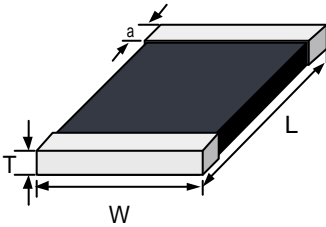


# TVS 1206 SMD



Dimensions



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
<b>T</b>	-	0.063	-	1.60
<b>a</b>	0.010	0.030	0.25	0.75
<b>L</b>	0.118	0.134	3.00	3.40
<b>W</b>	0.055	0.071	1.40	1.80

## Multilayer Ceramic Transient Voltage Suppressor Standard Capacity

### Features

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

### Applications

Circuit board and ESD, EFT

Protection of:

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

## Specifications

### Packaging

Tape and Reel  
T 7 inch reel (3.000 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  
0.1W max.

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

## Maximum Ratings (125°C)

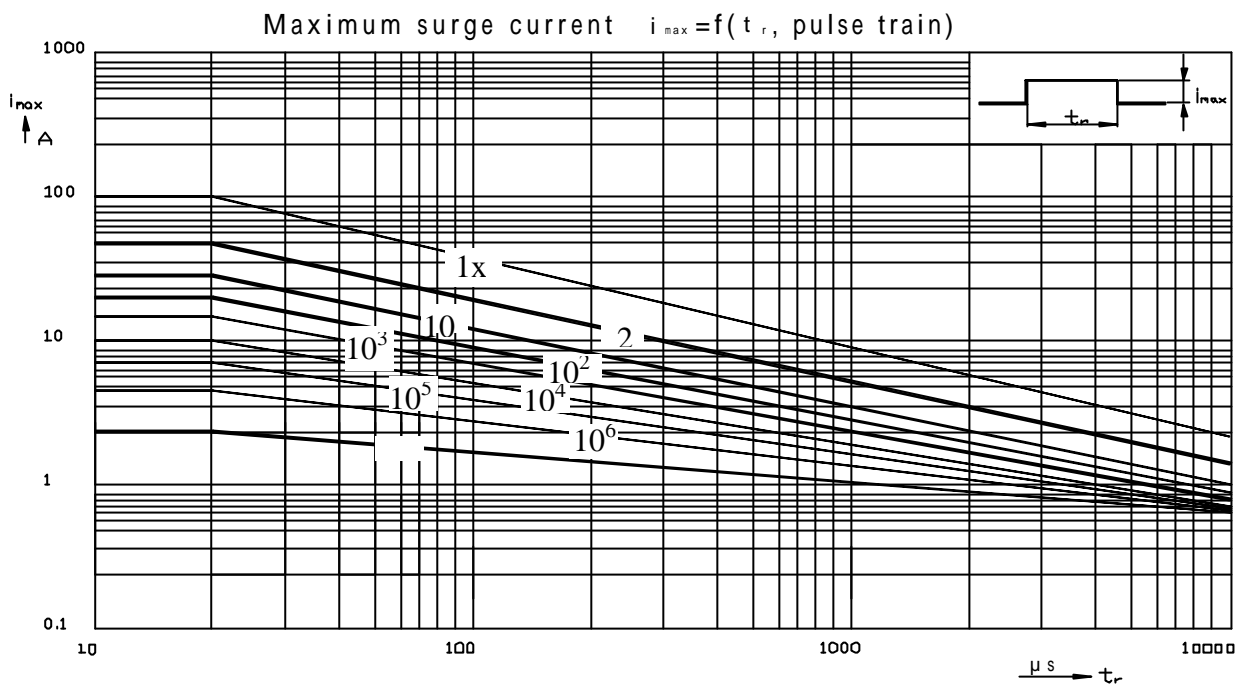
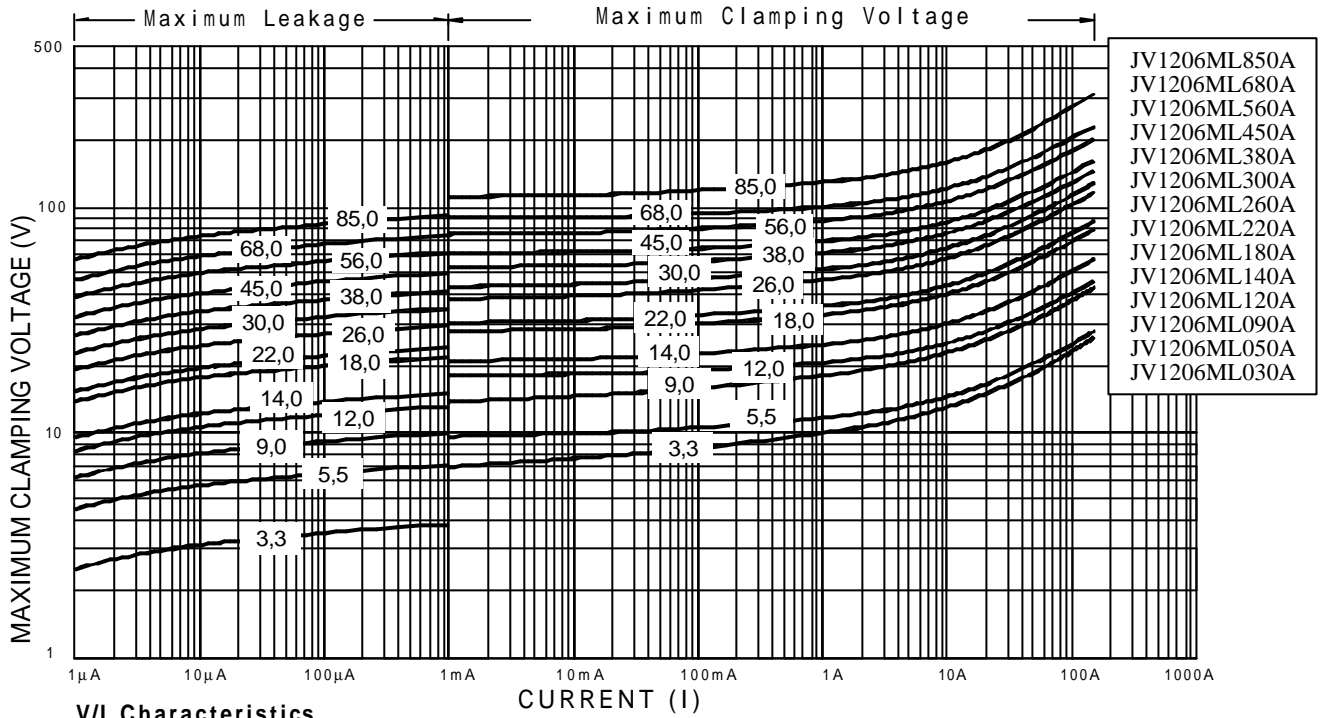
Type	max. cont. working voltage		max. non-repetitive surge current	max. non-repetitive surge energy	max. clamping voltage at spec. current	nominal voltage at 1mA (DC) test current		typ. capacitance		typ. inductance
