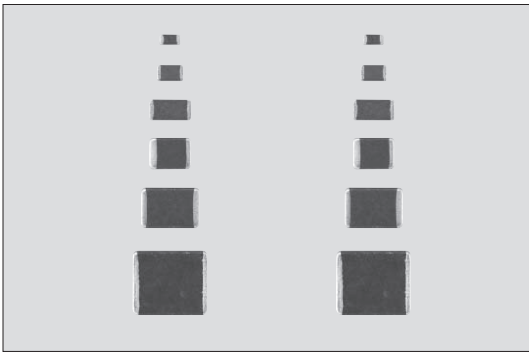
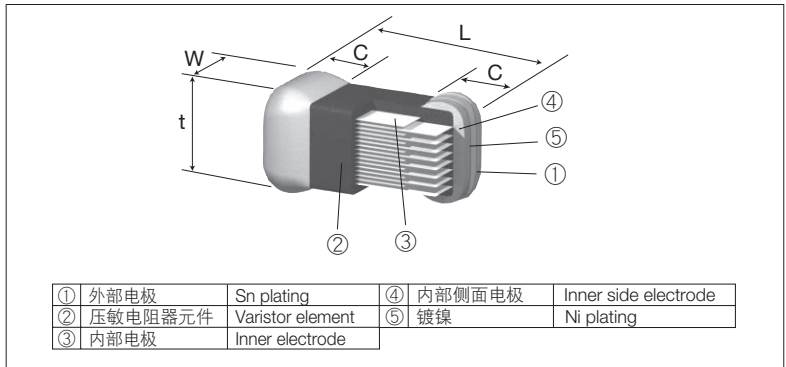


NV73 层叠型金属氧化物压敏电阻器 Multilayer Type Metal Oxide Varistors



外观颜色：黑色 Coating color：Black

■ 结构图 Construction



■ 特点 Features

- 有双向对称性，可吸收正负浪涌。
- 通过层叠结构，可以吸收从小到大的浪涌。
- 通过小型组件，可以节约空间，高密度安装。
- 对应回流焊和过流焊
- 符合欧盟RoHS。电极、压敏电阻器元件、玻璃中所含铅玻璃，欧盟RoHS不适用。
- Varistors own two-way symmetries and can absorb positive and negative surges.
- Multilayer construction allows its small size to absorb a large surge.
- Small space and high density mounting available due to the small package.
- Suitable for both flow and reflow solderings.
- Products meet EU-RoHS requirements. EU-RoHS regulation is not intended for Pb-glass contained in electrode, varistor element and glass.

■ 用途 Applications

- 来自手提设备输出端子的ESD保护。
- 从电动机、继电器等的感应载荷发生的过电压的吸收。
- 从过电压保护半导体元件。
- 从压电元件发生的过电压的吸收。

■ 品名构成 Type Designation

实例 Example

Lead Free Type	NV73	A	1J	T	TE	24
品种 Product Code	能量代码 Energy Code	尺寸 Size	端子表面材质 Terminal Surface Material	二次加工 Taping	压敏电阻器电压 Varistor Voltage	
	A B C	1J: 1.6x0.8mm 2A: 2.0x1.2mm 2B: 3.2x1.6mm 2E: 3.2x2.5mm 2J: 4.5x3.2mm 2L: 5.7x5.0mm	T: Sn	TE: Taping BK: Bulk		

端子表面材质以无铅品为标准。
欲知关于此产品含有的环境有害物质详情
(除EU-RoHS以外)，请与我们联系。
编带细节请参考卷末附录C。

The terminal surface material lead free is standard.
Contact us when you have control request for environmental hazardous material
other than the substance specified by EU-RoHS.
For further information on taping, please refer to APPENDIX C on the back pages.

