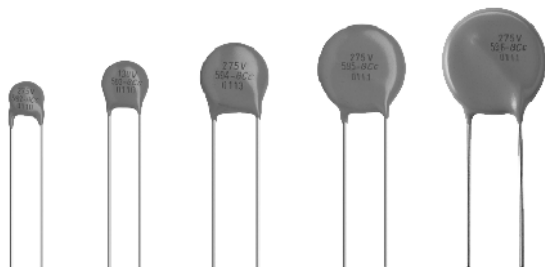


High Surge Suppression Varistors



QUICK REFERENCE DATA

PARAMETER	VALUE	UNIT
Maximum continuous voltage:		
RMS	11 to 680	V
DC	14 to 895	V
Maximum non-repetitive transient	250 to 10000	A
Robustness of terminations	10	N
Drop test:		
Height of fall	1	m
Detailed specification	based on CECC 42 000	
Storage temperature	-40 to +150	°C
Operating temperature	-40 to +125	°C

ORDERING INFORMATION

The varistors are available in a number of packaging options:

- Bulk
- On tape on reel
- On tape in ammpack

The basic ordering code for each option is given in tables titled Varistors on Tape on Reel, Varistors on Tape in Ammpack and Varistors in Bulk. To complete the catalog number and to determine the required operating parameters, see Electrical Data and Ordering Information table.

FEATURES

- Zinc oxide disc, epoxy coated
- Straight or kinked leads.

APPLICATION

- Supression of transients

DESCRIPTION

The varistors consist of a disc of low-β ceramic material with two tinned solid copper leads. They are coated with a layer of ochre coloured epoxy, which provides electrical, mechanical and climatic protection. The encapsulation is resistant to all cleaning solvents in accordance with "IEC 60068-2-45".

MOUNTING

The varistors are suitable for processing on automatic insertion and cutting and bending equipment.

Varistors with flanged leads provide better positioning on printed-circuit boards (PCB) and more accurate control over component height. This is important for hand mounting and automatic insertion techniques; see Outlines of flanged leads drawing.

Soldering

240 C; duration 5 s

Resistance to heat

260 C; duration 5 s

MARKING

The varistors are marked with the following information:

- Maximum continuous RMS voltage
- Series number (582, 583, 584, 585 or 586)
- Manufacture logo
- Date of manufacture

INFLAMMABILITY

The varistors are non-flammable.

ELECTRICAL DATA AND ORDERING INFORMATION

MAXIMUM CONTINUOUS VOLTAGE		VOLTAGE ⁽³⁾ at 1 mA	MAXIMUM VOLTAGE at STATED CURRENT		MAXIMUM ENERGY ⁽⁴⁾ (10 x 1000 μs) (J)	MAXIMUM NON-REP. TRANSIENT CURRENT ⁽⁵⁾ I _{nrp} (8 x 20 μs) (A)	TYPICAL CAPACITANCE AT 1kHz (pF)	CATALOG NUMBERS ⁽¹⁾
RMS ⁽²⁾ (V)	DC (V)		V (V)	I (A)				
11	14	18	40	1.0	0.7	250	1600	582 .110.
			36	2.5	1.5	500	3600	583 .110.
			36	5.0	2.6	1000	8000	584 .110.
			36	10.0	5.2	2000	20000	585 .110.
			36	20.0	13.0	3000	40000	586 .110.



ELECTRICAL DATA AND ORDERING INFORMATION								
MAXIMUM CONTINUOUS VOLTAGE		VOLTAGE ⁽³⁾ at 1 mA	MAXIMUM VOLTAGE at STATED CURRENT		MAXIMUM ENERGY ⁽⁴⁾ (10 x 1000 μs)	MAXIMUM NON-REP. TRANSIENT CURRENT ⁽⁵⁾ I _{nrp} (8 x 20 μs)	TYPICAL CAPACITANCE AT 1kHz	CATALOG NUMBERS ⁽¹⁾
RMS ⁽²⁾ (V)	DC (V)	(V)	V (V)	I (A)	(J)	(A)	(pF)	2322
14	18	22	48	5.0	0.8	250	1300	582 .140.
			43	10.0	1.7	500	2800	583 .140.
			43	25.0	3.2	1000	6000	584 .140.
			43	50.0	6.3	2000	15000	585 .140.
			43	100.0	16.0	3000	30000	586 .140.
17	22	27	60	5.0	1.1	250	1050	582 .170.
			53	10.0	2.1	500	2000	583 .170.
			53	25.0	3.9	1000	4000	584 .170.
			53	50.0	7.8	2000	10000	585 .170.
			53	100.0	19.0	3000	20000	586 .170.
20	26	33	73	5.0	1.3	250	900	582 .200.
			65	10.0	2.8	500	1500	583 .200.
			65	25.0	4.8	1000	3000	584 .200.
			65	50.0	9.5	2000	7500	585 .200.
			65	100.0	24.0	3000	15000	586 .200.
25	31	39	86	5.0	1.5	250	500	582 .250.
			77	10.0	3.0	500	1350	583 .250.
			77	25.0	5.6	1000	2600	584 .250.
			77	50.0	11.0	2000	6500	585 .250.
			77	100.0	28.0	3000	13000	586 .250.
30	38	47	104	5.0	1.8	250	700	582 .300.
			93	10.0	3.8	500	1600	583 .300.
			93	25.0	6.8	1000	2700	584 .300.
			93	50.0	14.0	2000	6000	585 .300.
			93	100.0	34.0	3000	12000	586 .300.
35	45	56	123	5.0	2.2	250	560	582 .350.
			110	10.0	4.4	500	1300	583 .350.
			110	25.0	8.1	1000	2200	584 .350.
			110	50.0	16.0	2000	4800	585 .350.
			110	100.0	41.0	3000	9600	586 .350.
40	56	68	150	5.0	2.6	250	460	582 .400.
			135	10.0	5.4	500	1000	583 .400.
			135	25.0	9.8	1000	1800	584 .400.
			135	50.0	20.0	2000	3800	585 .400.
			135	100.0	49.0	3000	7600	586 .400.
50	65	82	145	5.0	3.5	800	370	582 .500.
			135	10.0	7.0	1750	900	583 .500.
			135	25.0	14.0	3500	1500	584 .500.
			135	50.0	28.0	6000	3100	585 .500.
			135	100.0	56.0	10000	6200	586 .500.