	$V_{M(DC)}$ (V)	$V_{M(AC)}$ (V)	$I_{TM}$ (A)	$W_{TM}$ (J)	$V_C$ (V@A)	$V_{N(DC)min.}$ (V)	$V_{N(DC)max.}$ (V)	1KHz $C_{typ.}$ (pF)	1MHz $C_{typ.}$ (pF)	$L_{typ.}$ (nH)
JV1206ML030A	3,3	2,5	100	0.40	14,0 @ 10	3,8	7,0	7900	7100	1,8
JV1206ML050A	5,5	4,0	150	0.40	15,5 @ 10	7,1	9,8	9200	8000	1,8
JV1206ML090A	9,0	6,0	150	0.40	23,0 @ 10	10,0	14,5	3450	3000	1,8
JV1206ML120A	12,0	9,0	150	0.50	25,0 @ 10	14,0	18,5	2200	1900	1,8
JV1206ML140A	14,0	11,0	150	0.40	30,0 @ 10	16,0	21,0	1200	1000	1,8
JV1206ML180A	18,0	14,0	200	0.40	40,0 @ 10	22,0	28,0	1210	1030	1,8
JV1206ML220A	22,0	17,0	200	0.60	44,0 @ 10	24,3	30,0	870	750	1,8
JV1206ML260A	26,0	20,0	200	0.60	58,0 @ 10	29,5	38,0	800	680	1,8
JV1206ML300A	30,0	25,0	200	0.80	65,0 @ 10	35,0	43,0	560	500	1,8
JV1206ML380A	38,0	30,0	200	0.80	77,0 @ 10	42,3	51,7	460	400	1,8
JV1206ML450A	45,0	35,0	200	1.00	86,0 @ 10	50,0	61,0	430	350	1,8
JV1206ML560A	56,0	40,0	180	1.00	110,0 @ 10	61,2	74,0	315	280	1,8
JV1206ML680A	68,0	50,0	180	1.00	135,0 @ 10	74,0	90,0	270	250	1,8
JV1206ML850A	85,0	60,0	100	1.00	165,0 @ 10	91,0	115,0	180	160	1,8