■ 性能 Performance (1J·2A·2B)

试验项目 Test Items	标准值 Performance Requirements ΔV±%	试验方法 Test Methods
压敏电阻器电压 Varistor Voltage	在规定的允许偏差以内。 Within specified tolerance	流入1mA时的端子间电压。 Voltage between terminals when 1mA is flowed.
耐焊接热 Resistance to soldering heat	10	270°C±5°C 3s±0.5s
焊接性 Solderability	端子电极95%以上被新的焊接覆盖。 95% coverage min.	230°C±5°C 4s±1s
温度突变 Rapid change of temperature	10	-40°C (30min) / +125°C (30min) 30cycles
耐浪涌量 Maximum peak current	10	把额定的冲击波电流 (T=8×20μs)，正反施加各一次。 A single standard impulse of 8/20μs, positive/negative applied once each
最大电能 Maximum energy	10	把额定的能量 (T=2ms)，施加一次。 A single standard impulse of 2ms, once
施加高温直流电压 High temperature life with d.c. bias	10	85°C±5°C, Vc=最大允许电压 (V d.c.) 1000小时。 Load: Maximum Allowable Voltage (d.c.)
施加高温交流电压 High temperature life with d.c. bias	10	85°C±5°C, Vc=最大允许电压 (Va.c.r.m.s.) 1000小时。 Load: Maximum Allowable Circuit Voltage (Va.c.r.m.s.)
施加高温高湿电压 High temperature & high humidity life with d.c bias	10	40°C±5°C, 95%RH, Vc=最大允许电压 (V d.c.) 500小时。 Load: Maximum Allowable Voltage (d.c.)
高温保存 High temperature storage life	10	125°C±5°C, 1000h
低温保存 Low temperature storage life	10	-40°C±5°C, 1000h

压敏电阻器
Varistors

■ 性能 Performance (2E•2J•2L)

试验项目 Test Items	标准值 Performance Requirements ΔV±%	试验方法 Test Methods
压敏电阻器电压 Varistor Voltage	在规定的允许偏差以内。 Within specified tolerance	流入1mA时的端子间电压。Voltage between terminals when 1mA is flowed.
耐焊接热 Resistance to soldering heat	10	260±5℃, 4s±1s
焊接性 Solderability	端子电极95%以上被新的焊接覆盖。 95% coverage min.	235℃±5℃, 4s±1s
温度突变 Rapid change of temperature	10	-40℃ (30min) / +125℃ (30min) 5cycles
耐浪涌量 Maximum peak current	10	把额定的冲击波电流 (T=8×20μs), 正反施加各一次。 A single standard impulse of 8/20μs, 100pulse, 30s interval
最大电能 Maximum energy	10	把额定的能量 (T=10×1000μs), 施加一次。 A single standard impulse of 100/1000μs, 100pulse, 90s interval
施加高温直流电压 High temperature life with d.c. bias	10	125℃±5℃, Vc=最大允许电压 (V d.c.) 1000小时 Load: Maximum Allowable Circuit Voltage (d.c.)
施加低温直流电压 Low temperature life with d.c. bias	10	-50℃±5℃, Vc=最大允许电压 (V d.c.) 1000小时 Load: Maximum Allowable Circuit Voltage (d.c.)
施加高温高湿电压 High temperature & high humidity life with d.c. bias	10	40℃±5℃, 95%RH, Vc=最大允许电压 (V d.c.) 500小时 Load: Maximum Allowable Circuit Voltage (d.c.)
高温保存 High temperature storage life	10	150℃±5℃ 1000h
低温保存 Low temperature storage life	10	-50℃±5℃ 1000h

■ 额定值 Ratings (1J•2A•2B)

工作温度范围 Operating Temperature Range: -40℃~+85℃ 保存温度范围 Storage Temperature Range: -40℃~+125℃
 包装数量/卷 Q'ty/Reel : TE 2,500pcs TEB 10,000pcs

