100	0.8
J-FHV1210G511NX	320	415	510±10%	5	890	50	0.8
J-FHV1812G221NX	140	180	220±10%	10	395	250-500	2.0
J-FHV1812G241NX	150	200	240±10%	10	415	250-500	2.0
J-FHV1812G271NX	175	225	270±10%	10	475	250-500	2.0
J-FHV1812G331NX	210	275	330±10%	10	550	250	2.0
J-FHV1812G361NX	230	300	360±10%	10	595	250	2.0
J-FHV1812G391NX	250	320	390±10%	10	675	250	2.0
J-FHV1812G431NX	275	350	430±10%	10	745	250	2.0
J-FHV1812G471NX	300	385	470±10%	10	810	250	2.0
J-FHV2220G241NX	150	200	240±10%	10	415	400-800	5.8
J-FHV2220G271NX	175	225	270±10%	10	475	400-800	5.8
J-FHV2220G331NX	210	275	330±10%	10	550	400-800	5.8
J-FHV2220G361NX	230	300	360±10%	10	595	400-800	5.8
J-FHV2220G391NX	250	320	390±10%	10	675	400-800	5.8
J-FHV2220G431NX	275	350	430±10%	10	745	400-800	5.8
J-FHV2220G471NX	300	385	470±10%	10	810	400-800	5.8
J-FHV2220G511NX	320	415	510±10%	10	840	400-800	5.8
J-FHV2220G561NX	350	455	560±10%	10	925	400	8.5
J-FHV3220H201NX	130	170	200±10%	10	340	1250	8.5
J-FHV3220H241NX	150	200	240±10%	10	415	1250	8.5
J-FHV3220H271NX	175	225	270±10%	10	475	1250	8.5
J-FHV3220H331NX	210	275	330±10%	10	550	1250	8.5
J-FHV3220H361NX	230	300	360±10%	10	595	1250	8.5
J-FHV3220H391NX	250	320	390±10%	10	675	1250	8.5
J-FHV3220H431NX	275	350	430±10%	10	745	1250	8.5
J-FHV3220H471NX	300	385	470±10%	10	810	1250	8.5
J-FHV3220H511NX	300	385	510±10%	10	890	1000	8.5

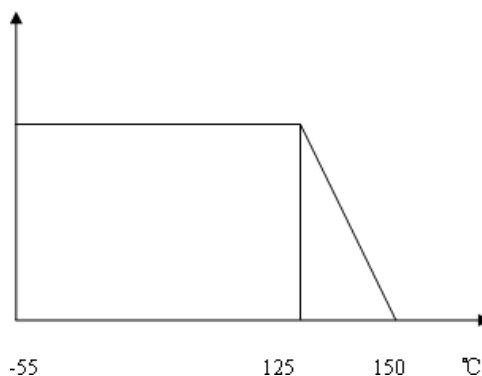
J-FHV3220H561NX	350	455	560±10%	10	925	800	8.5
J-FHV3220H621NX	385	505	620±10%	10	1025	400	8.5
J-FHV3220H681NX	420	560	680±10%	10	1120	400	8.5
J-FHV3838H271NX	175	225	270±10%	10	455	2500	10
J-FHV3838H471NX	300	385	470±10%	10	810	2500	10

14. IS product series can replace the correspondence between wafer varistors

IS series specifications	Corresponding to the wafer varistor series specifications
FHV1812/ FHV2220	5D/7D
FHV3220	7D
FHV3838	10D

5. Characteristic

5.1 The relationship between the rated peak current, energy and ambient temperature of the multilayer chip varistor voltage.



Note: When customers need plug-in varistors, corresponding products can be provided.