

TVS 0603 SMD

Multilayer Ceramic Transient
Voltage Suppressor
Standard Capacity

Specifications



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

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 (α_V) of clamping
voltage (V_C) @ specified test current

<0.01%/°C

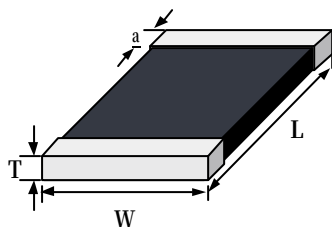
Power dissipation

0.05W max.

Standards

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

Dimensions



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
T	-	0.035	-	0.90
a	0.008	0.020	0.20	0.50
L	0.057	0.069	1.45	1.75
W	0.026	0.037	0.65	0.95

Maximum Ratings (125°C)

Specifications (25°C)

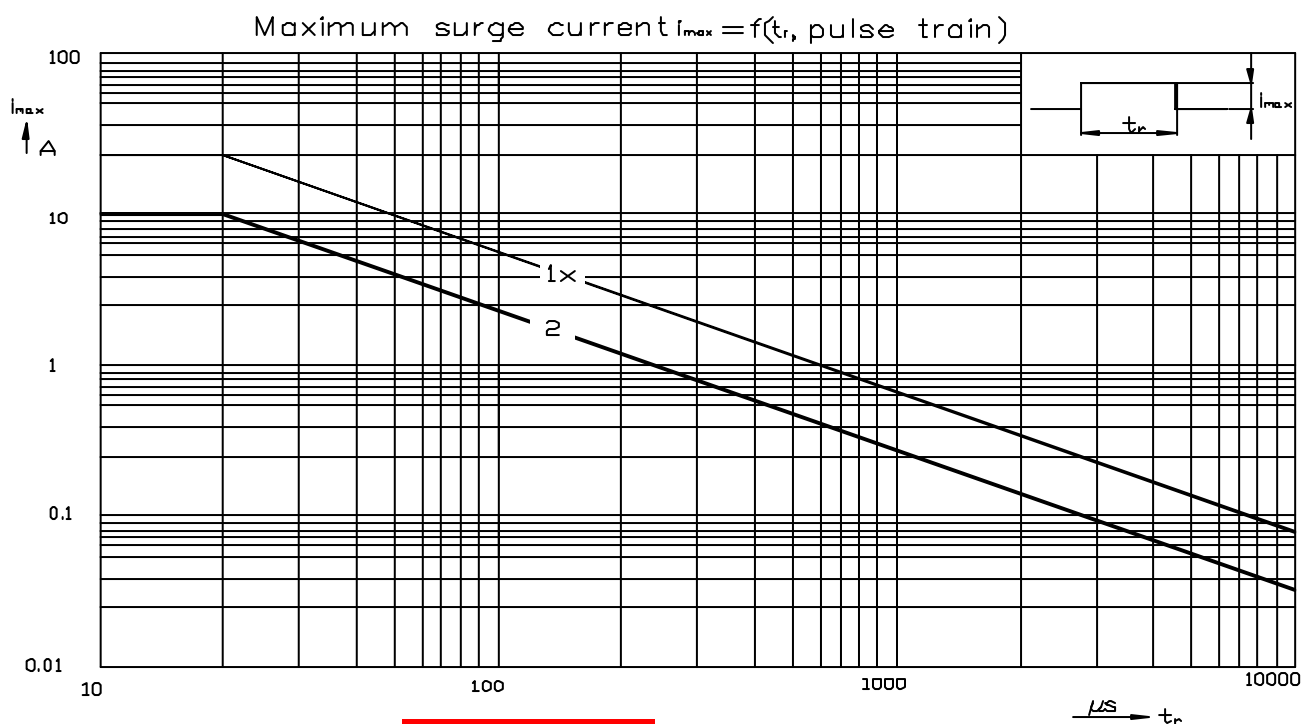
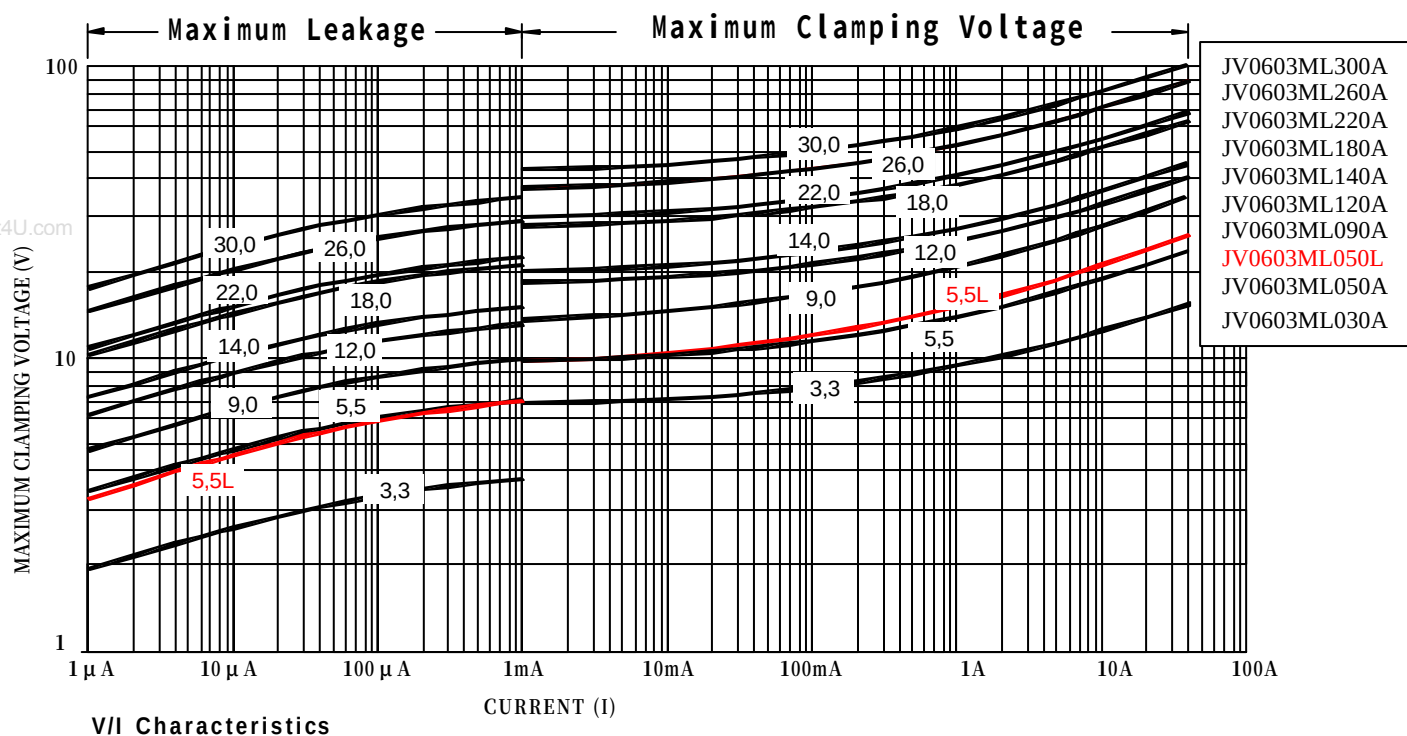
Type	max. cont. working voltage		max. non-repetitive surge current (8/20 μs)	max. non-repetitive surge energy (10/1000 μs)	max. clamping voltage at spec. current (8/20 μs)	nominal voltage at 1mA (DC) test current		typ. capacitance		typ. inductance