ELECTRICAL DATA AND ORDERING INFORMATION

MAXIMUM CONTINUOUS VOLTAGE		VOLTAGE ⁽³⁾ at 1 mA	MAXIMUM VOLTAGE at STATED CURRENT		MAXIMUM ENERGY ⁽⁴⁾ (10 x 1000 μ s)	MAXIMUM NON-REP. TRANSIENT CURRENT ⁽⁵⁾ I_{nrp} (8 x 20 μ s)	TYPICAL CAPACITANCE AT 1kHz	CATALOG NUMBERS ⁽¹⁾
RMS ⁽²⁾ (V)	DC (V)	(V)	V (V)	I (A)	(J)	(A)	(pF)	2322
60	85	100	175	5.0	4.5	800	290	582 .600.
			165	10.0	9.0	1750	700	583 .600.
			165	25.0	18.0	3500	1200	584 .600.
			165	50.0	36.0	6000	2300	585 .600.
			165	100.0	72.0	10000	4600	586 .600.
75	100	120	210	5.0	5.5	800	240	582 .750.
			200	10.0	11.0	1750	530	583 .750.
			200	25.0	22.0	3500	1000	584 .750.
			200	50.0	44.0	6000	1900	585 .750.
			200	100.0	88.0	10000	3800	586 .750.
95	125	150	260	5.0	6.5	800	180	582 .950.
			250	10.0	13.0	1750	450	583 .950.
			250	25.0	25.0	3500	800	584 .950.
			250	50.0	53.0	6000	1500	585 .950.
			250	100.0	106.0	10000	3000	586 .950.
115	150	180	320	5.0	8.0	800	150	582 .111.
			300	10.0	16.0	1750	390	583 .111.
			300	25.0	32.0	3500	680	584 .111.
			300	50.0	65.0	6000	1320	585 .111.
			300	100.0	130.0	10000	2640	586 .111.
130	170	205	355	5.0	8.5	800	130	582 .131.
			340	10.0	17.5	1750	320	583 .131.
			340	25.0	35.0	3500	580	584 .131.
			340	50.0	70.0	6000	1050	585 .131.
			340	100.0	140.0	10000	2100	586 .131.
140	180	220	380	5.0	9.0	800	120	582 .141.
			360	10.0	19.0	1750	290	583 .141.
			360	25.0	39.0	3500	540	584 .141.
			360	50.0	78.0	6000	950	585 .141.
			360	100.0	155.0	10000	1900	586 .141.
150	200	240	415	5.0	10.5	800	110	582 .151.
			395	10.0	21.0	1750	270	583 .151.
			395	25.0	42.0	3500	490	584 .151.
			395	50.0	84.0	6000	850	585 .151.
			395	100.0	168.0	10000	1700	586 .151.
175	225	275	475	5.0	11.0	800	90	582 .171.
			455	10.0	24.0	1750	230	583 .171.
			455	25.0	49.0	3500	430	584 .171.
			455	50.0	99.0	6000	750	585 .171.
			455	100.0	190.0	10000	1500	586 .171.



ELECTRICAL DATA AND ORDERING INFORMATION								
MAXIMUM CONTINUOUS VOLTAGE		VOLTAGE ⁽³⁾ at 1 mA	MAXIMUM VOLTAGE at STATED CURRENT		MAXIMUM ENERGY ⁽⁴⁾ (10 x 1000 μs)	MAXIMUM NON-REP. TRANSIENT CURRENT ⁽⁵⁾ I _{nrp} (8 x 20 μs)	TYPICAL CAPACITANCE AT 1kHz	CATALOG NUMBERS ⁽¹⁾
RMS ⁽²⁾ (V)	DC (V)	(V)	V (V)	I (A)	(J)	(A)	(pF)	2322
195	250	300	525	5.0	12.0	800	80	582 .191.
			455	10.0	26.0	1750	210	583 .191.
			455	25.0	52.0	3500	380	584 .191.
			455	50.0	105.0	6000	690	585 .191.
			455	100.0	210.0	10000	1350	586 .191.
210	275	330	575	5.0	13.0	800	75	582 .211.
			505	10.0	28.0	1750	190	583 .211.
			505	25.0	58.0	3500	350	584 .211.
			505	50.0	115.0	6000	610	585 .211.
			505	100.0	228.0	10000	1250	586 .211.
230	300	360	620	5.0	16.0	800	70	582 .231.
			595	10.0	32.0	1750	170	583 .231.
			595	25.0	65.0	3500	320	584 .231.
			595	50.0	130.0	6000	540	585 .231.
			595	100.0	255.0	10000	1100	586 .231.
250	320	390	675	5.0	17.0	800	60	582 .251.
			650	10.0	35.0	1750	160	583 .251.
			650	25.0	70.0	3500	300	584 .251.
			650	50.0	140.0	6000	480	585 .251.
			650	100.0	275.0	10000	960	586 .251.
275	350	430	745	5.0	20.0	800	55	582 .271.
			710	10.0	40.0	1750	140	583 .271.
			710	25.0	80.0	3500	270	584 .271.
			710	50.0	155.0	6000	440	585 .271.
			710	100.0	303.0	10000	900	586 .271.
300	385	470	810	5.0	21.0	800	50	582 .301.
			775	10.0	42.0	1750	130	583 .301.
			775	25.0	85.0	3500	240	584 .301.
			775	50.0	175.0	6000	400	585 .301.
			775	100.0	350.0	10000	810	586 .301.
320	420	510	880	5.0	22.0	800	45	582 .321.
			842	10.0	45.0	1750	120	583 .321.
			842	25.0	92.0	3500	220	584 .321.
			842	50.0	190.0	6000	370	585 .321.
			842	100.0	382.0	10000	750	586 .321.
350	460	560	940	5.0	25.0	800	42	582 .351.
			920	10.0	51.0	1750	110	583 .351.
			920	25.0	102.0	3500	200	584 .351.
			920	50.0	205.0	6000	320	585 .351.
			920	100.0	410.0	10000	650	586 .351.



