

Eaton MLVs provide overvoltage protection for wide range of applications



Eaton's Multilayer Varistors (MLV) provide reliable and cost effective protection against ESD, EFT and inductive switching transients

Product description

Eaton's surface mount Multilayer Varistors (MLV) provide reliable protection for electronic circuits against electrostatic discharge (ESD), electrically fast transients (EFT) and transients resulting from inductive load switching. They are ideal for the protection of I/O interfaces, as well as components and circuits sensitive to overvoltage and surge transients occurring on power supplies, control and signal lines. Eaton's broad range of MLVs are offered in working voltages ranging from 5.5 Vdc to 200 Vdc.

Multiple different sizes are available, including the most common industry footprints. With the standard and high energy MLVC (along with MLVA & MLVB), Eaton offers a complete product line of MLVs. The MLV line in addition to Eaton's overvoltage portfolio, TVS Diodes and PolySurg[™], protect against a broad range of overvoltage threats.

Features and benefits

MLVA (compact)

- Low working voltage range; down to 5.5 Vdc
- 0201 to 0603 footprints

MLVB (low capacitance)

- Low capacitance ESD protection; down to 0.5 pF
- 0402 to 0603 footprints

MLVC (standard)

- Expanded working voltage range; up to 68 Vdc
- 0402 to 1206 footprints

MLVC (high energy)

- High energy and working voltage protection; up to 200 Vdc/150 Vrms
- 0805 to 4032 footprints





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Multilayer varistors (MLV) selection guide

MLVA - Compact

Package size	Working voltage (Vdc)	Clamping voltage (V)	Max peak current (8/20 μs)	Capacitance (pF) range
0201	5.5	26 to 30	-	33 to 64
0402	5.5 to 18	28 to 54	20	85 to 270
0603	5.5 to 26	31 to 70	30	100 to 270

MLVB - Low capacitance

Package size	Working voltage (Vdc)	Clamping voltage (V)	Max peak current (8/20 μs)	Capacitance (pF) range
0402	9 to 18	35 to 250	-	0.5 to 5
0603	9 to 18	35 to 250	-	0.5 to 5

MLVC - Standard

Package size	Working voltage (Vdc)	Clamping voltage (V)	Max peak current (8/20 μs)	Capacitance (pF) range
0402	12 to 18	34 to 44	20	90 to 150
0603	12 to 33	34 to 79	30	80 to 210
0805	12 to 48	34 to 110	35	80 to 220
1206	12 to 68	34 to 151	35	90 to 450

MLVC - High energy

Package size	Working voltage (Vdc)	Clamping voltage (V)	Max peak current (8/20 μs)	Capacitance (pF) range
0805	12 to 33	34 to 79	120	230 to 420
1206	12 to 60	34 to 134	150	180 to 850
1210	11 to 65	33 to 144	300	400 to 1800
1812	11 to 60	33 to 134	500	650 to 2400
2220	18 to 68	44 to 151	600	700 to 4000
3225	18 to 200	44 to 425	400	250 to 3500
4032	14 to 200	35 to 422	1200	700 to 5000



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