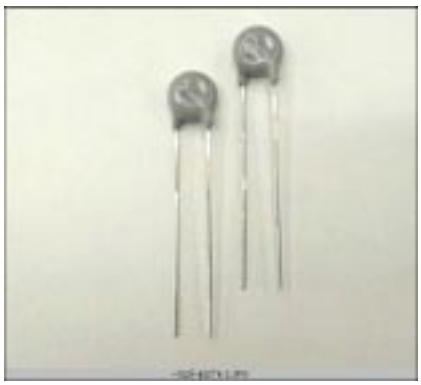
ENE series

385 to 1000V AC(Ta=25°C)



■ Features

·Excellent clamping characteristics
·High discharge current capability up to 6500Amps
·Remarkably symmetrical V-I characteristics
·UL recognized (UL1414 file No.E66188),
CSA recognized (C22.2 No.1 file No.LR98228)

■ Ratings and characteristics

Device type	Maximum ratings					Characteristics					
	Applied voltage *1		Transient			Nominal varistor *4 voltage			Max. Clamping *5 voltage @test current (8/20μs)		Typical capaci-tance
	RMS 50Hz/60Hz	DC	Energy *2	Average power dissipation	Peak *3 current (8/20μs)		Tolerance				
	Vacm [Volts]	Vdcm [Volts]	Wtm [Joules]	Ptam [Watts]	Itm [Amps]	Vnom [Volts]	Min. [Volts]	Max [Volts]	Vc [Volts]	Ip [Amps]	f=1kHz [pF]
ENE621D-10A	385	505	67	0.4	2500	620	558	682	1025	25	270
ENE621D-14A			136	0.6	4500				1025	50	550
ENE621D-20A			273	1.0	6500				1025	100	1100
ENE681D-10A	420	560	67	0.4	2500	680	612	748	1120	25	250
ENE681D-14A			136	0.6	4500				1120	50	500
ENE681D-20A			273	1.0	6500				1120	100	1000
ENE751D-10A	460	615	70	0.4	2500	750	675	825	1240	25	220
ENE751D-14A			150	0.6	4500				1240	50	450
ENE751D-20A			300	1.0	6500				1240	100	900
ENE781D-10A	485	640	75	0.4	2500	780	702	858	1290	25	220
ENE781D-14A			155	0.6	4500				1290	50	440
ENE781D-20A			310	1.0	6500				1290	100	880
ENE821D-10A	510	670	80	0.4	2500	820	738	902	1355	25	210
ENE821D-14A			165	0.6	4500				1355	50	420
ENE821D-20A			325	1.0	6500				1355	100	840
ENE911D-10A	550	745	90	0.4	2500	910	819	1001	1500	25	180
ENE911D-14A			180	0.6	4500				1500	50	380
ENE911D-20A			360	1.0	6500				1500	100	750
ENE102D-10A	625	825	100	0.4	2500	1000	900	1100	1650	25	180
ENE102D-14A			200	0.6	4500				1650	50	350
ENE102D-20A			400	1.0	6500				1650	100	700
ENE112D-10A	680	895	110	0.4	2500	1100	990	1210	1815	25	150
ENE112D-14A			220	0.6	4500				1815	50	300
ENE112D-20A			440	1.0	6500				1815	100	600
ENE182D-10A	1000	1465	183	0.4	2500	1800	1700	1980	2970	25	200
ENE182D-14A			360	0.6	4500				2970	50	400

Operating ambient temperature: -40°C to +85°C Storage temperature: -40°C to +125°C

*1 The waveform of the maximum DC applied voltage is flat.
When a ripple voltage as from a rectifier source applied. make sure the peak voltage is within the Vdcm rating.
The AC applied voltage (50/60Hz) is sine waveform.
When waveform distortion is extensive, make sure that peak voltage is less than $\sqrt{2}$ times the Vacm rating.

*2 Energy Wtm
Transient energy rating are given in the Wtm column in Joules (Watt-second). The rating is the maximum allowable energy of a single 2ms square-waveform impulse current continuously applied. Energy ratings are based on a shift of Vnom of less than ±10% of the initial value.

*3 Transient peak current (Itm)
The peak current rating, Itm, is based on 8/20μs test impulse waveform. This peak current is the maximum peak current at which the nominal varistor voltage shift dose not exceed ±10% when the test impulse is applied twice at a 5 minute interval.

*4 Nominal varistor voltage: Vnom
Indicates the varistor terminal voltage measured with 1mA DC applied.

