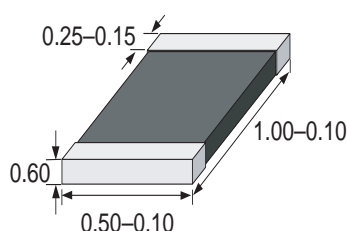


TVS 0402 SMD

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

**Dimensions (mm)**

Multilayer Ceramic Transient Voltage Suppressor

Low 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

Further technical info see technical varistor file:

www.wickmanngroup.com/download/techvaristor.pdf

Specifications**Packaging**

Tape and Reel
T 7 inch reel (10.000 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 (α_V) of clamping voltage (V_c) @ specified test current

<0.01%/°C

Power dissipation

0.05W max.

Standards

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

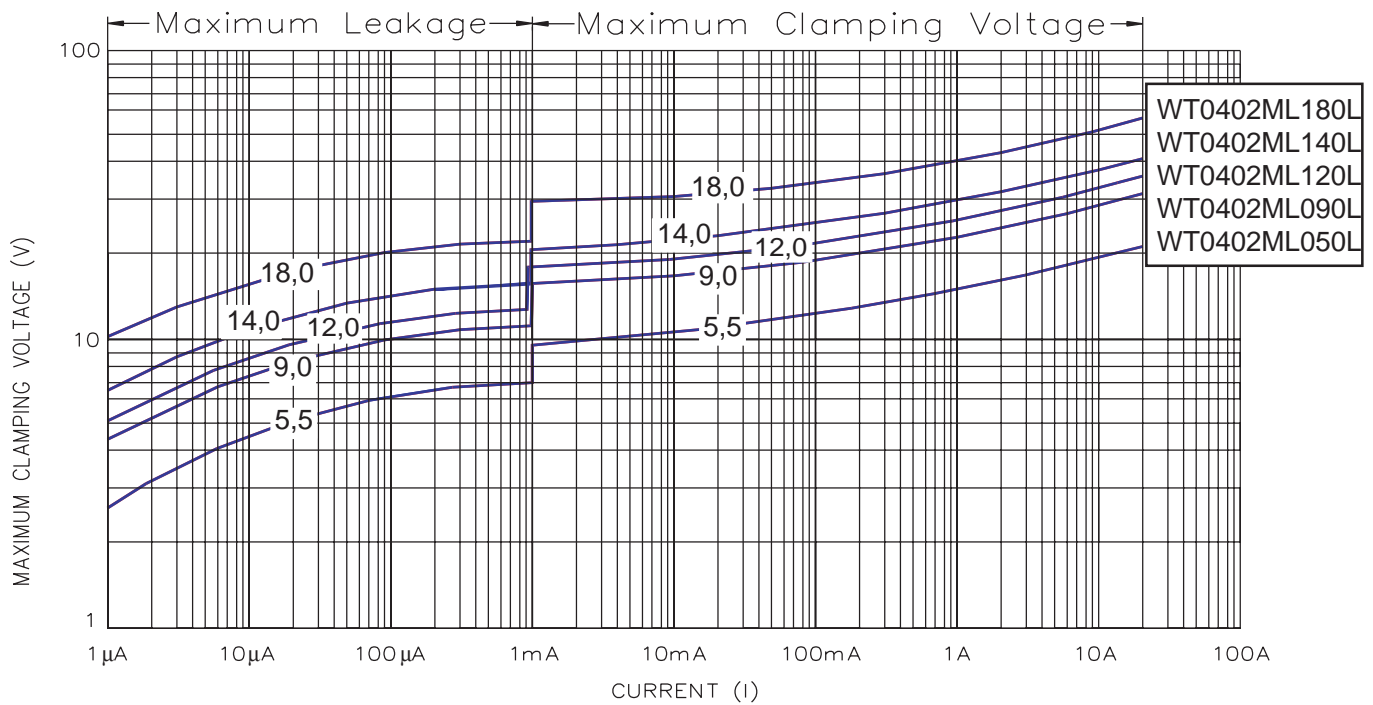
Maximum Ratings (125°C)						Specifications (25°C)				
Type	max. cont. working voltage		max. non-repetitive surge current (8/20 μ s)	max. non-repetitive surge energy (10/1000 μ s)	max. clamping voltage at spec. current (8/20 μ s)	nominal voltage at 1mA (DC) test current		typ. capacitance		typ. inductance
	$V_{M(DC)}$ (V)	$V_{M(AC)}$ (V)				$V_{N(DC)min.}$ (V)	$V_{N(DC)max.}$ (V)	1KHz $C_{typ.}$ (pF)	1MHz $C_{typ.}$ (pF)	
WT0402ML050L	5,5	4,0	20	0,05	15,5 @ 1	7,1	9,8	330	280	0,8
WT0402ML090L	9,0	6,0	20	0,05	23,0 @ 1	10,0	14,5	230	200	0,8
WT0402ML120L	12,0	9,0	20	0,05	27,0 @ 1	14,0	18,5	180	160	0,8
WT0402ML140L	14,0	11,0	20	0,05	30,0 @ 1	16,0	21,0	160	145	0,8
WT0402ML180L	18,0	14,0	20	0,05	40,0 @ 1	22,0	28,0	95	85	0,8