Order Information

Qty.	Order-Number	Type	Terminal Code	Packaging
		<b>JV1206ML560</b>	<b>A</b>	<b>P</b>
			<b>P</b>	<b>T</b>

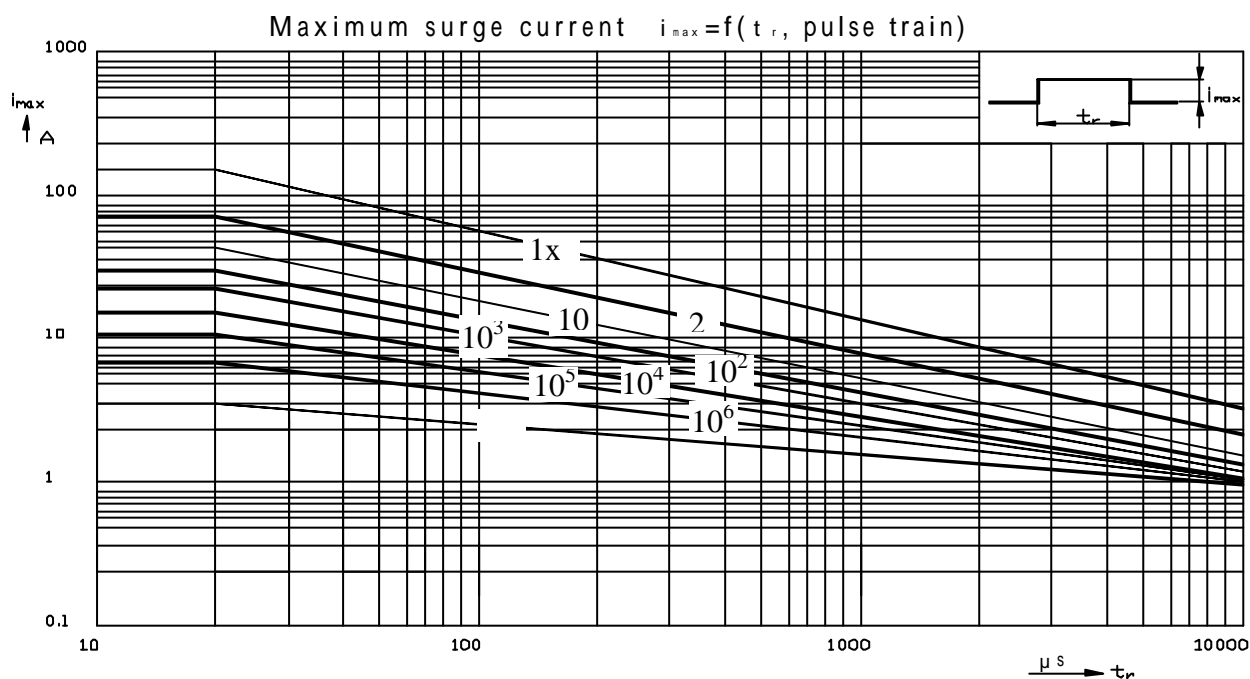
Specifications are subject to change without notice

