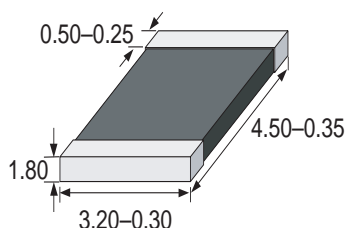


# TVS 1812 SMD

This product is not recommended for new designs. Please refer to Littelfuse series MLA.



Dimensions (mm)



## Multilayer Ceramic Transient Voltage Suppressor Standard Capacity

### Features

Thin layer, high precise techniques  
Lead free  
Bi-directional clamping  
Standard and low capacity  
Available with Nickel/Tin end termination

### Applications

Circuit board and ESD, EFT

Protection of:

- I/O ports
- Keyboards
- LCD's
- Sensors

### WebLinks

Further info see:

[www.wickmanngroup.com](http://www.wickmanngroup.com)

Further technical info see technical varistor file:

[www.wickmanngroup.com/download/techvaristor.pdf](http://www.wickmanngroup.com/download/techvaristor.pdf)

## Specifications

### Packaging

Tape and Reel  
T 7 inch reel (1.000 pcs.)

### Material

Body: Ceramic (ZnO)  
Terminals: Ni/Sn plated (code "P")  
Ag/Pt/Pd non plated (code "N" on request)

### Operating Temperature

-55 to +125°C

### Solderability

acc. to IEC 60068-2-58  
235°C, 2s

### Soldering Heat Resistance

260°C, 10 sec. (IEC 60068-2-58)  
280°C, 5 sec. (IEC 60068-2-58)

### Response Time

<0.5ns

### Temperature coefficient (αV) of clamping voltage (V<sub>c</sub>) @ specified test current

<0.01%/°C

### Power dissipation

0.3W max.

### Standards

IEC 61000-4-2  
MIL-STD-883C

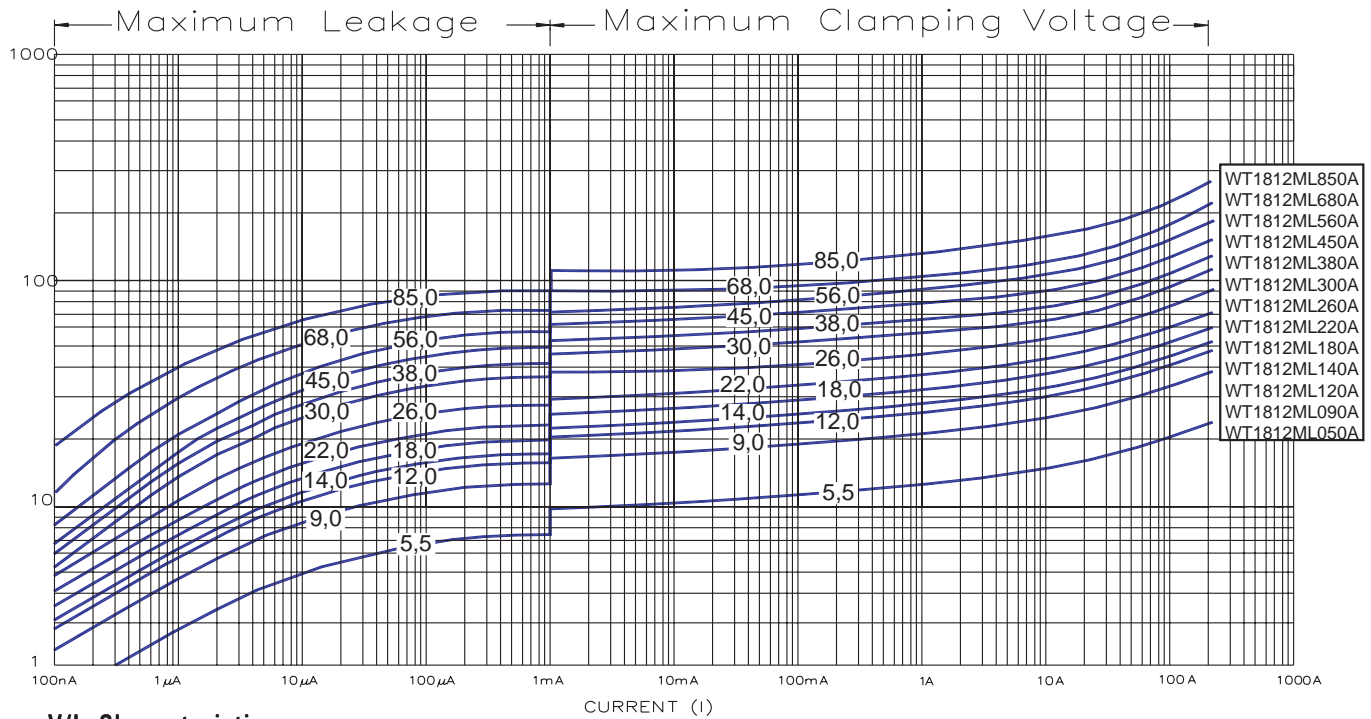
Type	Maximum Ratings (125°C)					Specifications (25°C)				
	max. cont. working voltage		max. non-repetitive surge current (8/20 μs)	max. non-repetitive surge energy (10/1000 μs)	max. clamping voltage at spec. current (8/20 μs)	nominal voltage at 1mA (DC) test current		typ. capacitance		typ. inductance
	V <sub>M(DC)</sub> (V)	V <sub>M(AC)</sub> (V)	I <sub>TM</sub> (A)	W <sub>TM</sub> (J)	V <sub>c</sub> (V@A)	V <sub>N(DC)min.</sub> (V)	V <sub>N(DC)max.</sub> (V)	1KHz C <sub>typ.</sub> (pF)	1MHz C <sub>typ.</sub> (pF)	L <sub>typ.</sub> (nH)
WT1812ML050A	5,5	4,0	500	0,8	15,5 @ 10	7,1	9,8	12900	11200	2,5
WT1812ML090A	9,0	6,0	500	1,0	25,0 @ 10	10,0	14,5	7100	6070	2,5
WT1812ML120A	12,0	9,0	800	1,8	30,0 @ 10	14,0	18,5	6500	5260	2,5
WT1812ML140A	14,0	11,0	800	2,0	33,0 @ 10	16,0	21,0	4410	3940	2,5
WT1812ML180A	18,0	14,0	800	2,3	38,0 @ 10	22,0	28,0	4000	3500	2,5
WT1812ML220A	22,0	17,0	800	2,5	44,0 @ 10	24,3	30,0	3670	2990	2,5
WT1812ML260A	26,0	20,0	800	3,0	54,0 @ 10	29,5	38,0	2670	2320	2,5
WT1812ML300A	30,0	25,0	800	3,6	65,0 @ 10	35,0	43,0	2320	1890	2,5
WT1812ML380A	38,0	30,0	800	4,2	77,0 @ 10	42,3	51,7	1960	1680	2,5
WT1812ML450A	45,0	35,0	800	4,5	90,0 @ 10	50,0	61,0	1370	1150	2,5
WT1812ML560A	56,0	40,0	500	4,8	110,0 @ 10	61,2	74,0	950	730	2,5
WT1812ML680A	68,0	50,0	400	4,5	135,0 @ 10	74,0	90,0	590	500	2,5
WT1812ML850A	85,0	60,0	400	5,8	165,0 @ 10	91,0	115,0	530	450	2,5

