

MULTILAYER VARISTORS

Transient Voltage Surge Suppressors

Applications

- Suppression of circuit board level Surge, ESD, EFT and other transient events
- ESD protection for components sensitive to IEC 61000-4-2, MIL-STD-883C Method 3015.7, and other industry specifications
- Provides on-board transient voltage protection for ICs and Transistors
- Used to help achieve Electromagnetic Compliance of end products
- Replace larger surface mount TVS zeners diodes in many applications

Features

- Thinlayer and high precise technique
- Able to withstand high surge current
- Bi-directional clamping characteristic
- Standard / Low capacitance chip TVS types available
- Available with Nickel / Tin end terminations

Specification

- Operating Temperature ● Solderability
-55 to +125°C 260°C 2sec (IEC 60068-2-58)
- Soldering Heat Resistance
260°C 5sec (IEC 60068-2-58)
- Response time < 0.5ns
- Temperature coefficient (αV) of clamping Voltage (V_c)
@ specified test current <0.01% / °C
- Leadless 0402, 0603, 0805, 1206, 1210, 1812, 2220 chip sizes
- Operating voltage range (DC) available from 3.3V to 120V
- Withstand ESD durability test severity of IEC 61000-4-2 level 4

PRODUCT NUMBER SYSTEM

JV 05 ML 03 302 P T
 1 2 3 4 5 6 7 8

1=Series Code

JV : High Power Series

2=Size code

05 : EIA 0805

3=Type Code

ML : Multilayer

4=Rated Voltage Code

03 : 3.3 VM(DC)

5=Capacitance

302 : $30 \times 10^2 = 3000$ pF Typical

6=End Termination

P : Nickle/Tin plated

7=Packing Code

T : Tape & Reel

B : Bulk

8=Special Code

DEVICE RATINGS AND SPECIFICATIONS

PART NUMBER	Maximum Ratings(125°C)					Specifications(25°C)		
	Maximum Continuous Working Voltage		Maximum Non-Repetitive Surge Current (8/20µs)	Maximum Non-Repetitive Surge Energy (10/1000µs)	Maximum Clamping Voltage at Specified Current (8/20µs)	Nominal Voltage at 1 mA (DC) Test Current		Typical Capacitance @1 MHz
	V _{M(DC)}	V _{M(AC)}	I _{TM}	W _{TM}	V _c	V _{N(DC)} min.	V _{N(DC)} max.	C
	(V)	(V)	(A)	(J)	(V)	(V)	(V)	(pF)
JV 05ML 03302 PT	3.3	2.5	60	0.3	12 at 1A	3.8	7.0	3000
JV 05ML 05172 PT	5.5	4	100	0.3	17 at 1A	7.1	9.8	1700
JV 05ML 09971 PT	9	6	120	0.3	26 at 1A	10.0	14.5	970
JV 05ML 12951 PT	12	9	120	0.3	30 at 1A	14.0	18.5	950
JV 05ML 14102 PT	14	11	120	0.3	35 at 1A	16.0	21.0	1050
JV 05ML 18691 PT	18	14	120	0.3	42 at 1A	22.0	28.0	690
JV 05ML 22621 PT	22	17	120	0.3	47 at 1A	24.3	30.0	620
JV 05ML 26421 PT	26	20	120	0.3	58 at 1A	29.5	38.0	420
JV 05ML 30291 PT	30	25	100	0.3	65 at 1A	35.0	43.0	290
JV 05ML 68850 PT	68	50	80	0.3	140at 1A	74.0	90.0	85

Notes :

1、Maximum ESD clamp voltage tested with IEC 61000-4-2 Human Body Model discharge

test current and direct discharge to device terminal (IEC preferred test method) .

2、Typical leakage current < 5µA .

3、Capacitance may be customized , please contact factory for availability .