## TVS 1206 SMD

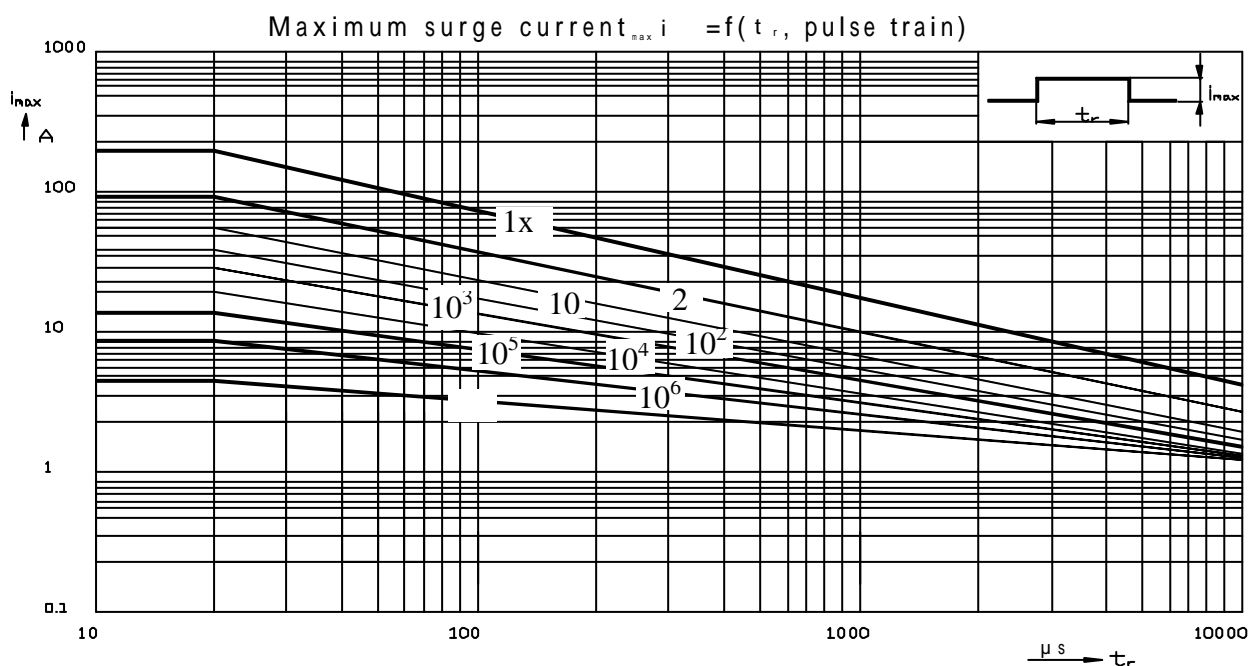


Maximum Surge Current: **JV1206ML030A, JV1206ML850A**

## TVS 1206 SMD

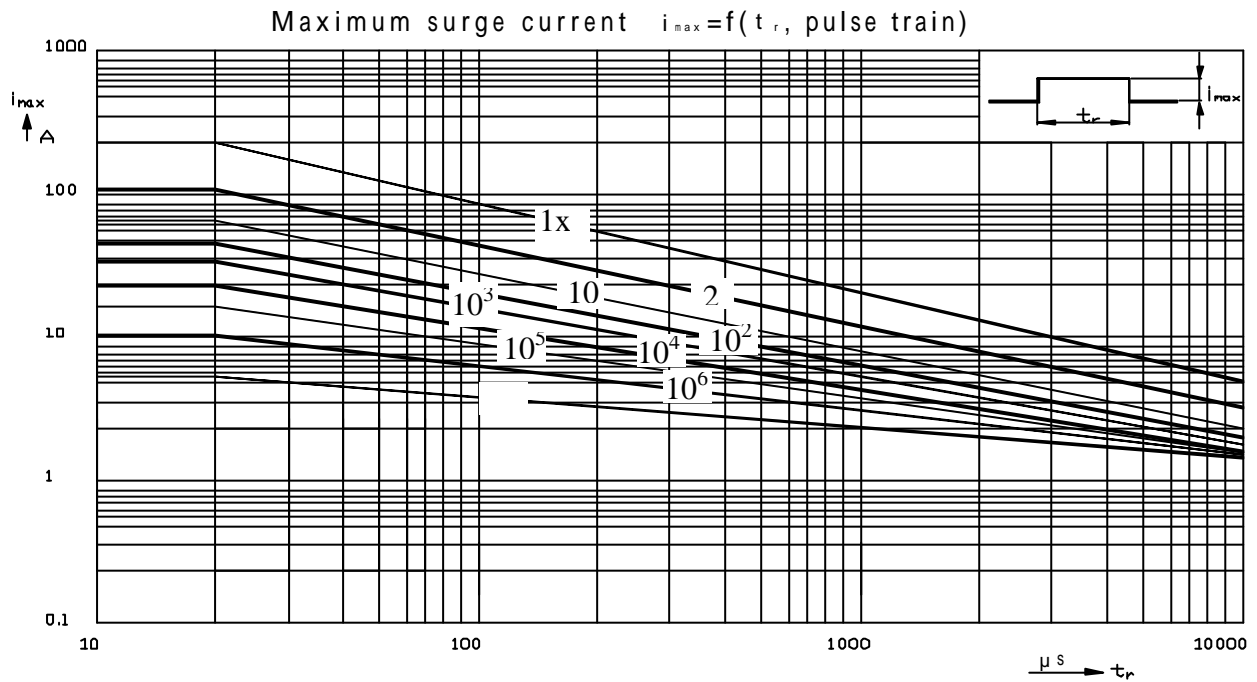


Maximum Surge Current: **JV1206ML050A - JV1206ML140A**



Maximum Surge Current: **JV1206ML560A - JV1206ML680A**

## TVS 1206 SMD



Maximum Surge Current: **JV1206ML180A - JV1206ML450A**



## TVS 1206 SMD

### Multilayer Ceramic Transient Voltage Suppressor Low Capacity



### Specifications

Packaging  
Tape and Reel  
T 7 inch reel (3.000 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  
0.1W max.

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

### Features

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

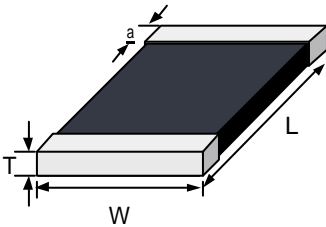
### Applications

Circuit board and ESD, EFT

Protection of:

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

### Dimensions



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
T	-	0.063	-	1.60
a	0.010	0.030	0.25	0.75
L	0.118	0.134	3.00	3.40
W	0.055	0.071	1.40	1.80

