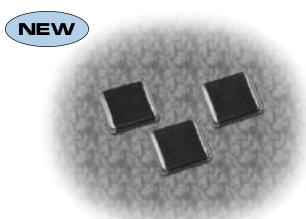


# NV73DS

# multilayer type metal oxide varistor (load dump surge)

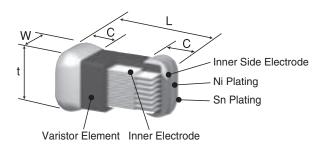


#### features



- 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℃
- High resistance to cyclic temperature stress
- Suitable for both flow and reflow solderings
- Products meet EU RoHS requirements
- AEC-Q200 Qualified

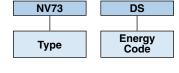
#### dimensions and construction



Туре	Dimensions inches (mm)					
(Inch Size Code)	L	W	t	С		
NV73DS 2L	.240±.014 (6.1±0.35)	.201±.014 (5.1±0.35)	.118 max. (3.0 max.)	.033±.008 (0.85±0.2)		

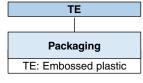
#### ordering information





2L		
Size		
2L: 6.1	x 5.1mm	

	Т		
Termination Material			
T: 5	Sn .		





## applications and ratings

Part Varistor Maximum Allowa Designation Varistor Voltage			Maximum Clamping Voltage (V)	Maximum Energy	Maximum Peak Current 8/20µs (A)	Short-Time Applied Voltage (5 min)	
	$V_{1mA}$	A.C.(V <sub>r.m.s.</sub> )	D.C.(V)	$V_{1A}$	(J)	1 time	(V <sub>DC</sub> )
NV73DS2LTTE27	20~25	14	16	40	10	200	24.5
NV73DS2LTTE47	40~45	30	34	60	10	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.

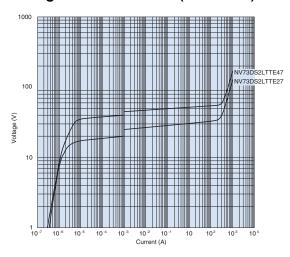


# NV73DS

# multilayer type metal oxide varistor (load dump surge)

# environmental applications

Voltage Current Curves ( $Ta = +25^{\circ}C$ )



#### **Performance Characteristics**

Parameter	Requirement ∆ V1mA	Test Method
Varistor Voltage	Within specified tolerance	Voltage between terminals when 1mA is flowed
Resistance to Solder Heat	±10%	260°C ± 5°C, 10 seconds ± 0.5 second
Solderability	95% coverage minimum	230°C ± 5°C, 5 seconds ± 0.5 second
Rapid Change of Temperature	±10%	-40°C (30 minutes)/ +125°C (30 minutes), 1000 cycles
Short-Time Applied Voltage	±10%	Maximum value of D.C. voltage that can be applied for a short period of time (5 min.)
Maximum Peak Current	±10%	A single standard impulse current of 8/20µ seconds is applied
Maximum Energy	±10%	A single standard impulse of 2m second, once
Electrostatic Discharge	±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	±10%	85°C ± 2°C, 85% RH, 1000h, Applied voltage: Varistor voltage (V1 <sub>ma</sub> ) x 0.85
High Temperature Life with d.c. Bias	±10%	125°C ± 2°C, 1000h, Applied voltage: Varistor voltage (V1 <sub>ma</sub> ) x 0.85
Thermal Shock	±10%	-55°C (15 min.)/ +125°C (15 min.) 300 cycles
Shock	±10%	Half sine wave, Applied time: 1m second, Applied cycle: 500m/s², 5 cycles
High Temperature Storage	±10%	150°C, 1000h
Low Temperature Storage	±10%	-40°C, 1000h