






Type Series Overview





SMD varistors, multilayer (MLV)

				
Size	Recommended for ESD protection			
	0402	0603	0805	1206
Standard	CT/CN0402 page 118 ff	CT/CN0603 page 118 ff	CT/CN0805 page 118 ff	CT/CN1206 page 118 ff
Operating voltage V_{RMS}	14 V	4 ... 25 V	4 ... 30 V	4 ... 60 V
Surge current (8/20 μ s) i_{max}	10 A	30 A	80 ... 120 A	150 ... 200 A
Energy absorption (2 ms) W_{max}	0,01 J	0,1 ... 0,3 J	0,1 ... 0,3 J	0,3 ... 1,1 J
Automotive		CT/CN0603AUTO page 136 f	CT/CN0805AUTO page 136 f	CT/CN1206AUTO page 136 f
Operating voltage V_{RMS}		14 V	14 V	14 V
Surge current (8/20 μ s) i_{max}		30 A	120 A	200 A
Energy absorption (10 \times) W_{LD}		—	1,0 J	1,5 J
Defined capacitance		CT/CN0603K17LC page 126	CT/CN0805K17LC page 126	
Low cap. C_{max}	upon request	50 pF	100 pF	
Defined cap. C_{range}	upon request	upon request	upon request	
High cap. C_{min}	upon request	upon request	upon request	
Antenna		CT0402 page 75		
Capacitance C_{max}		3 pF		

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Type Series Overview

SMD varistors, multilayer (MLV)

				
Size	Recommended for ESD protection			
	1210	1812	2220	
Standard	CT/CN1210 page 118 ff	CT/CN1812 page 118 ff	CT/CN2220 page 118 ff	
Operating voltage V_{RMS}	4 ... 60 V	4 ... 60 V	4 ... 60 V	
Surge current (8/20 μ s) i_{max}	250 ... 400 A	500 ... 800 A	800 ... 1200 A	
Energy absorption (2 ms) W_{max}	0,4 ... 2,3 J	0,8 ... 5,8 J	1,4 ... 12 J	
Automotive	CT/CN1210AUTO page 136 f	CT/CN1812AUTO page 136 f	CT/CN2220AUTO page 136 f	
Operating voltage V_{RMS}	14 V	14 V	14 ... 30 V	
Surge current (8/20 μ s) i_{max}	400 A	800 A	1200 A	
Energy absorption (10 \times) W_{LD}	3,0 J	6,0 J	12 ... 25 J	
Telecom		CT/CN1812(TELE) page 140 f		
Operating voltage V_{RMS}		60 ... 130 V		
Surge current (8/20 μ s) i_{max}		250 ... 400 A		
Energy absorption (2 ms) W_{max}		2,2 ... 3,5 J		


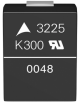
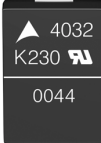
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Type Series Overview
SMD varistors, multilayer array varistors



			
Size	Recommended for ESD protection		
	0612	0508	0405
Standard	CA06P4 page 132	CA05P4 page 132	CA04P2 page 132
Operating voltage V_{RMS}	7 ... 17 V	17 V	17 V
Surge current (8/20 μ s) i_{max}	30 A	10 A	10 A
Energy absorption (2 ms) W_{max}	0,075 J	0,01 J	0,01 J
Defined capacitance	CA06P4S17ALCGK2 page 132		
Low cap. C_{max}	75 pF		
Defined cap. C_{range}	upon request		
High cap. C_{min}	upon request		

Type Series Overview

SMD varistors, monolithic

		
Size	3225	4032
Standard	CU3225 page 144 ff	CU4032 page 144 ff
Operating voltage V_{RMS}	11 ... 300 V	11 ... 460 V
Surge current (8/20 μ s) i_{max}	100 ... 400 A	250 ... 1200 A
Energy absorption (2 ms) W_{max}	0,3 ... 9,6 J	0,8 ... 36,0 J
Automotive	CU3225AUTO page 150	CU4032AUTO page 150
Operating voltage V_{RMS}	14 ... 30 V	14 ... 30 V
Surge current (8/20 μ s) i_{max}	100 A	250 A
Energy absorption (10 \times) W_{LD}	6,0 J	12,0 J
Capacitance $C_R \pm 20\%$	—	—
Telecom		CU4032(TELE) page 153
Operating voltage V_{RMS}		60 ... 95 V
Surge current (8/20 μ s) i_{max}		1200 A
Energy absorption (2 ms) W_{max}		4,8 ... 7,6 J







HICAP multilayer varistors, leaded

	
SHCV-SR1 page 204	SHCV-SR2 page 204
14 ... 20 V	14 ... 20 V
800 A	1200 A
6,0 J	12,0 J
0,47 ... 2,2 μ F	0,47 ... 4,7 μ F