### Maximum Ratings (125°C)

### Specifications (25°C)

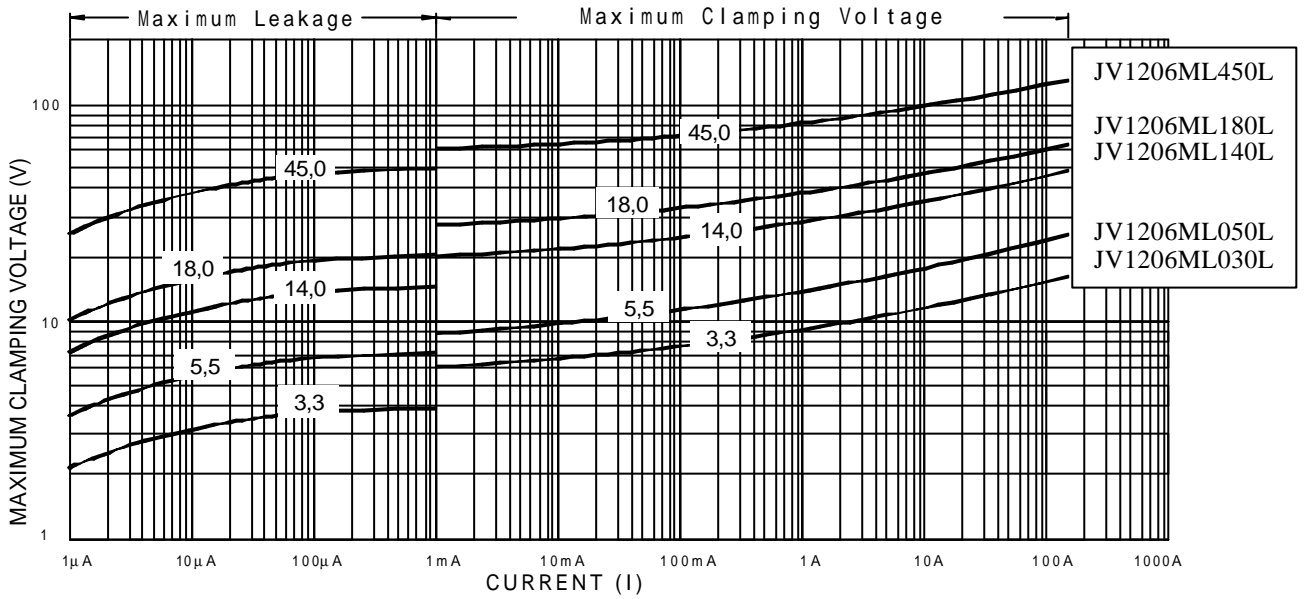
Type	max. cont. working voltage		max. non-repetitive surge current (8/20 $\mu$ s)	max. non-repetitive surge energy (10/1000 $\mu$ s)	max. clamping voltage at spec. current (8/20 $\mu$ s)	nominal voltage at 1mA (DC) test current		typ. capacitance		typ. inductance
	$V_{M(DC)}$ (V)	$V_{M(AC)}$ (V)	$I_{TM}$ (A)	$W_{TM}$ (J)	$V_c$ (V@A)	$V_{N(DC)min.}$ (V)	$V_{N(DC)max.}$ (V)	1KHz $C_{typ.}$ (pF)	1MHz $C_{typ.}$ (pF)	$L_{typ.}$ (nH)
