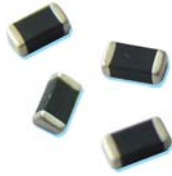
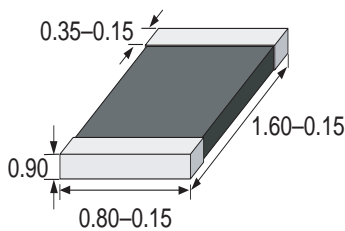


**TVS 0603 SMD**

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 (4.000 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 ( $\alpha V$ ) 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 $\mu$ s)	max. non-repetitive surge energy (10/1000 $\mu$ s)	max. clamping voltage at spec. current (8/20 $\mu$ 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)	
WT0603ML050L	5,5	4,0	20	0,05	15,5 @ 1	7,1	9,8	420	360	1,0
WT0603ML030A	3,3	2,5	30	0,10	10,0 @ 2	3,8	7,0	1260	1080	1,0
WT0603ML050A	5,5	4,0	30	0,10	15,5 @ 2	7,1	9,8	750	640	1,0
WT0603ML090A	9,0	6,0	30	0,10	23,0 @ 2	10,0	14,5	340	300	1,0
WT0603ML120A	12,0	9,0	30	0,10	27,0 @ 2	14,0	18,5	415	340	1,0
WT0603ML140A	14,0	11,0	30	0,10	30,0 @ 2	16,0	21,0	280	240	1,0
WT0603ML180A	18,0	14,0	30	0,10	40,0 @ 2	22,0	28,0	250	220	1,0
WT0603ML220A	22,0	17,0	30	0,10	44,0 @ 2	24,3	30,0	310	270	1,0
WT0603ML260A	26,0	20,0	30	0,10	58,0 @ 2	29,5	38,0	140	130	1,0
WT0603ML300A	30,0	25,0	30	0,10	65,0 @ 2	35,0	43,0	120	110	1,0