Order Information

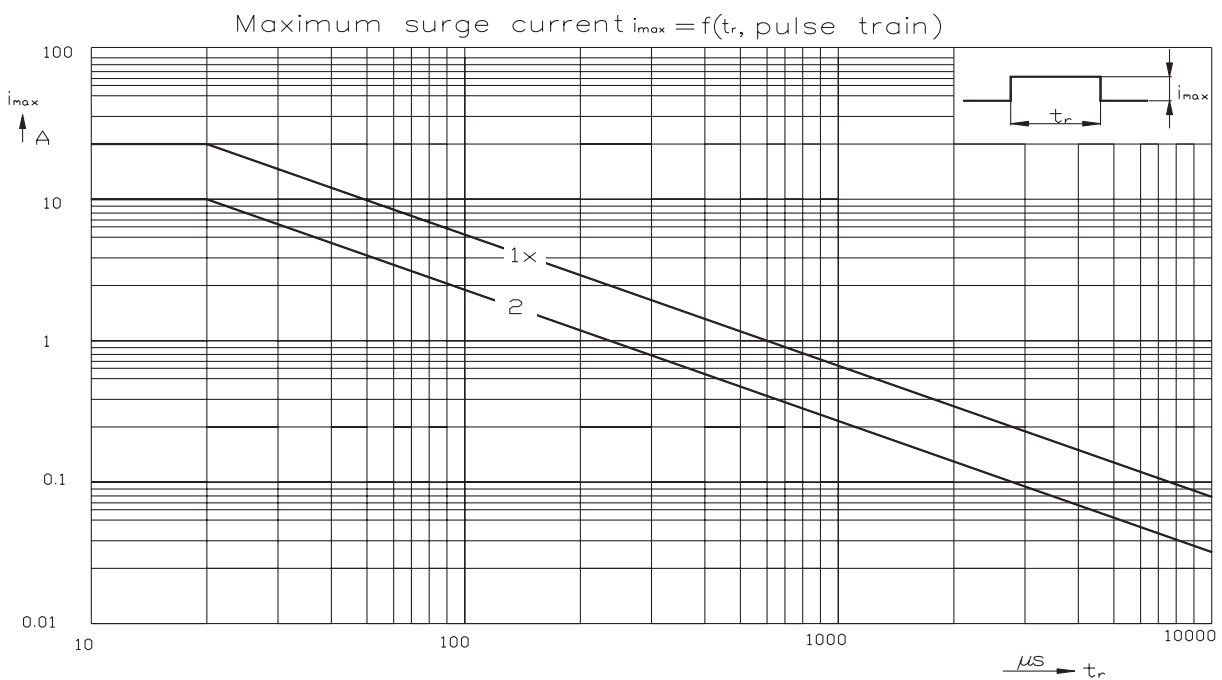
Qty.	Order-Number	Type	Terminal Code	Packaging
		WT0402ML050	L	P
				T

Specifications are subject to change without notice

TVS 0402 SMD



V/I Characteristics



Maximum Surge Current