型号 Type	压敏电阻器电压 Varistor Vol. Vc		最大允许回路电压 Max. Allowable Vol.		限制电压 Clamping Vol.		最大电能 Max. Energy E (J)	耐浪涌量 (施加2次) Max. Peak Current Ip (A) (2 times)		
	Ic=1mA	(V)	a.c.r.m.s. (V)	d.c. (V)	V1A	V2A				
NV73A1JTTE8.2	6.8~9.8	4.2	6.0	6.0	—	21	0.1	30		
NV73A1JTTE12	10~14.4	6.1	8.6	8.6	—	29				
NV73A1JTTE15	12.5~18	7.6	10.8	10.8	—	35				
NV73A1JTTE18	16~20	9.1	12.8	12.8	—	37				
NV73A1JTTE20	18~22	10.6	15.0	15.0	—	40				
NV73A1JTTE22	19~24	12.0	16.5	16.5	—	42				
NV73A1JTTE24	21.8~26.5	14.0	18.0	18.0	—	46				
NV73A1JTTE27	25~32	17.0	22.0	22.0	—	49				
NV73A2ATTE8.2	6.8~9.8	4.2	6.0	6.0	18	—			0.01	10
NV73A2ATTE12	10~14.4	6.1	8.6	8.6	24	—			0.03	
NV73A2ATTE15	12.5~18	7.6	10.8	10.8	29	—	0.04			
NV73A2ATTE18	16~20	9.1	12.8	12.8	29	—	—			
NV73A2ATTE20	18~22	10.6	15.0	15.0	33	—	0.05			
NV73A2ATTE22	19~24	12.0	16.5	16.5	39	—	—			
NV73A2ATTE24	21.8~26.5	14.0	18.0	18.0	42	—	0.06			
NV73A2ATTE27	25~32	17.0	22.0	22.0	50	—	0.07			
NV73A2ATTE33	30~39	20.0	26.0	26.0	60	—	0.12	20		
NV73A2ATTE39	37~47	25.0	31.0	31.0	72	—	0.14			
NV73A2ATTE47	45~54	30.0	38.0	38.0	86	—	0.16			
NV73B2ATTE8.2	6.8~9.8	4.2	6.0	6.0	—	18	0.03		20	
NV73B2ATTE12	10~14.4	6.1	8.6	8.6	—	24	0.05			
NV73B2ATTE15	12.5~18	7.6	10.8	10.8	—	30	0.07			
NV73B2ATTE18	16~20	9.1	12.8	12.8	—	32	0.08			
NV73B2ATTE20	18~22	10.6	15.0	15.0	—	36	0.09			
NV73B2ATTE22	19~24	12.0	16.5	16.5	—	40	0.11			
NV73B2ATTE24	21.8~26.5	14.0	18.0	18.0	—	42	0.12			
NV73B2ATTE27	25~32	17.0	22.0	22.0	—	58	0.24			
NV73B2ATTE33	30~39	20.0	26.0	26.0	—	66	0.25	50		
NV73C2ATTE8.2	6.8~9.8	4.2	6.0	6.0	—	18	0.04			
NV73C2ATTE12	10~14.4	6.1	8.6	8.6	—	24	0.09			
NV73C2ATTE15	12.5~18	7.6	10.8	10.8	—	29	0.11			
NV73C2ATTE18	16~20	9.1	12.8	12.8	—	32	0.13			
NV73C2ATTE20	18~22	10.6	15.0	15.0	—	35	0.14			
NV73C2ATTE22	19~24	12.0	16.5	16.5	—	40	0.17			
NV73C2ATTE24	21.8~26.5	14.0	18.0	18.0	—	42	0.18			
NV73A2BTTE27	25~32	17.0	22.0	22.0	—	55	0.13		40	
NV73A2BTTE33	30~39	20.0	26.0	26.0	—	60	0.15			
NV73A2BTTE39	37~47	25.0	31.0	31.0	—	72	0.18			
NV73A2BTTE47	45~54	30.0	38.0	38.0	—	85	0.22			
NV73A2BTTE56	52~62	35.0	45.0	45.0	—	100	0.26			
NV73B2BTTE8.2	6.8~9.8	4.2	6.0	6.0	—	18	0.03	30		
NV73B2BTTE12	10~14.4	6.1	8.6	8.6	—	24	0.07			
NV73B2BTTE15	12.5~18	7.6	10.8	10.8	—	29	0.09			
NV73B2BTTE18	16~20	9.1	12.8	12.8	—	32	0.10			
NV73B2BTTE20	18~22	10.6	15.0	15.0	—	35	0.11			
NV73B2BTTE22	19~24	12.0	16.5	16.5	—	40	0.12			
NV73B2BTTE24	21.8~26.5	14.0	18.0	18.0	—	42	0.14			
NV73B2BTTE27	25~32	17.0	22.0	22.0	—	52	0.16			
NV73C2BTTE8.2	6.8~9.8	4.2	6.0	6.0	—	18	0.06		40	
NV73C2BTTE12	10~14.4	6.1	8.6	8.6	—	24	0.10			
NV73C2BTTE15	12.5~18	7.6	10.8	10.8	—	29	0.13			
NV73C2BTTE18	16~20	9.1	12.8	12.8	—	29	0.15			
NV73C2BTTE20	18~22	10.6	15.0	15.0	—	31	0.17			
NV73C2BTTE22	19~24	12.0	16.5	16.5	—	35	0.19			
NV73C2BTTE24	21.8~26.5	14.0	18.0	18.0	—	38	0.20			
NV73C2BTTE27	25~32	17.0	22.0	22.0	—	48	0.24			