ELECTRICAL DATA AND ORDERING INFORMATION								
MAXIMUM CONTINUOUS VOLTAGE		VOLTAGE ⁽³⁾ at 1 mA	MAXIMUM VOLTAGE at STATED CURRENT		MAXIMUM ENERGY ⁽⁴⁾ (10 x 1000 μs)	MAXIMUM NON-REP. TRANSIENT CURRENT ⁽⁵⁾ I _{nrp} (8 x 20 μs)	TYPICAL CAPACITANCE AT 1kHz	CATALOG NUMBERS ⁽¹⁾
RMS ⁽²⁾ (V)	DC (V)	(V)	V (V)	I (A)	(J)	(A)	(pF)	2322
385	505	620	1050	5.0	27.0	800	40	582 .381.
			1025	10.0	54.0	1750	95	583 .381.
			1025	25.0	107.0	3500	180	584 .381.
			1025	50.0	215.0	6000	280	585 .381.
			1025	100.0	420.0	10000	570	586 .381.
420	560	680	1150	5.0	28.0	800	35	582 .421.
			1120	10.0	56.0	1750	85	583 .421.
			1120	25.0	112.0	3500	165	584 .421.
			1120	50.0	225.0	6000	250	585 .421.
			1120	100.0	430.0	10000	510	586 .421.
460	615	750	1290	5.0	29.0	800	30	582 .461.
			1240	10.0	58.0	1750	75	583 .461.
			1240	25.0	115.0	3500	150	584 .461.
			1240	50.0	230.0	6000	225	585 .461.
			1240	100.0	440.0	10000	450	586 .461.
485	640	780	1290	10.0	59.0	1750	65	583 .481.
			1290	25.0	116.0	3500	145	584 .481.
			1290	50.0	233.0	6000	220	585 .481.
			1290	100.0	450.0	10000	400	586 .481.
510	670	820	1355	10.0	60.0	1750	62	583 .511.
			1355	25.0	118.0	3500	135	584 .511.
			1355	50.0	235.0	6000	220	585 .511.
			1355	100.0	460.0	10000	400	586 .511.
550	745	910	1500	25.0	127.0	3500	120	584 .551.
			1500	50.0	255.0	6000	180	585 .551.
			1500	100.0	510.0	10000	320	586 .551.
625	825	1000	1650	25.0	140.0	3500	105	584 .621.
			1650	50.0	283.0	6000	165	585 .621.
			1650	100.0	566.0	10000	280	586 .621.
680	895	1100	1815	25.0	155.0	3500	80	584 .681.
			1815	50.0	310.0	6000	150	585 .681.
			1815	100.0	620.0	10000	250	586 .681.

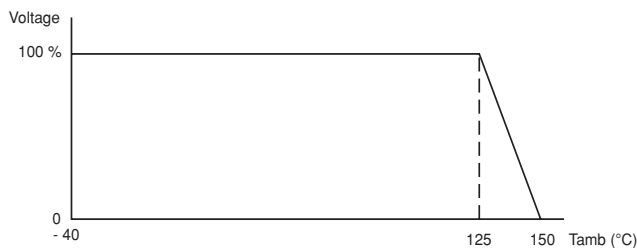
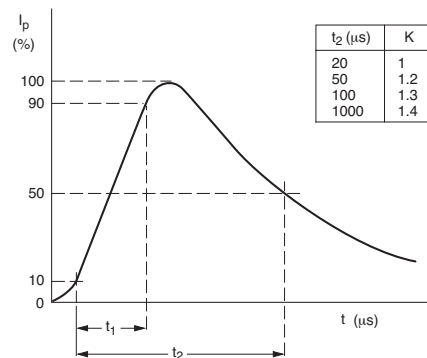
Notes

- Lists with products certified according to UL (E98144), VDE (40002622) and CSA (219883) are available at www.vishay.com or on request.
- The sinusoidal voltage is assumed as the normal operating condition. If a non-sinusoidal voltage is present, type selection should be based on multiplying the peak voltage by a factor of 0.707.
- The voltage measured at 1 mA meets the requirements of "paragraph 4.3 of CECC specification 42000". The tolerance on the voltage at 1 mA is ±10%.
- High energy surges are generally of longer duration. The maximum energy for one pulse of 10 × 1000 μs is given as a reference for longer duration pulses. This pulse can be characterised by peak current (I_p) and pulse width t₂ (virtual time of half I_p value, following "IEC 60060-2, section 6"). If V_p is the clamping voltage corresponding to I_p, the energy absorbed in the varistor is determined by the formula:

$$E = K \times V_p \times I_p \times t_2$$
 where:
 a) K is dependant on the value of t₂ when the value of t₁ is between 8 μs and 10 μs; see Peak Current as a Function of Pulse Width drawing.
- A current wave of 8 x 20 μs (requirement of "paragraph B.2.10.1 of CECC specification 42000") is used as a standard for pulse current and clamping voltage ratings. The maximum non-repetitive transient current is given for one pulse applied during the life of the component.