	V _{M(DC)} (V)	V _{M(AC)} (V)	I _{TM} (A)	W _{TM} (J)	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)
JV0603ML050L	5,5	4,0	20	0,05	15,5 @ 1	7,1	9,8	420	360	1,0
JV0603ML030A	3,3	2,5	30	0,10	10,0 @ 2	3,8	7,0	1260	1080	1,0
JV0603ML050A	5,5	4,0	30	0,10	15,5 @ 2	7,1	9,8	750	640	1,0
JV0603ML090A	9,0	6,0	30	0,10	23,0 @ 2	10,0	14,5	340	300	1,0
JV0603ML120A	12,0	9,0	30	0,10	27,0 @ 2	14,0	18,5	415	340	1,0
JV0603ML140A	14,0	11,0	30	0,10	30,0 @ 2	16,0	21,0	280	240	1,0
JV0603ML180A	18,0	14,0	30	0,10	40,0 @ 2	22,0	28,0	250	220	1,0
JV0603ML220A	22,0	17,0	30	0,10	44,0 @ 2	24,3	30,0	310	270	1,0
JV0603ML260A	26,0	20,0	30	0,10	58,0 @ 2	29,5	38,0	140	130	1,0
JV0603ML300A	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
		JV 0603ML140	A	P
				T