还准备了上述以外的详细数据, 请向营业所索要。

Detailed data other than the above-mentioned are also available, for which please ask our sales office.

本样本手册中记载的产品规格如有变更, 恕不一一奉告。订购以及使用之前, 请仔细确认规格表的内容。

用于车载设备、医疗设备、航空设备以及其它涉及人身安全、或可能引起重大损失的设备上时, 请务必先与我公司联系。这些产品在这类用途中出现故障或失灵可能导致人身事故或严重损坏。

Specifications given herein may be changed at any time without prior notice. Please confirm technical specifications before you order and/or use.

Contact our sales representatives before you use our products for applications including automobiles, medical equipment and aerospace equipment.

Malfunction or failure of the products in such applications may cause loss of human life or serious damage.

VARISTORS

NV73 层叠型金属氧化物压敏电阻器 Multilayer Type Metal Oxide Varistors

■ 额定值 Ratings (2E • 2J • 2L)

工作温度范围 Operating Temperature Range: -50°C ~ +125°C 保存温度范围 Storage Temperature Range: -50°C ~ +150°C

包装数量/卷 Q'ty /Reel2E: TE (2,000pcs)、2J•2L: TE (1,000pcs)

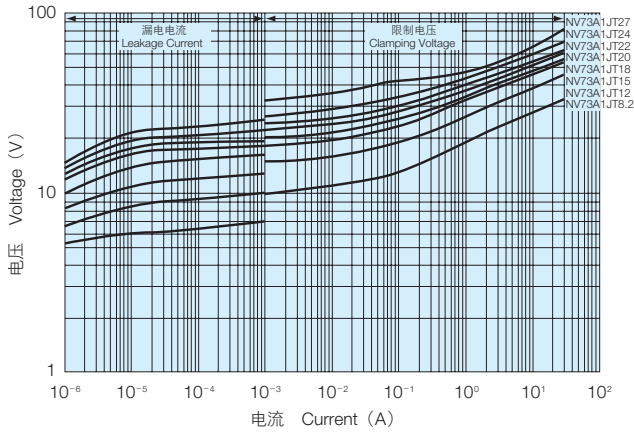
型号 Type	压敏电阻器电压 Varistor Vol. V _c		最大允许回路电压 Max. Allowable Vol.		限制电压 Clamping Vol.			最大电能 (100回印加) Max. Energy E (J) (100 times)	耐浪涌量 (100回印加) Max. Peak Current I _p (A) (100 times)
	I _c =1mA	(V)	a.c. r.m.s. (V)	d.c. (V)	V _{2.5A}	V _{5A}	V _{10A}		
NV73A2ETTE15	12.8~17.3		8	11	30	—	—	1.0	400
NV73A2ETTE18	15.3~20.7		11	14	34	—	—	1.2	
NV73A2ETTE22	19.8~24.2		12	16.5	39	—	—	1.4	
NV73A2ETTE24	21.6~26.4		14	18	39	—	—	1.7	
NV73A2ETTE27	24.3~29.7		17	22	44	—	—	1.9	
NV73A2ETTE33	29.7~36.3		20	26	54	—	—	1.7	
NV73A2ETTE39	35.1~42.9		25	30	65	—	—	2.0	
NV73A2ETTE47	42.3~51.7		30	38	77	—	—	1.2	
NV73A2ETTE56	50.4~61.6		35	45	90	—	—	1.4	
NV73A2ETTE82	73.8~90.2		50	65	135	—	—	250	
NV73A2ETTE100	90.0~110.0		60	85	165	—	—	200	
NV73A2ETTE110	99.0~121.0		70	90	180	—	—		
NV73A2JTTE12	10.2~13.8		6	9	—	27	—	0.9	500
NV73A2JTTE15	12.8~17.3		8	11	—	32	—	1.2	
NV73A2JTTE18	16.2~19.8		11	14	—	35	—	1.4	
NV73A2JTTE22	19.8~24.2		12	16.5	—	41	—	1.6	
NV73A2JTTE24	21.6~26.4		14	18	—	44	—	1.7	
