

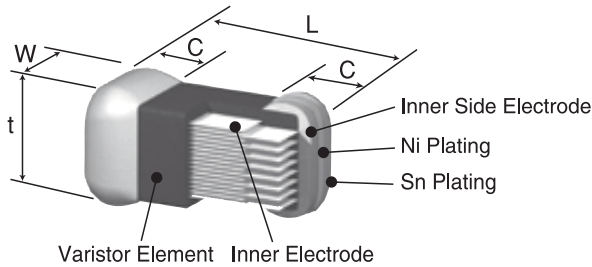


features

- Symmetrical non-linearity V-I characteristics absorb positive and negative surge
- Suitable for protection of automotive applications from load dump surge on electronic components
- Meets JASO load dump surge test requirements
- 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 Tested

Not Recommended for New Design

dimensions and construction



Type (Inch Size Code)	Dimensions inches (mm)			
	L	W	t	C
NV73DS 2L (2420)	.240±.014 (6.1±0.35)	.201±.014 (5.1±0.35)	.146 max. (3.7 max.)	.041±.008 (1.05±0.2)

ordering information

NV73	DS	2L	T	TE	27
Type	Energy Code A B	Size 2L: 6.1 x 5.1mm	Termination Material T: Sn	Packaging TE: 7" embossed plastic (8mm pitch)	Varistor Voltage

applications and ratings

Part Designation	Varistor Voltage (Range) (V)	Maximum Allowable Voltage		Clamping Voltage (V)	Maximum Load Dump Surge Energy	Maximum Peak Current	Short-Time Applied Voltage (5 min)
	V _{1mA}	A.C.(V _{r.m.s.})	D.C.(V)	V _{20A}	J	8/20μs (A) 1 time	(V _{DC})
NV73DSA2LTTE27	20~25	14	16	40	70	200	24.5
NV73DSB2LTTE27	20~25	14	16	40	63	200	24.5
NV73DSB2LTTE47	40~45	30	34	60	65	200	38

Operating temperature range: -40°C to +125°C
Storage temperature range: -40°C to +150°C

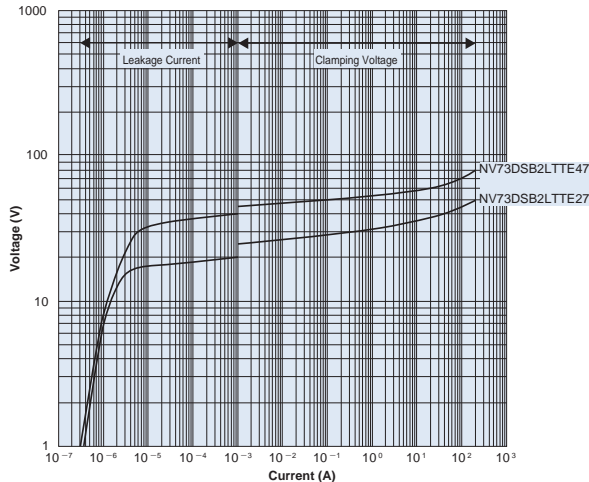
For further information on packaging, please refer to Appendix A.

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

4/25/23

environmental applications

Voltage Current Curves (Ta = +25°C)



Performance Characteristics

Parameter	Requirement ΔV_{1mA}	Test Method
Varistor Voltage	Within specified tolerance	Voltage between terminals when 1mA is flowed
Resistance to Solder Heat	$\pm 10\%$	260°C \pm 5°C, 10 seconds \pm 0.5 second
Solderability	95% coverage minimum	230°C \pm 5°C, 5 seconds \pm 0.5 second
Rapid Change of Temperature	$\pm 10\%$	-40°C (30 minutes)/ +125°C (30 minutes), 1000 cycles
Short-Time Applied Voltage	$\pm 10\%$	Maximum value of D.C. voltage that can be applied for a short period of time (5 min.)
Maximum Peak Current	$\pm 10\%$	A single standard impulse current of 8/20 μ seconds is applied
Maximum Energy	$\pm 10\%$	A single standard impulse of 2m second, once
Electrostatic Discharge	$\pm 10\%$	25kV (Non contact)
Vibration Resistance	No visible damage. No remarkable mechanical damage	Vibration frequency: 10Hz~2000Hz; Full amplitude: 1.5mm, 10Hz~2000Hz~10Hz 20 min. XYZ direction 4 hrs for each total 12 hrs
High Temperature & High Humidity Life with Bias	$\pm 10\%$	85°C \pm 2°C, 85% RH, 1000h, Applied voltage: Varistor voltage (V_{1ma}) x 0.85
High Temperature Life with d.c. Bias	$\pm 10\%$	125°C \pm 2°C, 1000h, Applied voltage: Varistor voltage (V_{1ma}) x 0.85
Thermal Shock	$\pm 10\%$	-55°C (15 min.)/ +125°C (15 min.) 300 cycles
Shock	$\pm 10\%$	Half sine wave, Applied time: 1m second, Applied cycle: 500m/s ² , 5 cycles
High Temperature Storage	$\pm 10\%$	150°C, 1000h
Low Temperature Storage	$\pm 10\%$	-40°C, 1000h

circuit protection