JV1206ML030L	3,3	2,5	40	0,10	10,0 @ 2	3,8	7,0	4330	3600	1,8
JV1206ML050L	5,5	4,0	40	0,10	15,5 @ 2	7,1	9,8	3450	2900	1,8
JV1206ML140L	14,0	11,0	40	0,10	30,0 @ 2	16,0	21,0	890	750	1,8
JV1206ML180L	18,0	14,0	40	0,10	40,0 @ 2	22,0	28,0	760	640	1,8
JV1206ML450L	45,0	35,0	100	0,40	100,0 @ 10	50,0	61,0	225	190	1,8

Order Information

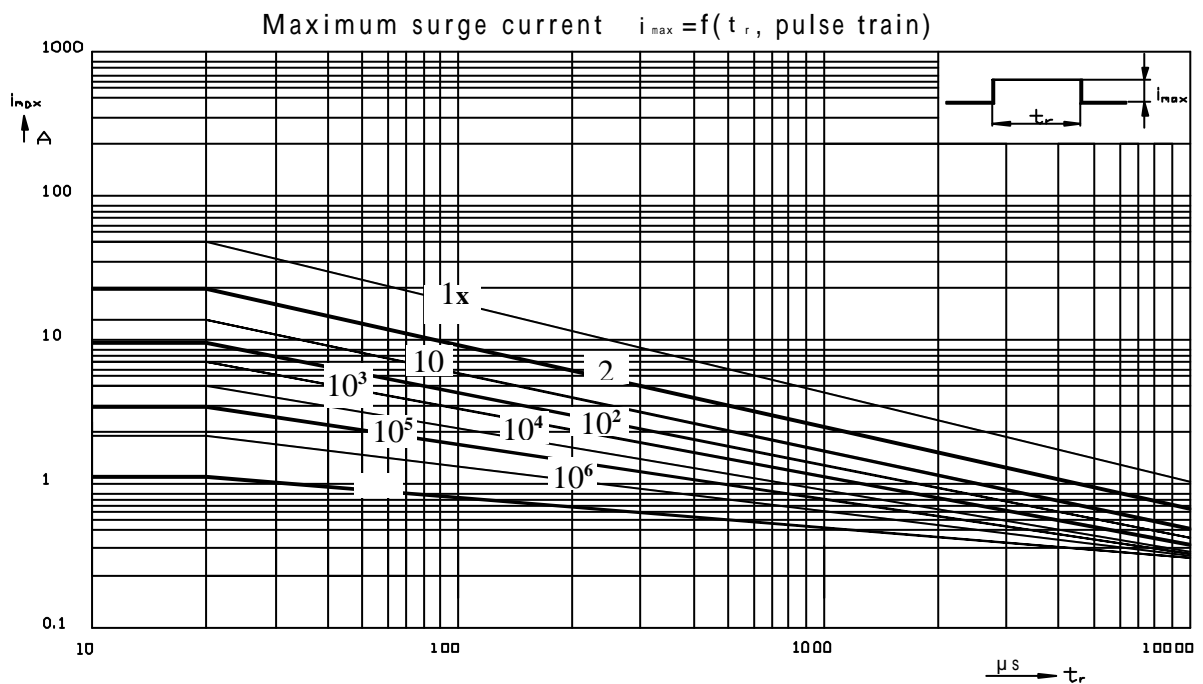
Qty.	Order-Number	Type	Terminal Code	Packaging
		JV 1206ML140	L	P
				T