NV73A2JTTE27	24.3~29.7		17	22	—	49	—	2.0	
NV73A2JTTE33	29.7~36.3		20	26	—	54	—	2.5	
NV73A2JTTE39	35.1~42.9		25	30	—	65	—	2.9	
NV73A2JTTE47	42.3~51.7		30	38	—	77	—	3.5	
NV73A2JTTE56	50.4~61.6		35	45	—	90	—	4.2	
NV73A2JTTE68	61.2~74.8		40	56	—	110	—	4.8	
NV73A2JTTE82	73.8~90.2		50	65	—	135	—	4.5	400
NV73A2JTTE100	90.0~110.0		60	85	—	165	—	5.8	
NV73A2JTTE110	99.0~121.0		70	90	—	180	—		
NV73A2JTTE150	135.0~165.0		95	127	—	248	—	300	
NV73B2JTTE15	12.8~17.3		8	11	—	32	—	1.8	800
NV73B2JTTE18	15.3~20.7		11	14	—	35	—	1.9	
NV73B2JTTE22	19.8~24.2		12	16.5	—	41	—	2.3	
NV73B2JTTE24	21.6~26.4		14	18	—	44	—	2.7	
NV73B2JTTE27	24.3~29.7		17	22	—	49	—	3.0	
NV73B2JTTE33	29.7~36.3		20	26	—	54	—	3.7	
NV73B2JTTE39	35.1~42.9		25	30	—	65	—	4.2	
NV73B2JTTE47	42.3~51.7		30	38	—	77	—	—	
NV73B2JTTE56	50.4~61.6		35	45	—	90	—	—	
NV73A2LTTE12	10.2~13.8		6	9	—	—	28	1.9	
NV73A2LTTE15	12.8~17.3		8	11	—	—	33	2.3	
NV73A2LTTE18	16.2~19.8		11	14	—	—	36	2.7	
NV73A2LTTE22	19.8~24.2		12	16.5	—	—	41	2.9	
NV73A2LTTE24	21.6~26.4		14	18	—	—	45	3.1	
NV73A2LTTE27	24.3~29.7		17	22	—	—	48	3.8	
NV73A2LTTE33	29.7~36.3		20	26	—	—	57	4.3	
NV73A2LTTE39	35.1~42.9		25	30	—	—	65	5.5	
NV73A2LTTE47	42.3~51.7		30	38	—	—	77	6.3	
NV73A2LTTE56	50.4~61.6		35	45	—	—	90	7.7	
NV73A2LTTE68	61.2~74.8		40	56	—	—	110	8.8	1,200
NV73A2LTTE100	90.0~110.0		60	85	—	—	165	6.8	
NV73A2LTTE110	99.0~121.0		70	90	—	—	180		
NV73B2LTTE15	12.8~17.3		8	11	—	—	33	4.2	
NV73B2LTTE18	15.3~20.7		11	14	—	—	36	5.4	
NV73B2LTTE22	19.8~24.2		12	16.5	—	—	41	5.8	
NV73B2LTTE24	21.6~26.4		14	18	—	—	45		
NV73B2LTTE27	24.3~29.7		17	22	—	—	48	7.2	
NV73B2LTTE33	29.7~36.3		20	26	—	—	57	7.8	
NV73B2LTTE39	35.1~42.9		25	30	—	—	65	9.6	
NV73B2LTTE47	42.3~51.7		30	38	—	—	77	12.0	
NV73B2LTTE56	50.4~61.6		35	45	—	—	90	7.7	1,000
NV73B2LTTE82	73.8~90.2		50	65	—	—	135	5.6	
NV73C2LTTE39	35.1~42.9		25	30	—	—	65	5.6(1 time)	2,500(1 time)
NV73C2LTTE82	73.8~90.2		50	65	—	—	135	14 (1 time)	4,500(1 time)