ELECTRICAL CHARACTERISTICS

ELECTRICAL DATA		
PARAMETER	VALUE	UNIT
Maximum continuous voltage:		
RMS	11 to 680	V
DC	14 to 895	V
Maximum non-repetitive transient current (I_{nrp}) ($8 \times 20 \mu s$):		
2322 582	250 or 800	A
2322 583	500 or 1750	A
2322 584	1000 or 3500	A
2322 585	2000 or 6000	A
2322 586	3000 or 10000	A
Thermal resistance:		
2322 582	≈ 80	K/W
2322 583	≈ 70	K/W
2322 584	≈ 60	K/W
2322 585	≈ 50	K/W
2322 586	≈ 40	K/W
Maximum dissipation:		
2322 582	100	mW
2322 583	250	mW
2322 584	400	mW
2322 585	600	mW
2322 586	1000	mW
Temperature coefficient of voltage at 1 mA maximum	-0.065	%/K
Voltage proof between interconnected leads and case	2500	V
Storage temperature	-40 to +150	$^{\circ}C$
Operating temperature	-40 to +125	$^{\circ}C$

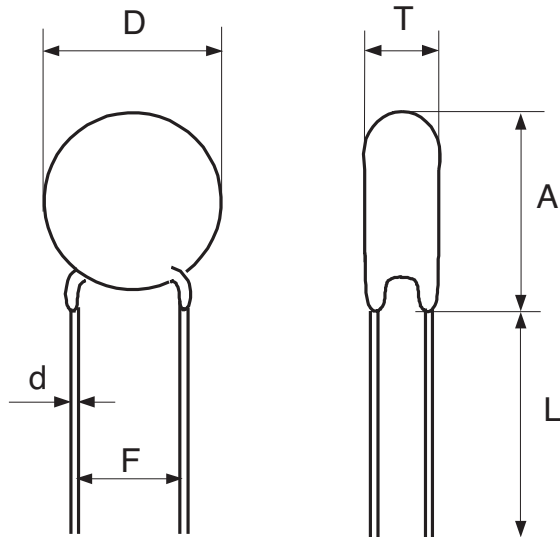
DERATING CURVE

PEAK CURRENT AS A FUNCTION OF PULSE WIDTH

COMPONENT DIMENSIONS AND CATALOG NUMBERS in millimeters

D NOM.	D MAX.	A MAX.	A₀ MAX.	L MIN.	T MAX.	∅D	F	CATALOG NUMBER
5.0	7.0	9.0	11.0	27.0	6	0.6 ±0.05	5 +0.6/-0.1	2322 582
7.0	9.0	11.0	13.0	27.0	6	0.6 ±0.05	5 +0.6/-0.1	2322 583
10.0	13.5	15.5	18.0	17.0	10	0.8 ±0.05	7.5 ±0.8	2322 584
14.0	17.0	19.0	23.0	16.0	11	0.8 ±0.05	7.5 ±0.8	2322 585
20.0	23.0	25.0	28.0	24.0	11	1.0 ±0.05	10 ±0.8	2322 586

VARISTORS IN BULK					
TYPE	2322 582 Ø5 mm 11 V to 460 V	2322 583 Ø7 mm 11 V to 510 V	2322 584 Ø10 mm 11 V to 680 V	2322 585 Ø14 mm 11 V to 680 V	2322 586 Ø20 mm 11 V to 680 V
Straight leads; see Outline of components with straight leads drawing	5...6	5...6	5...6	5...6	5...6
Kinked leads; see Outline of components with kinked leads drawing	6...6	6...6	6...6	6...6	6...6
Package quantities					
14 to 95 V	250	250	250	100	50
130 to 460 V	250	250	250	100	50
485 to max. V	-	250	150	100	50

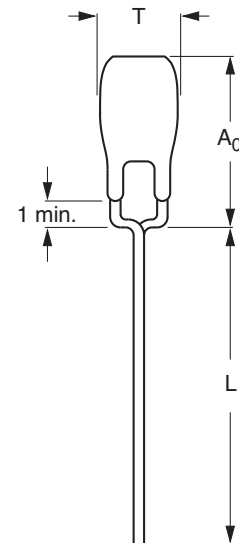
DIMENSIONS in millimeters

Outline of component with straight leads.



For dimensions, see Component Dimensions and catalog Numbers table.

Outline of component with kinked leads.

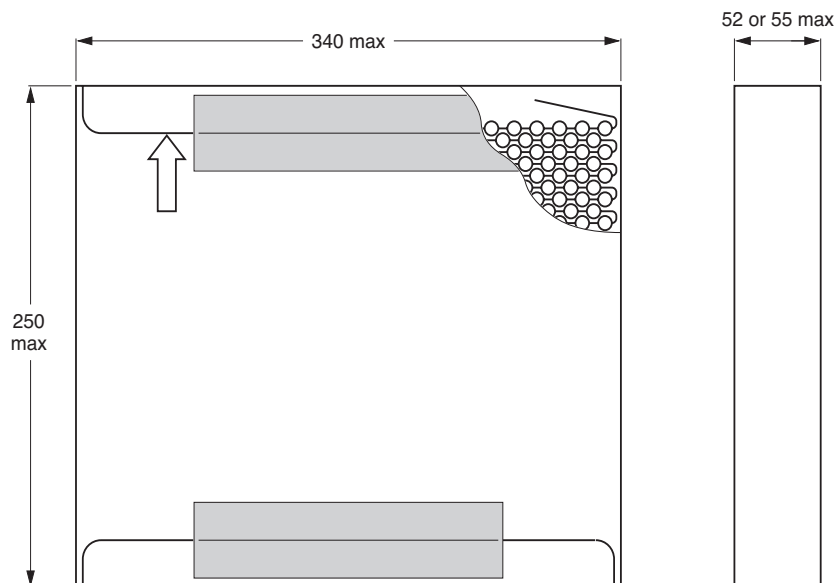


For dimensions, see Component Dimensions and catalog Numbers table.

