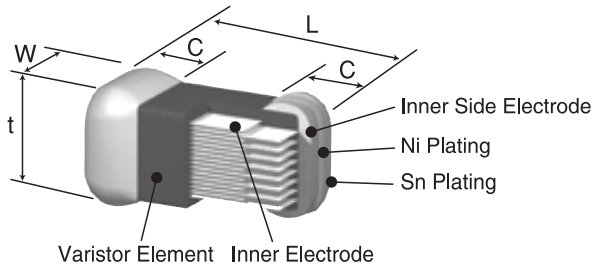




features

- 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

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

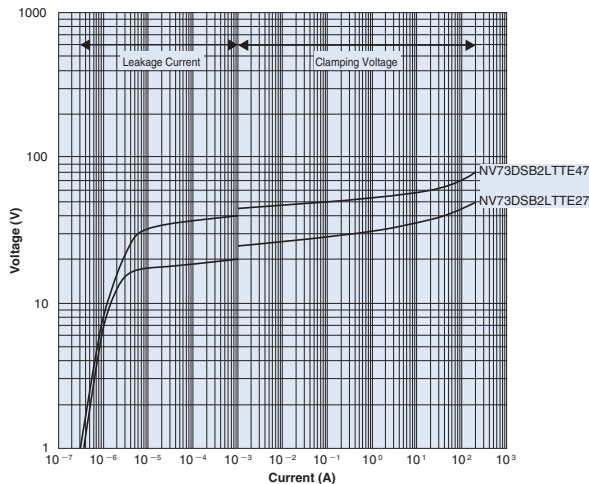
For further information on packaging, please refer to Appendix A.

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

10/29/20

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 $\pm 5^\circ\text{C}$, 10 seconds ± 0.5 second |
| Solderability | 95% coverage minimum | 230°C $\pm 5^\circ\text{C}$, 5 seconds ± 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 $\pm 2^\circ\text{C}$, 85% RH, 1000h, Applied voltage: Varistor voltage (V_{1ma}) x 0.85 |
| High Temperature Life with d.c. Bias | $\pm 10\%$ | 125°C $\pm 2^\circ\text{C}$, 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 |