**Order Information**

Qty.	Order-Number	Type	Terminal Code	Packaging
		WT0603ML140	A	P
				T

Specifications are subject to change without notice

**WebSite**

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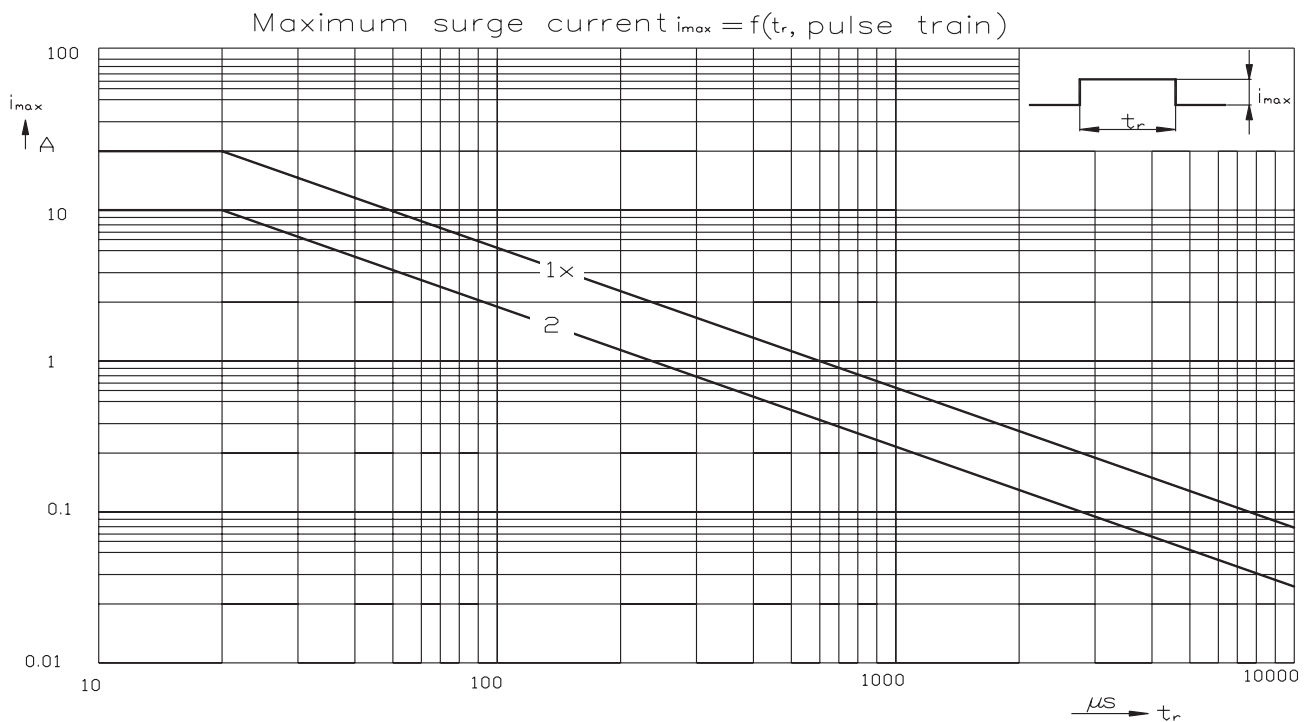
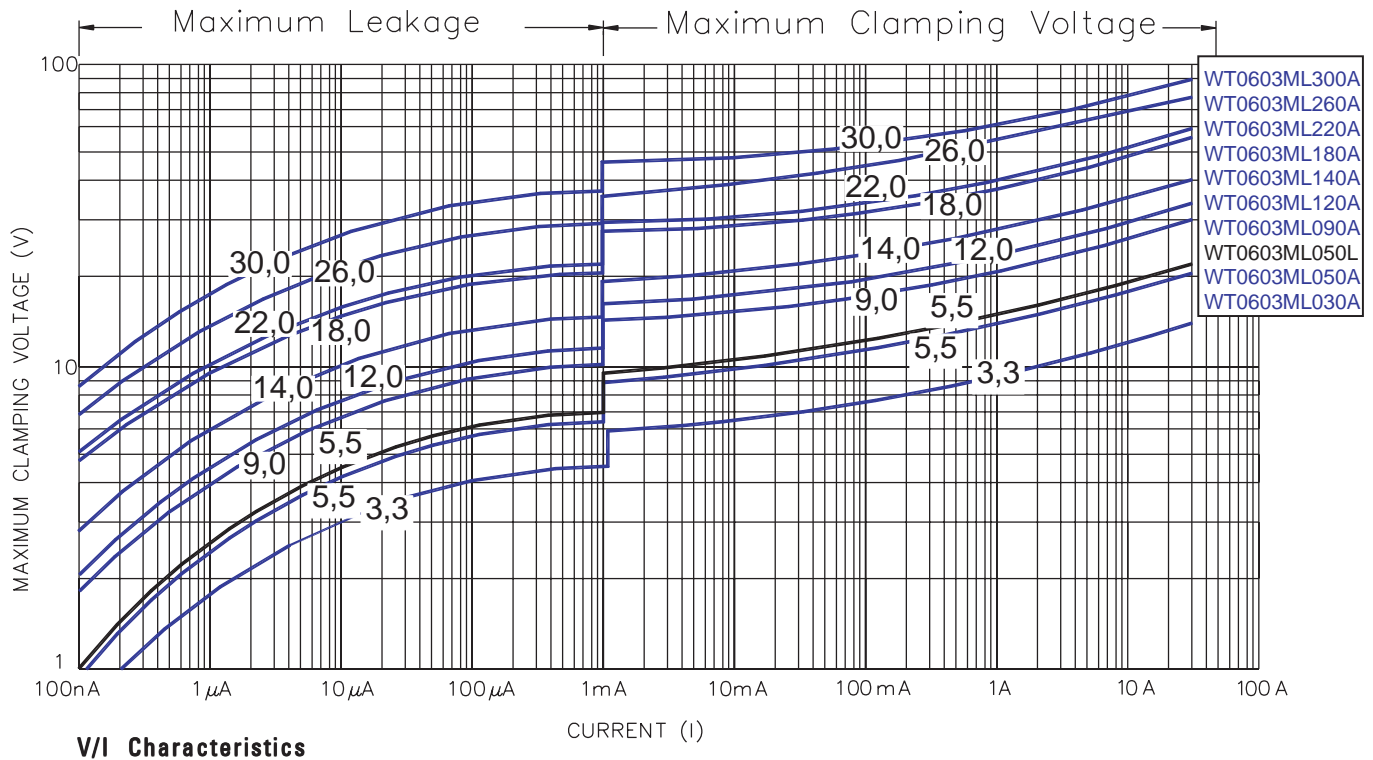
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## TVS 0603 SMD



**Maximum Surge Current: WT0603ML050L**

## TVS 0603 SMD

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