VARISTORS ON TAPE IN AMMOPACK				
TYPE	2322 582 Ø5 mm 11 V to 460 V	2322 583 Ø7 mm 11 V to 510 V	2322 584 Ø10 mm 11 V to 680 V	2322 585 Ø14 mm 11 V to 680 V
Straight leads; H = 18 or 20 mm; see Taped version with straight leads (only for 2322 582 and 2322 583 series) and Taped version with straight leads (only for 2322 584 and 2322 585 series) drawings	0...7	0...7	0...7	0...7
Kinked leads; H ₀ = 18 mm; see Taped version with kinked leads (only for 2322 584 and 2322 585 series) drawing	3...7	3...7	3...7	3...7
Kinked leads; H ₀ = 16 mm; see Taped version with kinked leads (only for 2322 582 and 2322 583 series) drawing	8...7	8...7	8...7	8...7
Package quantities				
14 to 210 V	1500 ¹⁾	1500 ¹⁾	500	500
230 to max. V	1000	1000	500	500

Note

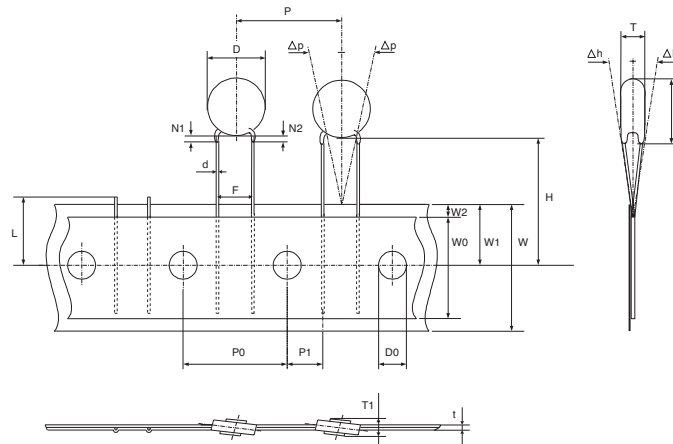
1. Except for 35 and 40 V = 1000 pieces

DIMENSIONS OF AMMOPACK in millimeters


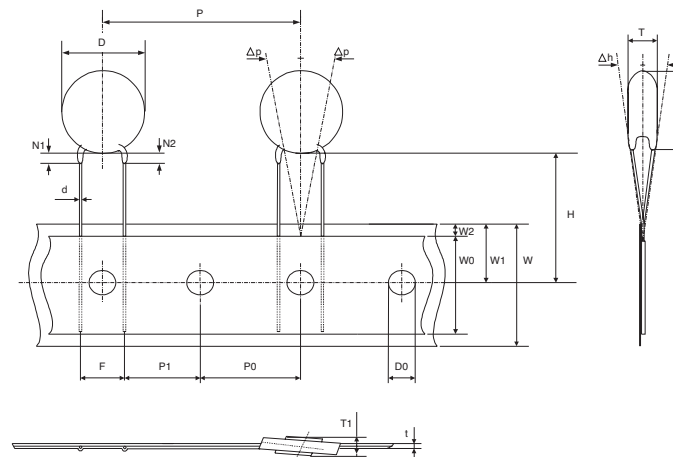
VARISTORS ON TAPE ON REEL				
TYPE	2322 582 Ø5 mm 11 V to 460 V	2322 583 Ø7 mm 11 V to 510 V	2322 584 Ø10 mm 11 V to 680 V	2322 585 Ø14 mm 11 V to 680 V
Straight leads: H = 18 mm (2322 584 and 2322 585); see Taped version with straight leads (only for 2322 584 and 2322 585 series) drawing H = 20 mm (2322 582 and 2322 583); see Taped version with straight leads (only for 2322 582 and 2322 583 series) drawing	–	–	0...6	0...6
Kinked leads; H ₀ = 18 mm; see Taped version with kinked leads (only for 2322 584 and 2322 585 series) drawing	3...6	3...6	3...6	3...6
Kinked leads; H ₀ = 16 mm; see Taped version with kinked leads (only for 2322 582 and 2322 583 series) drawing	8...6	8...6	8...6	8...6
Package quantities				
14 V to 300V	3000	3000	2000	750
320 V to 350 V	3000	3000	1000	500
385 V to max. V	3000	2000	1000	500

PACKAGING

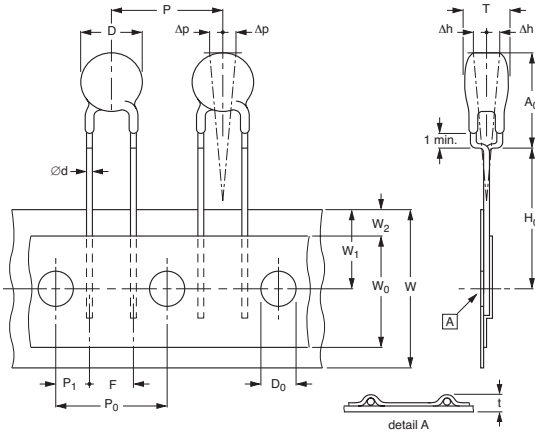
TAPED VERSION WITH STRAIGHT LEADS (only for 2322 582 and 2322 583 series).



TAPED VERSION WITH STRAIGHT LEADS (only for 2322 584 and 2322 585 series).

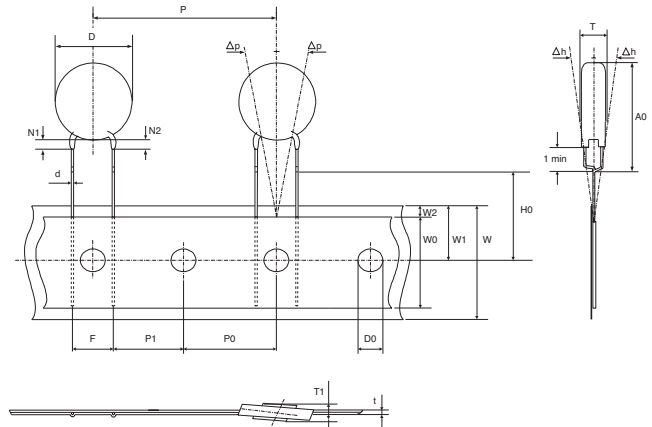


TAPED VERSION WITH KINKED LEADS
(only for 2322 582 and 2322 583 series).