### Order Information

Qty.	Order-Number	Type	Terminal Code	Packaging
		WT1812ML140	A	T

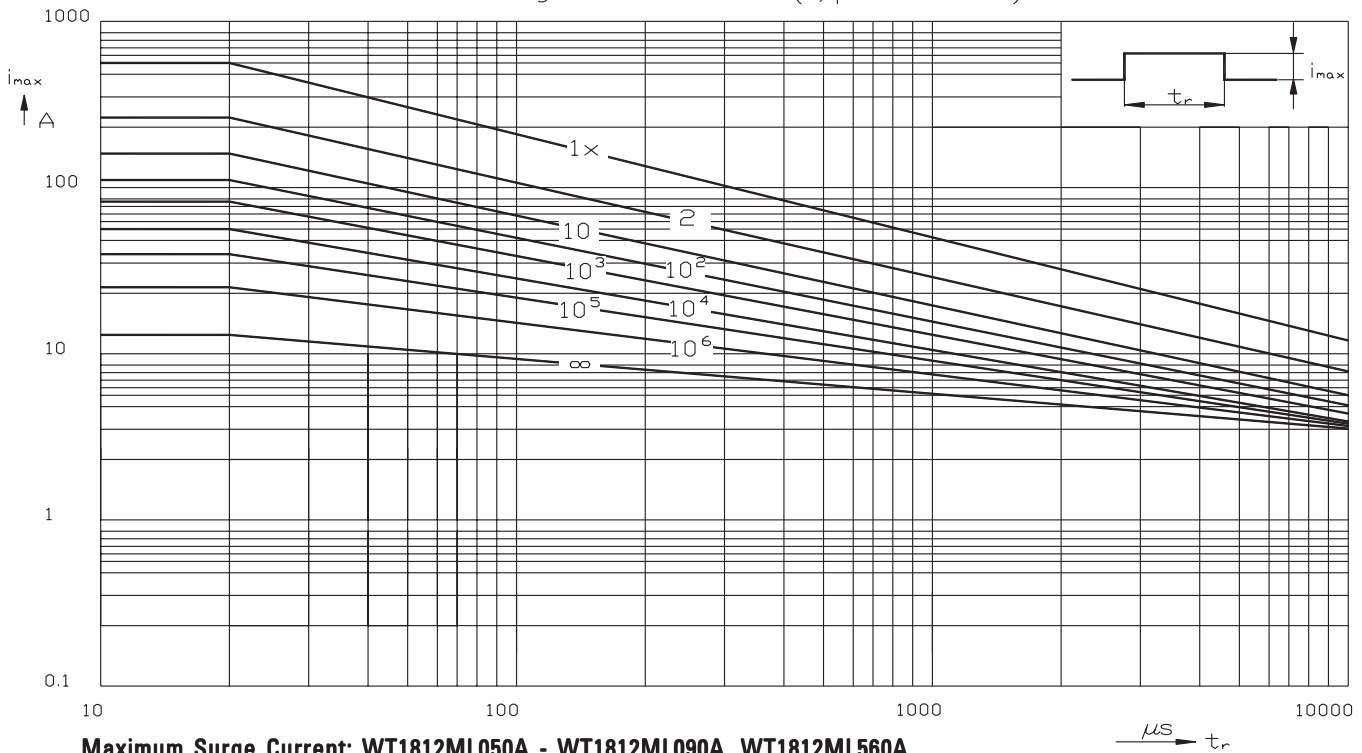
Specifications are subject to change without notice

# TVS 1812 SMD



V/I Characteristics

Maximum surge current  $i_{max} = f(t_r, \text{pulse train})$



Maximum Surge Current: WT1812ML050A - WT1812ML090A, WT1812ML560A

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