本样本手册中记载的产品规格如有变更，恕不一一奉告。订购以及使用之前，请仔细确认规格表的内容。
用于车载设备、医疗设备、航空设备以及其它涉及人身安全、或可能引起重大损失的设备上时，请务必先与我公司联系。这些产品在这类用途中出现故障或失灵可能导致人身事故或严重损坏。
Specifications given herein may be changed at any time without prior notice. Please confirm technical specifications before you order and/or use.
Contact our sales representatives before you use our products for applications including automobiles, medical equipment and aerospace equipment.
Malfunction or failure of the products in such applications may cause loss of human life or serious damage.

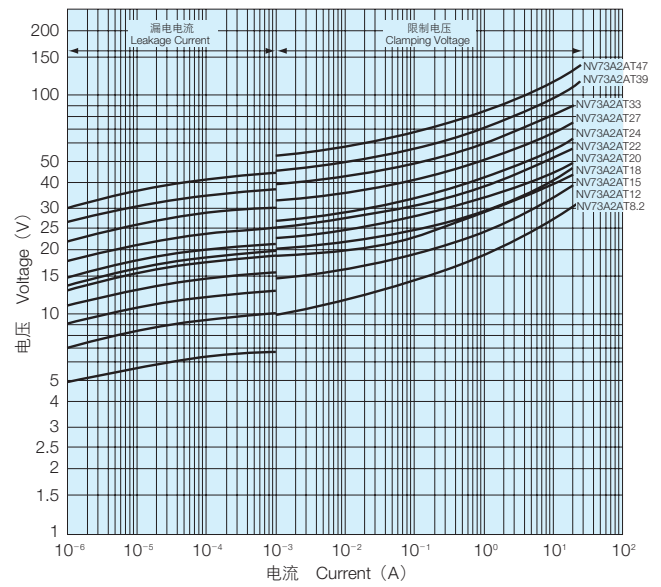
压敏电阻器
Varistors

电压—电流曲线 Voltage-Current Curves (Reference) (Ta=25°C)