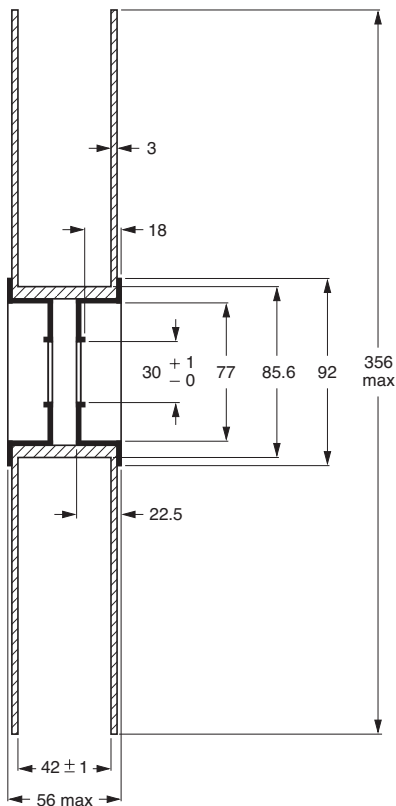
For dimensions, see Taping data table.

TAPED VERSION WITH KINKED LEADS
(only for 2322 584 and 2322 585 series).

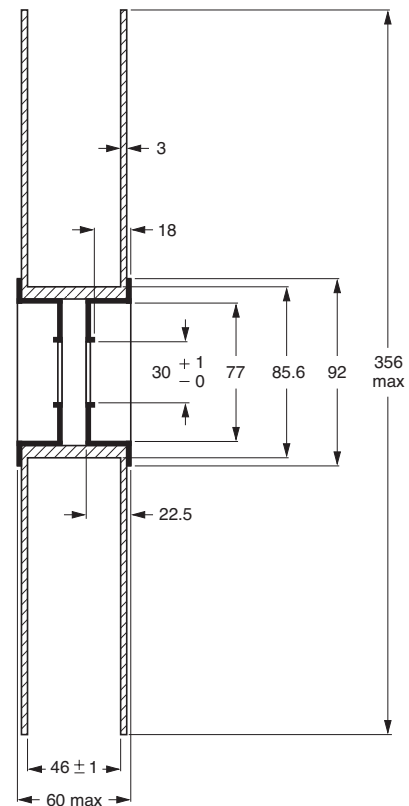


For dimensions, see Taping data table.

DIMENSIONS OF REELS in millimeters



For 2322 582/583



For 2322 584/585

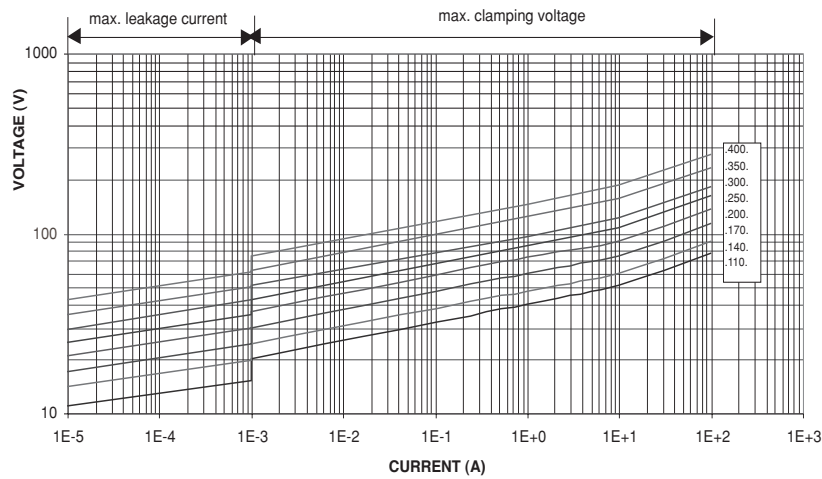
TAPING DATA (based on "IEC 60286-2")					
SYMBOL	PARAMETER	DIMENSIONS/TOLERANCE			
		582	583	584	585
A	mounting height	9.0 max	11.0 max	15.5 max	19.0 max
A ₀	mounting height	11.0 max	13.0 max	18.0 max	23.0 max
B	body diameter	7.0 max	9.0 max	13.5 max	17.0 max
D ₀	feed hole diameter	4.0 ±0.2			
d	lead wire diameter	0.6 ±0.05		0.8 ±0.05	
F	lead to lead distance ⁽¹⁾	5 +0.6/-0.1		7.5 ±0.8	
H	distance component to tape centre				
H ₀	lead-wire clinch height				
Δh	component alignment	0.0 ±2.0			
L	lead length	27.0 min		17.0 min	16.0 min
P	component pitch	12.7 ±1.0		25.4 ±1.0	
P ₀	feed hole pitch ⁽²⁾	12.7 ±0.3		12.7 ±0.3	
P ₁	feed hole centre to lead centre	3.85 ±0.7		8.95 ±0.7	
Δp	component alignment	0.0 ±1.3			
T	total thickness	6.0 max	6.0 max	10.0 max	11.0 max
t	total tape thickness ⁽³⁾	1.4 max			
W	tape width	18.0 +1.0/-0.5			
W ₀	hold down tape width	12.5 min			
W ₁	hole position	9.0 ±0.5			
W ₂	hold down tape position	3.0 max			

Note

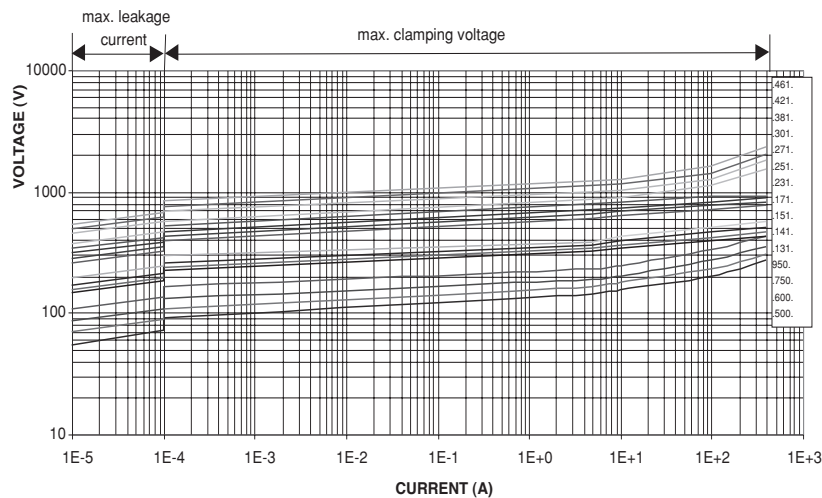
1. Guaranteed between component and tape.
2. Cumulative pitch-error ±1.0 mm to 20 pitches.
3. With cardboard tape from 0.5 mm ±0.1.