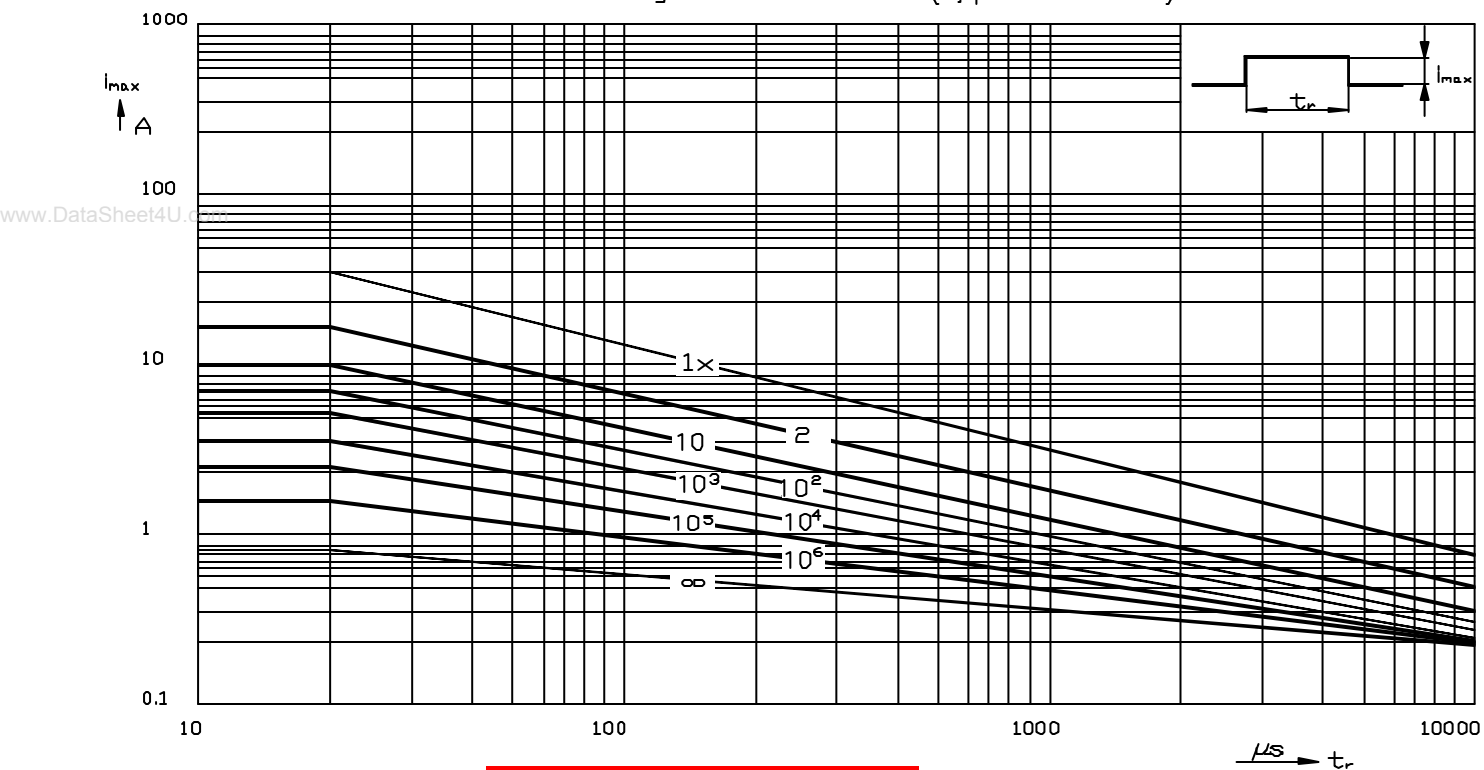
Specifications are subject
to change without notice

TVS 0603 SMD



Maximum Surge Current: **JV0603ML050L**

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

Maximum Surge Current: TV0603MT.030A-TV0603MT.300A