

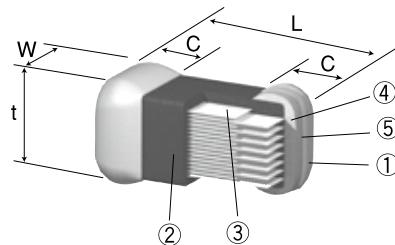
# NV73DSI 负载突降保护层叠型金属氧化物压敏电阻器

Multilayer Type Metal Oxide Varistors for Load Dump Surge



外观颜色：黑色 Body color : Black

## ■ 结构图 Construction



①	镀锡	Sn plating	④	内部侧面电极	Inner side electrode
②	压敏电阻器元件	Varistor element	⑤	镀镍	Ni plating
③	内部电极	Inner electrode			

## ■ 特点 Features

- 有双向对称性，可吸收正负浪涌。
- 适用于汽车电子机器在负载突降时的浪涌对策。
- 对应JASO过渡电压试验A种A-1。
- 可以在高温（125°C）下使用。
- 温度循环强。
- 对应波峰焊和回流焊。
- 对应欧盟RoHS。
- 对应（取得数据）AEC-Q200。
- Symmetrical non-linearity V-I characteristics absorb positive and negative surge.
- Suitable for the protection from load dump surge on the electronic components for automotive.
- Meet for load dump surge test of JASO.
- Operating temperatures up to 125°C.
- High resistance to cyclic temperature stress.
- Suitable for both flow and reflow solderings.
- Products meet EU-RoHS requirements.
- AEC-Q200 Qualified.

## ■ 用途 Applications

- 车载电子设备的过电压的保护。
- 从电动机、继电器等的感应载荷所发生的过电压的吸收。
- 从过电压保护半导体元件。
- Protection from surge to electronic device for automotive.
- Absorption of surge voltages occurred from inductive load of motors, relays, etc.
- Protection of semiconductor elements against over voltages.

## ■ 额定值 Ratings

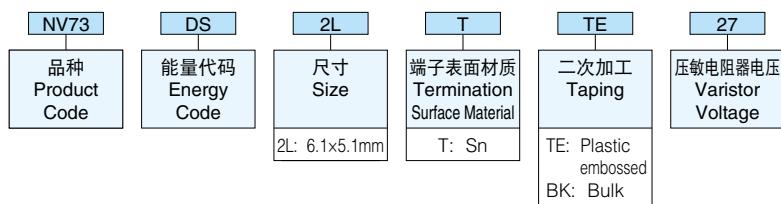
工作温度范围 Operating Temperature Range: -40°C ~ +125°C 保存温度范围 Storage Temperature Range: -40°C ~ +150°C  
包装数/卷 Q'ty/Reel : 800pcs

## ■ 外形尺寸 Dimensions

型号 Type	尺寸 Dimensions (mm)				Weight (g) (1000pcs)
	L	W	t Max.	c	
NV73DS 2L	6.1±0.35	5.1±0.35	3.0	0.85±0.2	350~420

## ■ 品名构成 Type Designation

实例 Example



预知关于此产品含有的环境负荷物质详情（除EU-RoHS以外），请与我们联系。  
编带细节请参考卷末附录C。

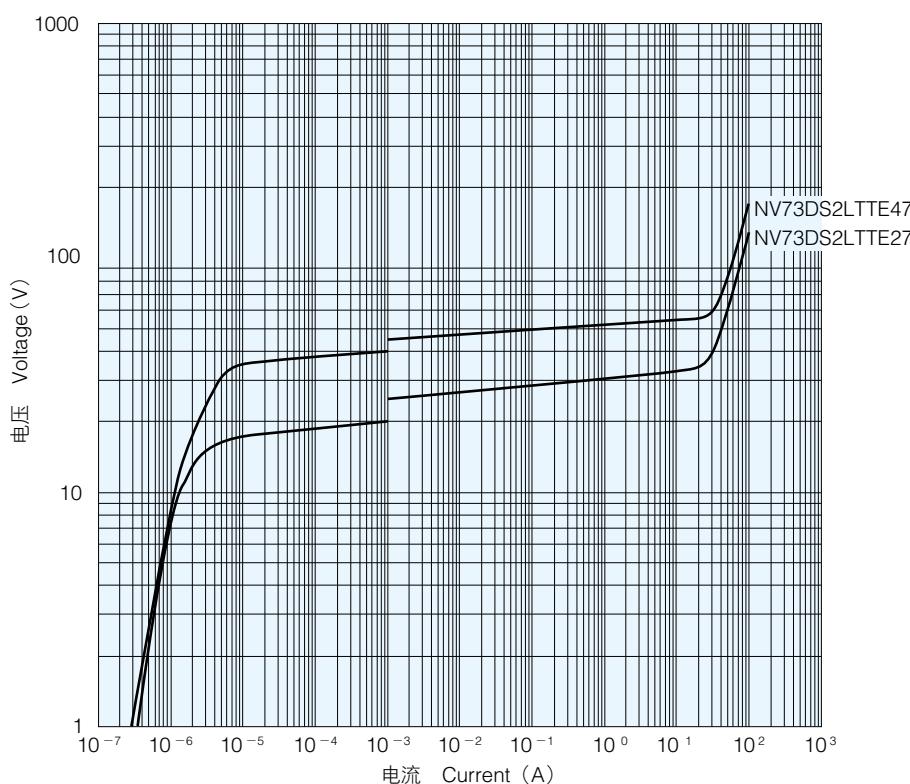
Contact us when you have control request for environmental hazardous material other than the substance specified by EU-RoHS.