Specifications are subject to change without notice

## TVS 1206 SMD



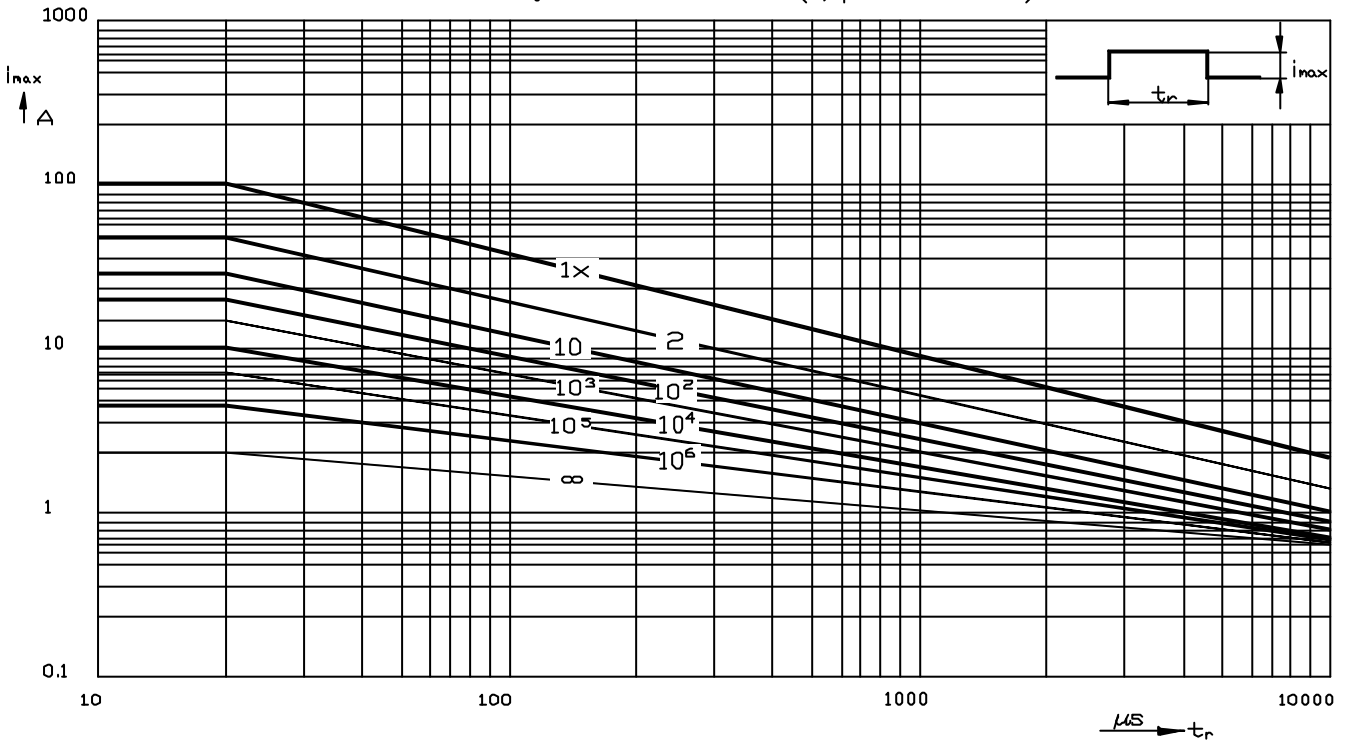
V/I Characteristics



Maximum Surge Current: **JV1206ML030L - JV1206ML180L**

## TVS 1206 SMD

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



Maximum Surge Current: **JV1206ML450L**