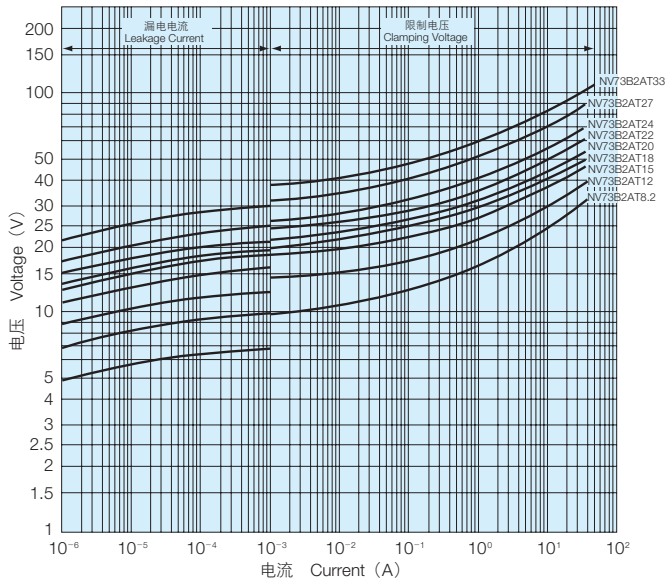
NV73A1J



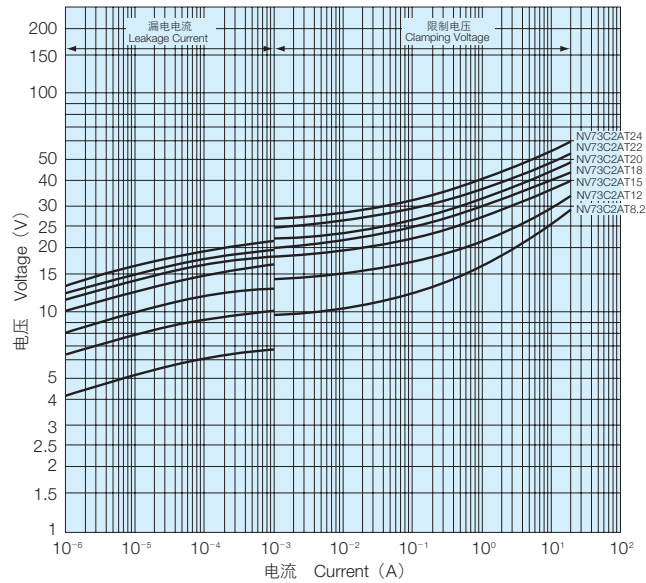
NV73A2A



NV73B2A



NV73C2A

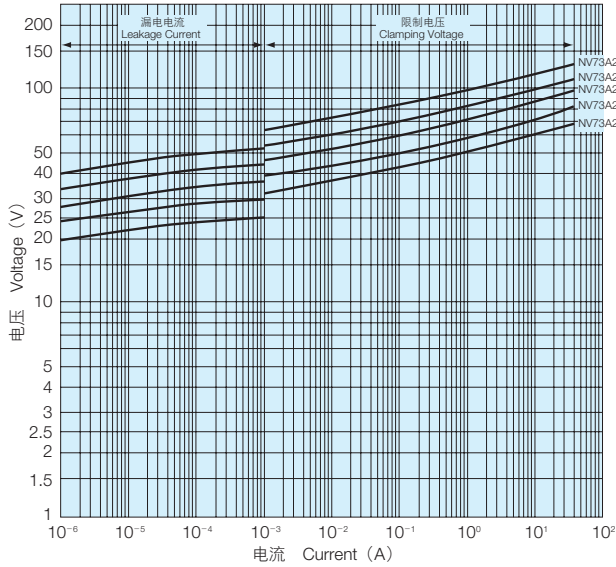


VARISTORS

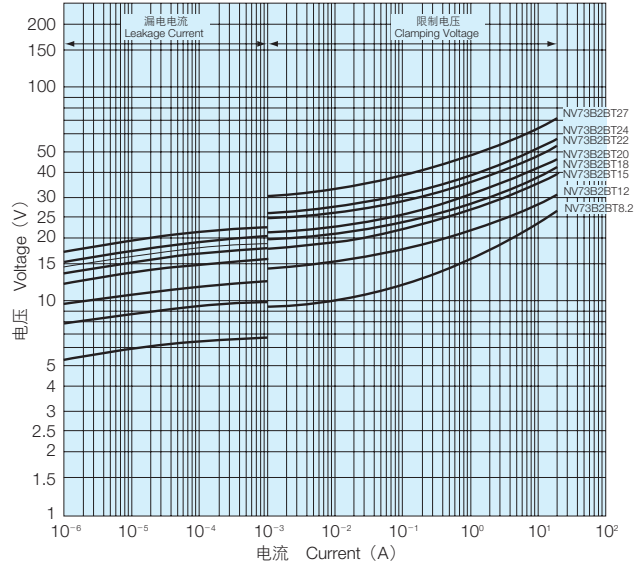
NV73 层叠型金属氧化物压敏电阻器 Multilayer Type Metal Oxide Varistors

■ 电压—电流曲线 Voltage-Current Curves (Reference) (Ta=25°C)