*5 Maximum clamping voltage: Vc
Indicates the peak terminal voltage measured with 8/20μs impulse current applied.

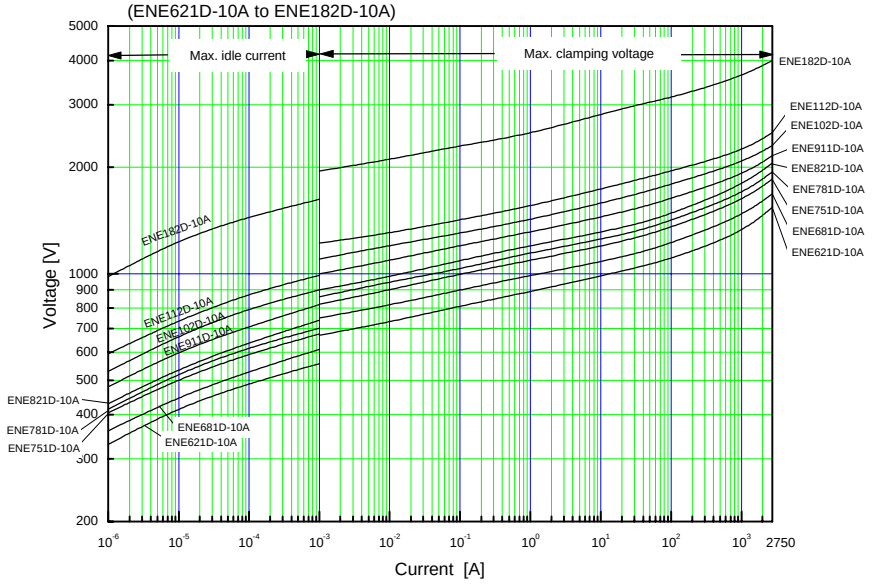
FUJI Ceramic Surge Absorbers

ENE series 385 to 1000V AC(Ta=25°C)

■ Characteristic curves (Typical)

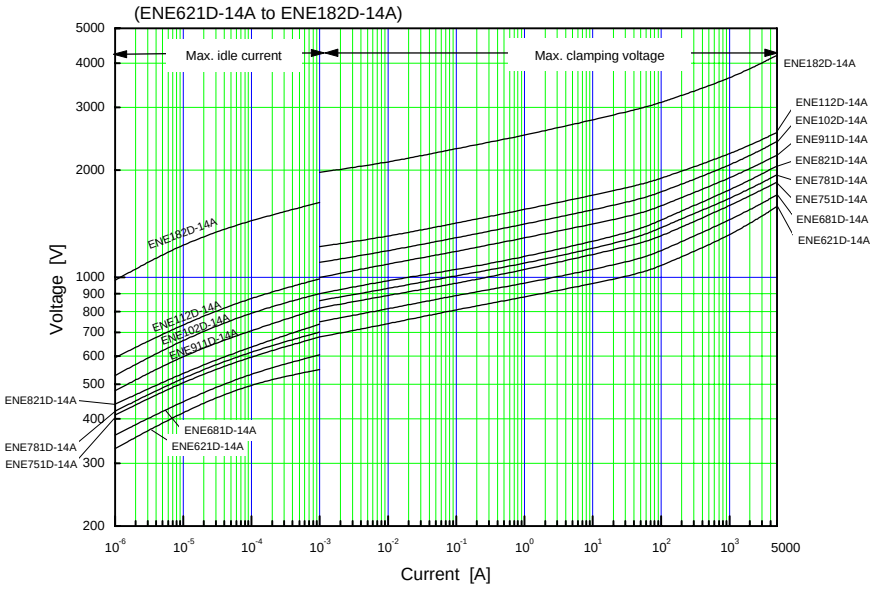
Transient V-I characteristic curves

(ENE621D-10A to ENE182D-10A)