For further information on taping, please refer to APPENDIX C on the back pages.

型 号 Type	压敏电阻器电压 (允许范围) Varistor Voltage (Range) (V)		最大允许回路电压 Maximum Allowable Voltage		限制电压 Clamping Voltage (V)	最大电能 Maximum Energy	耐浪涌量 Maximum Peak Current	短时间施加电压 Short-Time Applied Voltage (5min.)
	V <sub>1mA</sub>	A.C.(V <sub>r.m.s.</sub> )	D.C.(V)	V <sub>20A</sub>	(J)	8/20 μ s (A) 1time	(V <sub>DC</sub> )	
NV73DS2LTTE27	20~25	14	16	40	10	200	24.5	
NV73DS2LTTE47	40~45	30	34	60	10	200	38	

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

NV73DS2LTTE27~NV73DS2LTTE47



压敏电阻器  
Varistors

## ■ 性能 Performance

试验项目 Test Items	标准值 Performance Requirements $\Delta V_{1mA} \pm \%$	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 and 10mA are flowed.
耐焊接热 Resistance to soldering heat	10	260±5°C, 10s±0.5s
焊接性 Solderability	端子电极95%以上被新的焊接覆盖。 95% coverage min.	230±5°C, 5s±0.5s
温度突变 Rapid change of temperature	10	-40°C (30min.) / +125°C (30min.) 1000cycles
短时间施加电压 Short-time applied voltage	10	短时间(5分钟)能施加直流电压的最大值。 Maximum value of D.C. voltage that can be applied for a short period of time. (5min.)
耐浪涌量 Maximum peak current	10	额定冲击波电流( $T=8/20\mu s$ )，施加一次。 A single standard impulse current of $8/20\mu s$ is applied.
最大电能 Maximum energy	10	额定的能量( $T=2ms$ )，施加一次。 A single standard impulse of 2ms, once
耐静电量 Electrostatic discharge	10	25kV (大气放电) 25kV (Non contact) (NV73D2A 12: 15kV (Non contact))
耐振性 Vibration resistance	外观应无显著异常。端子电极和本体 破损等没有异常。 No visible damage. No remarkable mechanical damage	振动频率 Vibration frequency: 10Hz~2000Hz 振动全振幅 Full amplitude: 1.5mm, 10Hz~2000Hz~10Hz 20min. XYZ方向各4小时 计12小时 XYZ direction 4hrs for each total 12hrs
施加高温高湿电压 High temperature & high humidity life with bias	10	85°C±2°C, 85%RH, 1000h 连续施加压敏电阻电压( $V1mA$ )×0.85 Applied voltage: Varistor voltage( $V1mA$ )×0.85
加高温直流电压 High temperature life with d.c. bias	10	125°C±2°C, 1000h 连续施加压敏电阻电压( $V1mA$ )×0.85 Applied voltage: Varistor voltage( $V1mA$ )×0.85
热冲击试验 Thermal shock	10	-55°C (15min.) / +125°C (15min.) 300cycles
冲击试验 Shock	10	施加半正弦波, 1ms, 500m/s² 5回 Half sine wave, Applied time: 1ms, Applied cycle: 5cycles
高温保存 High temperature storage life	10	+150°C, 1000h
低温保存 Low temperature storage life	10	-40°C, 1000h