

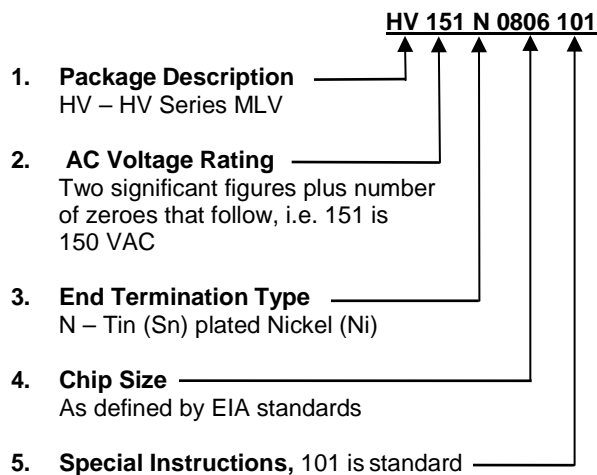
INTRODUCTION

The HV MLV Series is a surface mount, multilayer varistor (MLV) design for line voltage applications. While typical MLV's are designed for low voltage applications, these MLV's are available with maximum continuous operating voltages (MCOV) ranging from 150VAC to 300VAC. Available in EIA chip sizes of 0806 and 1206.

STYLE DESIGNATION

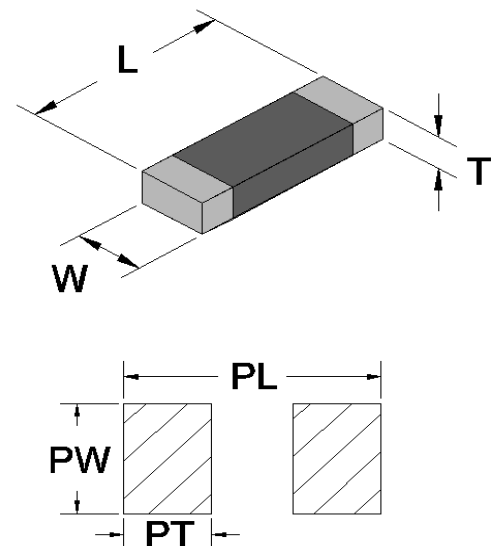
The Maida Style Number is the typical means to identify our components when ordered. The style number identifies several parameters that are important for the characteristics of the device. An alternative ordering method, if known, is by our Item Number.

The following example is the standard part numbering system when ordering our SMD Series components by the Maida Style Number:



STANDARD MARKING

The HV MLV Series do not have individual markings on the components due to the chip sizes. The HV MLV Series components are supplied Tape & Reel. Each reel is marked with all required information and may include special annotation as required by our customers.



HV SERIES (For line voltage and higher)

Maida Style Number	Recognitions To Safety Agency Standards						Nominal Size (EIA)	Minimum Marking	Maximum Ratings						Electrical Characteristics				
									Applied Voltage		Transient				Varistor Voltage @1 mA DC		Max Clamping Voltage (@ Test Current)		Typical Cap. 1 V rms @1kHz
											Energy	Nominal Discharge I _{NOM}	Peak Current						
													8 x 20 μsec	8x20μs					
A	B	C	D	E	F	(AC)	(DC)	(J)	(A)	(A)	(A)	Vmin	Vmax	(V)	(A)	(pF)			
HV151N0806101	X	X					0806	N/A	150	200	0.7	10.0	40	25	216	264	340	1	60
HV181N0806101	X	X					0806	N/A	180	230	0.8	10.0	40	25	243	297	400	1	40
HV251N0806101	X	X					0806	N/A	250	330	1.0	10.0	40	25	354	432	500	1	25
HV271N0806101	X	X					0806	N/A	270	360	1.2	10.0	40	25	387	473	560	1	15
HV151N1206101	X	X					1206	N/A	150	200	1.5	10.0	80	50	216	264	350	1	35
HV181N1206101	X	X					1206	N/A	180	230	1.6	10.0	80	50	243	297	380	1	30
HV251N1206101	X	X					1206	N/A	250	330	2.0	10.0	80	50	354	432	560	1	20
HV271N1206101	X	X					1206	N/A	270	360	2.5	10.0	80	50	387	473	600	1	20
HV301N1206101	X	X					1206	N/A	300	390	3.0	10.0	80	50	425	518	650	1	15