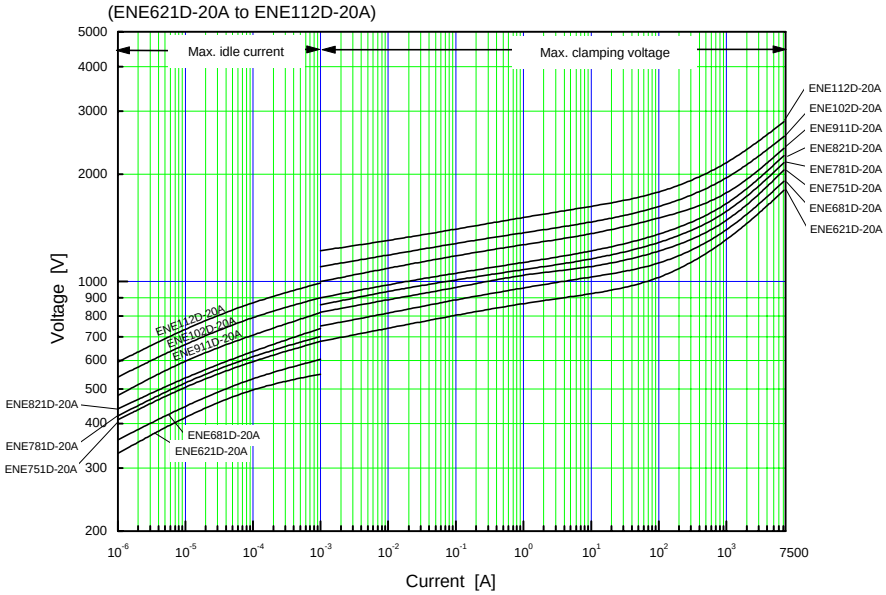
Transient V-I characteristic curves

(ENE621D-14A to ENE182D-14A)



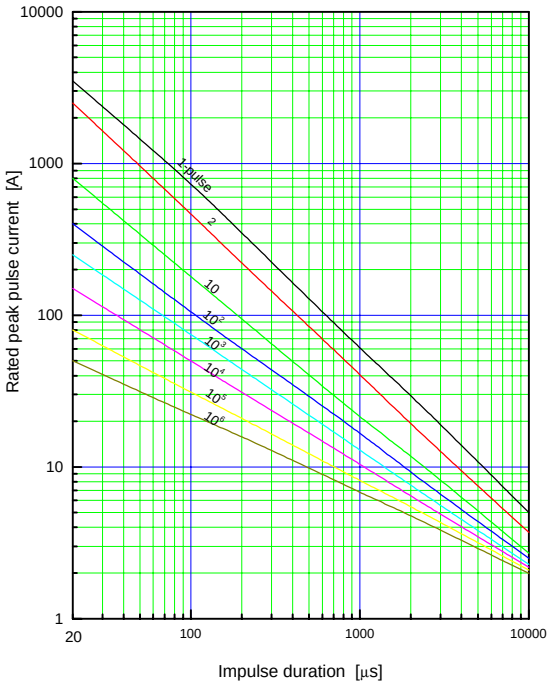
Transient V-I characteristic curves

(ENE621D-20A to ENE112D-20A)



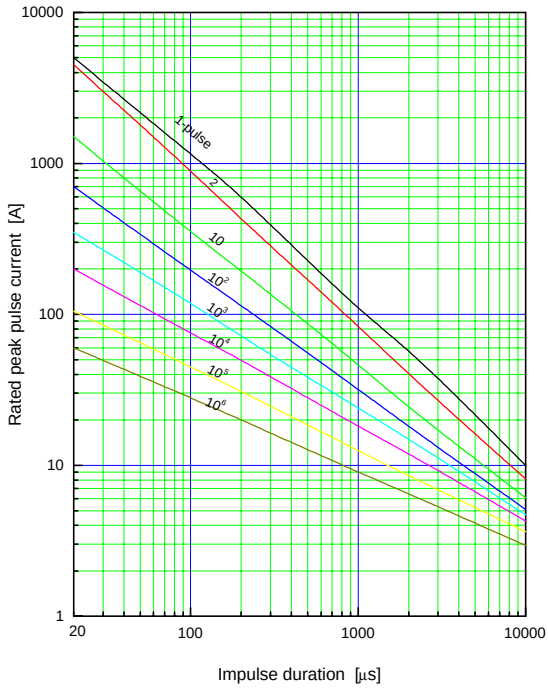
Pulse lifetime ratings

10A series (ENE621D-10A to ENE182D-10A)