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Type Series Overview

Disk varistors, monolithic, leaded







					
Nominal diameter	5 mm	5 mm	7 mm	7 mm	10 mm
	StandarD	AdvanceD	StandarD	AdvanceD	StandarD
	S05 page 160 ff	S05 ... E2 page 176 ff	S07 page 160 ff	S07 ... E2 page 176 ff	S10 page 160 ff
Operating voltage V_{RMS}	11 ... 460 V	130 ... 300 V	11 ... 460 V	130 ... 320 V	11 ... 680 V
Surge current (8/20 μ s) i_{max}	100 ... 400 A	250 ... 800 A	250 ... 1200 A	500 ... 1750 A	500 ... 2500 A
Energy absorption (2 ms) W_{max}	0,3 ... 18 J	4,2 ... 15 J	0,8 ... 36 J	9,5 ... 32 J	1,7 ... 72 J
Automotive			S07AUTO page 194/198		S10AUTO page 194/198
Operating voltage V_{RMS}			14 V_{RMS} 48 V_{DC} ¹⁾ NEW		14 ... 17 V_{RMS} 48 V_{DC} ¹⁾ NEW
Surge current (8/20 μ s) i_{max}			250 A		500 A
Energy absorption (10 \times) W_{LD}			12,0 J		25,0 J
Telecom			S07(TELE) page 202		
Operating voltage V_{RMS}			60 ... 95 V		
Surge current (8/20 μ s) i_{max}			1200 A		
Energy absorption (2 ms) W_{max}			4,8 ... 7,6 J		

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1) Automotive Series for 42-V Supply Systems

Type Series Overview

Disk varistors, monolithic, leaded





					
Nominal diameter	10 mm	14 mm	14 mm	20 mm	20 mm
	AdvancedD	StandarD	AdvanceD	StandarD	AdvancedD
	S10 ... E2 page 176 ff	S14 page 160 ff	S14 ... E2 page 176 ff	S20 page 160 ff	S20 ... E2 page 176 ff
Operating voltage V_{RMS}	130 ... 510 V	11 ... 1100 V	130 ... 510 V	11 ... 1100 V	130 ... 510 V
Surge current (8/20 μ s) i_{max}	3,5 kA	1,0 ... 4,5 kA	6,0 kA	2,0 ... 8,0 kA	10 kA
Energy absorption (2 ms) W_{max}	19 ... 80 J	3,2 ... 230 J	34 ... 165 J	10 ... 410 J	74 ... 325 J
Automotive		S14AUTO page 194/198		S20AUTO page 194/198	
Operating voltage V_{RMS}		14 ... 30 V 48 V _{DC} ¹⁾ NEW		14 ... 30 V 48 V _{DC} ¹⁾ NEW	
Surge current (8/20 μ s) i_{max}		1,0 kA		2,0 kA	
Energy absorption (10 \times) W_{LD}		50 J		100 J	

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1) Automotive Series for 42-V Supply Systems

Type Series Overview






Disk varistors, monolithic, leaded

			
Nominal diameter	20 mm	14 mm	20 mm
	SuperioR S20 ... E3 page 186 f	EnergetiQ Q14 page 190 ff	
Operating voltage V_{RMS}	115 ... 320 V	130 ... 320 V	130 ... 320 V
Surge current (8/20 μ s) i_{max}	12 kA	8,0 kA	15 kA
Energy absorption (2 ms) W_{max}	110 ... 320 J	75 ... 185 J	100 ... 255 J

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Type Series Overview





Block varistors, monolithic, screw terminals

				
Nominal diameter	32 mm	40 mm	60 mm	80 mm
	HighE			
	B32 page 222 ff	B40 page 222 ff	B60 page 222 ff	B80 page 222 ff
Operating voltage V_{RMS}	130 ... 750 V	75 ... 750 V	130 ... 1100 V	130 ... 1100 V
Surge current (8/20 μ s) i_{max}	25 kA	40 kA	70 kA	100 kA
Energy absorption (2 ms) W_{max}	210 ... 800 J	190 ... 1200 J	490 ... 3000 J	660 ... 6000 J

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Type Series Overview




Strap varistors, monolithic, straight or bent strap terminals

				
Nominal diameter	40 mm	40 mm	50 mm	50 mm
	HighE			
	LS40 ... QP page 228 f	LS40 ... QPK2 page 228 f	LS50 ... P page 232 f	LS50 ... PK2 page 232 f
Operating voltage V_{RMS}	130 ... 750 V	130 ... 750 V	130 ... 550 V	130 ... 550 V
Surge current (8/20 μ s) i_{max}	40 kA	40 kA	75 kA	75 kA
Energy absorption (2 ms) W_{max}	310 ... 1200 J	310 ... 1200 J	490 ... 1500 J	490 ... 1500 J

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Type Series Overview

Arrester-block varistors, monolithic

			Others on request
Nominal diameter	32 mm	42 mm	... 100 mm max
Standard	E32 page 236	E42 page 236	
Rated voltage V_R	3 kV, 6 kV	3 kV, 6 kV	on request
Surge current (4/10 μ s) i_{max}	65 kA	100 kA	

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