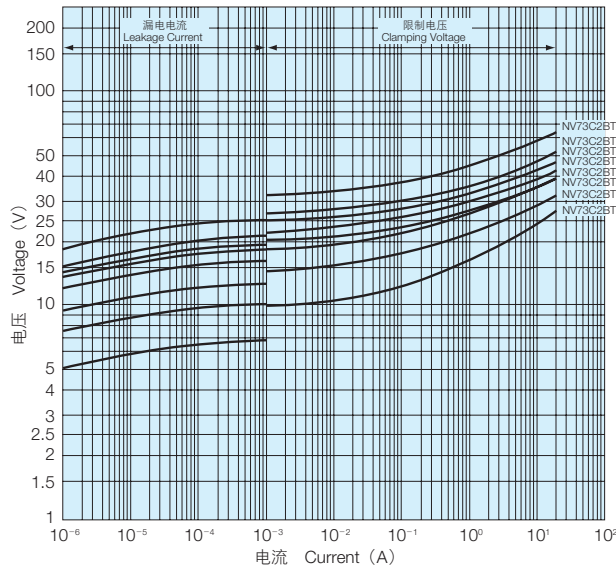
NV73A2B



NV73B2B



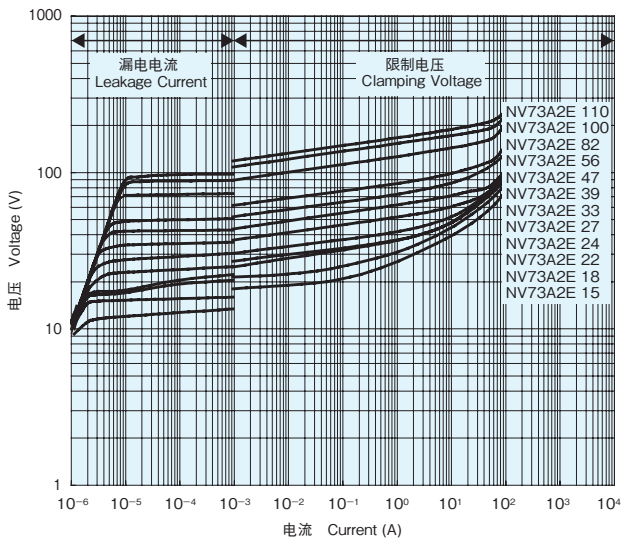
NV73C2B



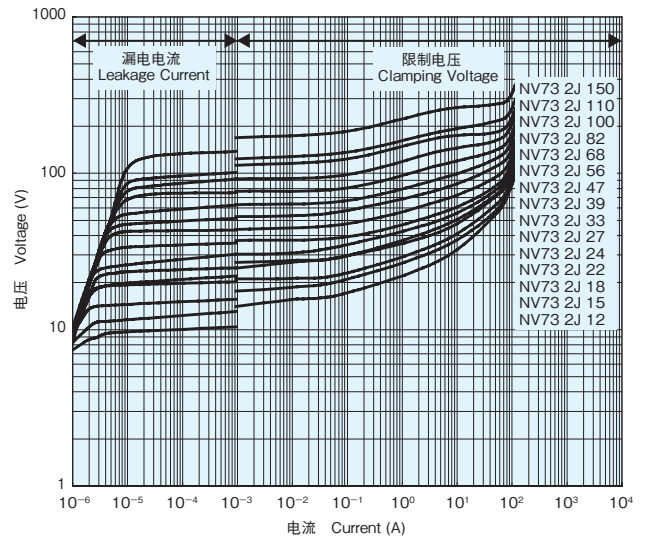
压敏电阻器
Varistors

■ 电压—电流曲线（参考） Voltage-Current Curves (Reference) (Ta=25°C)

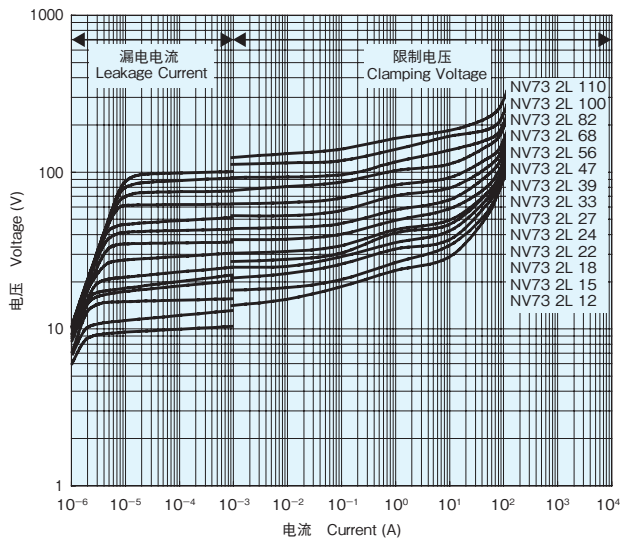
NV73 2E



NV73 2J



NV73 2L



压敏电阻器
Varistors