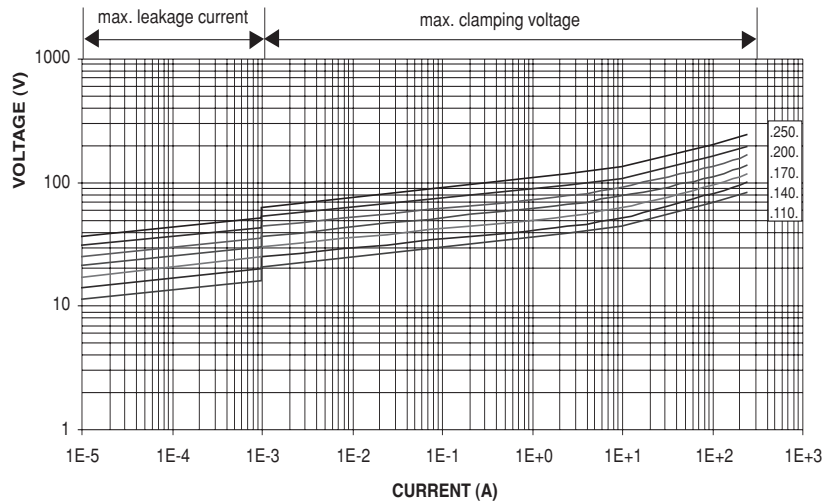
V/I CHARACTERISTIC, 11 TO 40 V (RMS); 2322 582 series



V/I CHARACTERISTIC, 50 TO 460 V (RMS); 2322 582 series

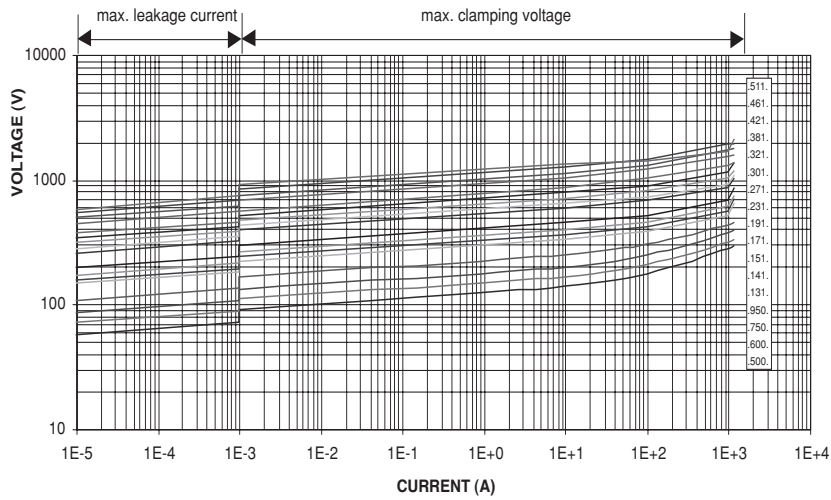


V/I CHARACTERISTIC, 11 TO 40 V (RMS); 2322 583 series

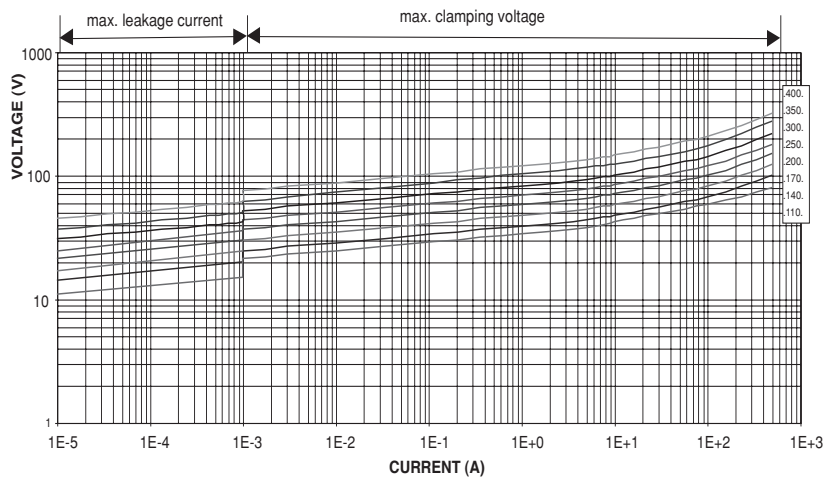




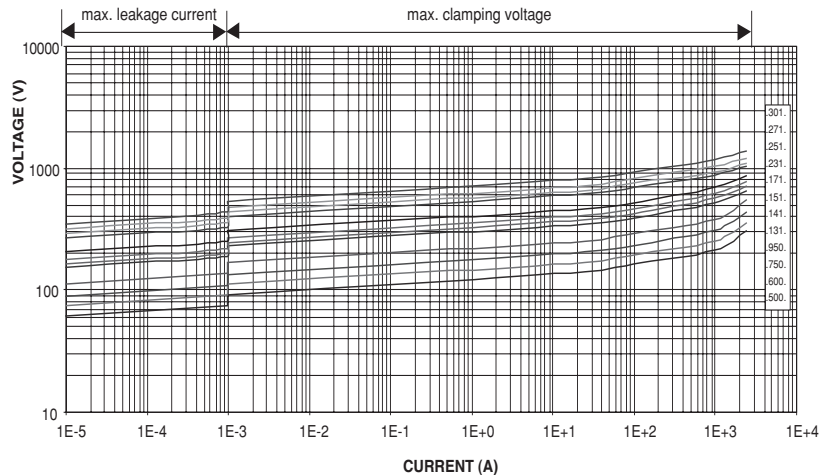
V/I CHARACTERISTIC, 50 TO 510 V (RMS); 2322 583 series