SV SERIES

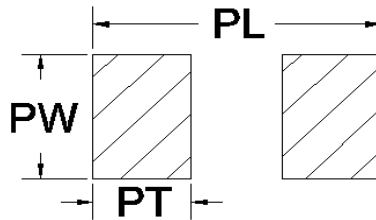
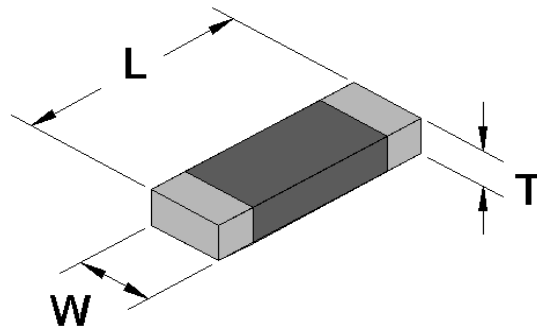
Maida Style Number	Recognitions To Safety Agency Standards						Nominal Size (EIA)	Minimum Marking	Maximum Ratings						Electrical Characteristics				
									Applied Voltage		Transient				Varistor Voltage @1 mA DC		Max Clamping Voltage (@ Test Current)		Typical Cap. 1 V rms @1kHz
											Energy		Peak Current						
											10 x 1000 μsec	8 x 20 μsec	1	2					
A	B	C	D	E	F	(AC)	(DC)	(J)	(J)	(A)	(A)	Vmin	Vmax	(V)	(A)	(pF)			
SV5R5N0402271							0402	N/A	4	5.5	0.1	0.1	20	20	6.9	9.3	19	1	270
SV9N0402131							0402	N/A	6.5	9	0.1	0.1	20	20	11.3	15.2	32	1	130
SV11N0402121							0402	N/A	8	11	0.1	0.1	20	20	12.7	17.3	33	1	120
SV11N0402400							0402	N/A	8	11	0.1	0.1	10	10	12.7	17.3	33	1	40
SV14N0402900							0402	N/A	11	14	0.1	0.1	20	20	16.2	19.8	38	1	90
SV14N0402330							0402	N/A	11	14	0.1	0.1	10	10	16.2	19.8	42	1	33
SV18N0402850							0402	N/A	14	18	0.1	0.1	20	20	19.8	24.2	45	1	85
SV3R5N0603181							0603	N/A	2.5	3.3	0.1	0.1	20	20	4.4	6.6	13	1	180
SV5R5N0603271							0603	N/A	4	5.5	0.1	0.1	30	30	6.9	9.3	16	1	270
SV8N0603141							0603	N/A	6	8	0.1	0.1	30	30	8.8	13.2	29	1	140
SV9N0603211							0603	N/A	7	9	0.1	0.1	30	30	10	15	27	1	210
SV11N0603201							0603	N/A	8	11	0.1	0.1	30	30	13	18	27	1	200
SV14N0603101							0603	N/A	11	14	0.1	0.1	30	30	16.2	19.8	35	1	100
SV14N0603151							0603	N/A	11	14	0.1	0.1	30	30	16.2	19.8	35	1	150
SV18N0603131							0603	N/A	14	18	0.1	0.1	30	30	19.8	24.2	40	1	130
SV26N0603101							0603	N/A	20	26	0.1	0.1	30	30	27.9	34.1	58	1	100
SV30N0603040							0603	N/A	25	30	0.1	0.1	30	30	38	46	65	1	40
SV39N0603030							0603	N/A	30	39	0.1	0.1	30	30	42	52	80	1	30
SV5R5N0805102							0805	N/A	4	5.5	0.3	0.3	120	120	6.9	9.3	15	2	1000
SV9N0805641							0805	N/A	6.5	9	0.3	0.3	120	120	11.3	15.2	24	2	640
SV11N0805581							0805	N/A	8	11	0.3	0.3	120	120	13	18	27	2	580
SV14N0805501							0805	N/A	10	14	0.3	0.3	120	120	17.5	23.7	30	2	500
SV18N0805401							0805	N/A	14	18	0.3	0.3	120	120	23	30	40	2	400
SV22N0805361							0805	N/A	17	22	0.3	0.3	120	120	28	34	50	2	360
SV26N0805281							0805	N/A	20	26	0.3	0.3	120	120	33	40	58	2	280
SV30N0805201							0805	N/A	25	30	0.3	0.3	120	120	38	46	65	2	200
SV39N0805151							0805	N/A	30	39	0.3	0.3	120	120	42	52	80	2	150
SV5R5N1206312							1206	N/A	4	5.5	0.4	0.4	100	100	7.5	10.5	20	10	3100
SV9N1206222							1206	N/A	6.5	9	0.4	0.4	150	150	11.3	15.2	25	10	2200
SV14N1206172							1206	N/A	10	14	0.4	0.4	150	150	17.5	23.7	30	10	1700
SV18N1206102							1206	N/A	14	18	0.4	0.4	150	150	23	30	40	10	1000
SV26N1206941							1206	N/A	20	26	0.4	0.4	150	150	33	40	58	10	940
SV30N1206891							1206	N/A	25	30	0.4	0.4	150	150	38	46	66	10	890
SV42N1206641							1206	N/A	30	42	0.4	0.4	150	150	46	60	180	10	640
SV48N1206601							1206	N/A	40	48	0.4	0.4	150	150	55	66	100	10	600
SV56N1206181							1206	N/A	40	56	0.4	0.4	150	150	63	77	120	10	180
SV18N1210172							1210	N/A	14	18	0.9	0.9	220	220	23	30	40	10	1700
SV26N1210122							1210	N/A	20	26	0.9	0.9	220	220	33	40	58	10	1200
SV30N1210901							1210	N/A	25	30	0.9	0.9	220	220	38	46	66	10	900
SV38N1210781							1210	N/A	30	38	0.9	0.9	250	250	42.3	51.7	77	10	780
SV48N1210451							1210	N/A	40	48	0.9	0.9	250	250	55	66	100	10	450
SV60N1210601							1210	N/A	50	60	0.9	0.9	250	250	69	83	120	10	600