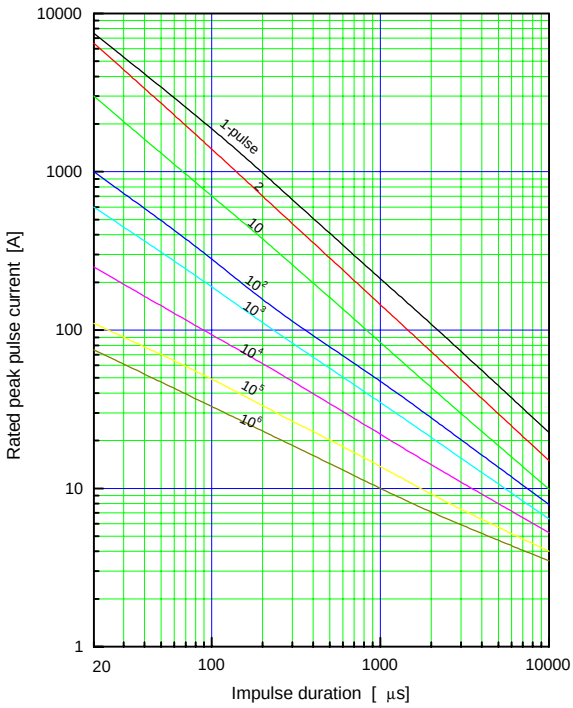
Pulse lifetime ratings

14A series (ENE621D-14A to ENE182D-14A)

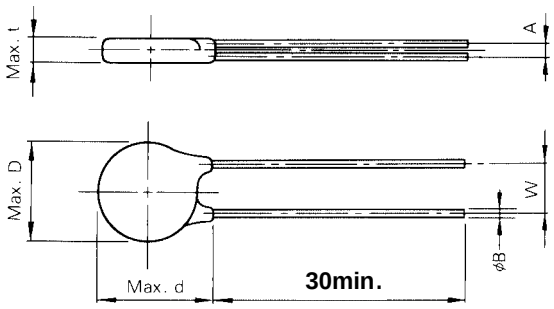


Pulse lifetime ratings

20A series (ENE621D-20A to ENE112D-20A)



■ Dimensions,mm



Typet	t	A	D (max.)	d (Max.)	L (Min.)	W	ØB	Net weight (g)
ENE621D-10A	7.1	4.2±1	12.5	16.0	30.0	7.5±1	0.8	2.6
ENE681D-10A	7.4	4.5±1	12.5	16.0	30.0	7.5±1	0.8	2.8
ENE751D-10A	8.7	4.9±1	12.5	16.0	30.0	7.5±1	0.8	3.0
ENE781D-10A	8.9	5.1±1	12.5	16.0	30.0	7.5±1	0.8	3.2
ENE821D-10A	9.2	5.2±1	12.5	16.0	30.0	7.5±1	0.8	3.2
ENE911D-10A	9.7	5.7±1	12.5	16.0	30.0	7.5±1	0.8	3.4
ENE102D-10A	10.3	6.2±1	12.5	16.0	30.0	7.5±1	0.8	3.6
ENE112D-10A	10.9	6.8±1	12.5	16.0	30.0	7.5±1	0.8	4.0
ENE182D-10A	15.3	10.0±2	12.5	16.5	30.0	7.5±1	0.8	5.6
ENE621D-14A	7.1	4.2±1	16.0	20.0	30.0	7.5±1	0.8	5.0
ENE681D-14A	7.4	4.5±1	16.0	20.0	30.0	7.5±1	0.8	5.5
ENE751D-14A	8.7	4.9±1	16.0	20.0	30.0	7.5±1	0.8	6.0
ENE781D-14A	8.9	5.1±1	16.0	20.0	30.0	7.5±1	0.8	6.5
ENE821D-14A	9.2	5.2±1	16.0	20.0	30.0	7.5±1	0.8	6.5
ENE911D-14A	9.7	5.7±1	16.0	20.0	30.0	7.5±1	0.8	6.5
ENE102D-14A	10.3	6.2±1	16.0	20.0	30.0	7.5±1	0.8	7.0
ENE112D-14A	10.9	6.8±1	16.0	20.0	30.0	7.5±1	0.8	7.5
ENE182D-14A	15.3	10.0±2	16.5	20.5	30.0	7.5±1	0.8	11.5
ENE621D-20A	7.5	4.4±1	22.5	25.5	30.0	10.0±1	1.0	8.0
ENE681D-20A	7.8	4.7±1	22.5	25.5	30.0	10.0±1	1.0	9.0
ENE751D-20A	9.1	5.1±1	22.5	25.5	30.0	10.0±1	1.0	9.5
ENE781D-20A	9.3	5.3±1	22.5	25.5	30.0	10.0±1	1.0	10.0
ENE821D-20A	9.6	5.4±1	22.5	25.5	30.0	10.0±1	1.0	10.0
ENE911D-20A	10.1	5.9±1	22.5	25.5	30.0	10.0±1	1.0	11.0
ENE102D-20A	10.7	6.4±1	22.5	25.5	30.0	10.0±1	1.0	12.0
ENE112D-20A	11.3	7.0±1	22.5	25.5	30.0	10.0±1	1.0	13.0