A = UL1449
 B = cUL
 C = CSA
 D = VDE
 E = DEMKO
 F =

MLV SERIES

MECHANICAL SPECIFICATIONS

Size	Length (L)	Width (W)	MAX. Height (H)	Recommended Land Pad Length (PL)	Recommended Land Pad Width (PW)	Recommended Land Pad Thickness (PT)	End Termination Material
HV - 0806	0.086"±0.008"	0.067"±0.008"	0.079"	0.138"	0.079"	0.047"	Ag/Ni/Sn
HV - 1206	0.126"±0.012"	0.067"±0.008"	0.079"	0.159"	0.079"	0.047"	Ag/Ni/Sn
0402	0.039"±0.004"	0.020"±0.002"	0.020"	0.067"	0.024"	0.022"	Ag/Ni/Sn
0603	0.063"±0.006"	0.032"±0.006"	0.035"	0.100"	0.042"	0.037"	Ag/Ni/Sn
0805	0.079"±0.008"	0.049"±0.008"	0.035"	0.137"	0.061"	0.039"	Ag/Ni/Sn
1206	0.126"±0.012"	0.063"±0.012"	0.067"	0.159"	0.079"	0.047"	Ag/Ni/Sn
1210	0.126"±0.012"	0.098"±0.012"	0.071"	0.159"	0.114"	0.047"	Ag/Ni/Sn



Recommended Reflow Profile