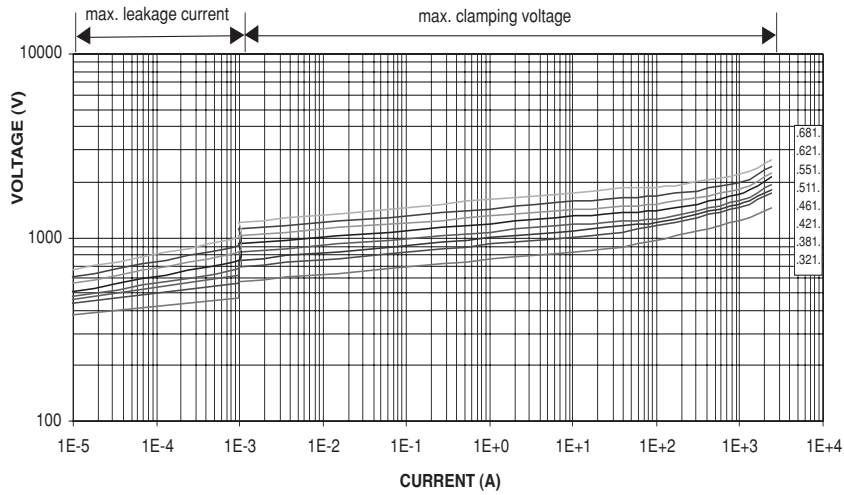
V/I CHARACTERISTIC, 11 TO 40 V (RMS); 2322 584 series



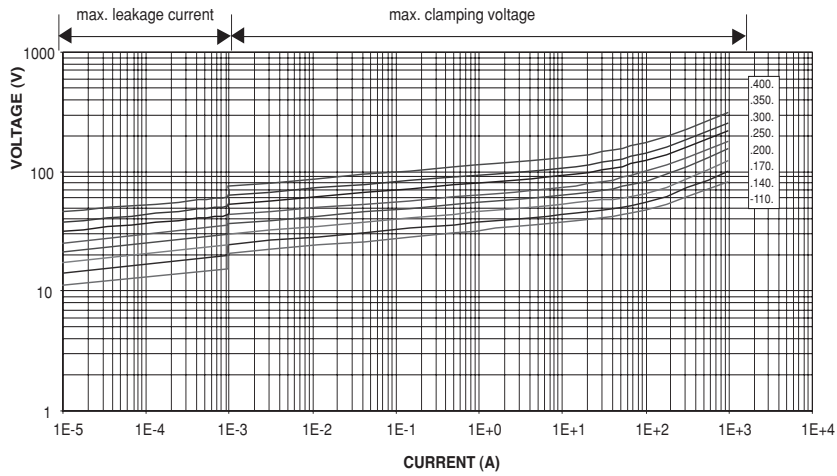
V/I CHARACTERISTIC, 50 TO 300 V (RMS); 2322 584 series



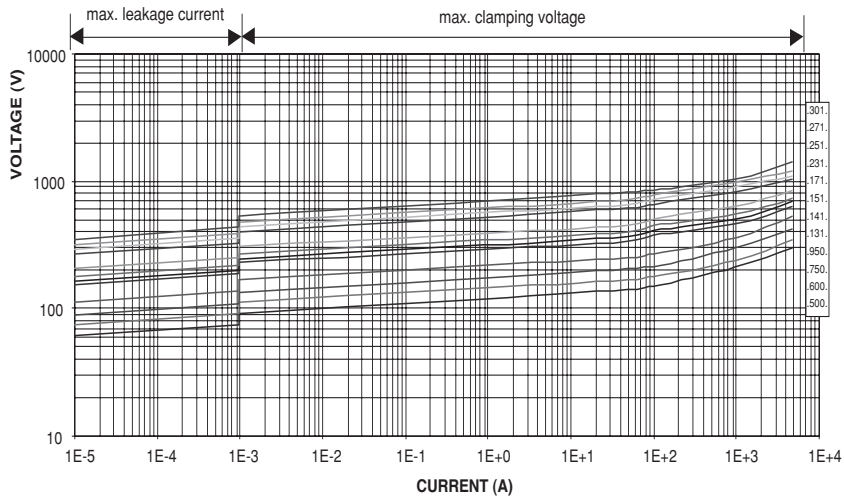
V/I CHARACTERISTIC, 320 TO 680 V (RMS); 2322 584 series



V/I CHARACTERISTIC, 11 TO 40 V (RMS); 2322 585 series

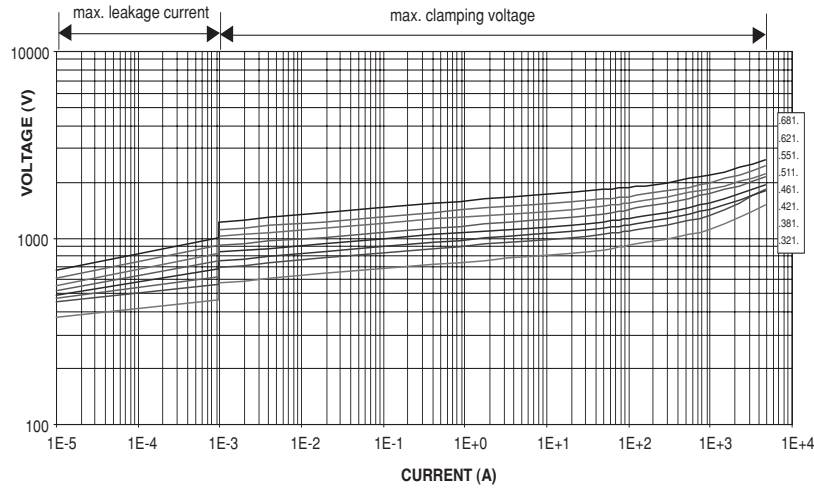


V/I CHARACTERISTIC, 50 TO 300 V (RMS); 2322 585 series

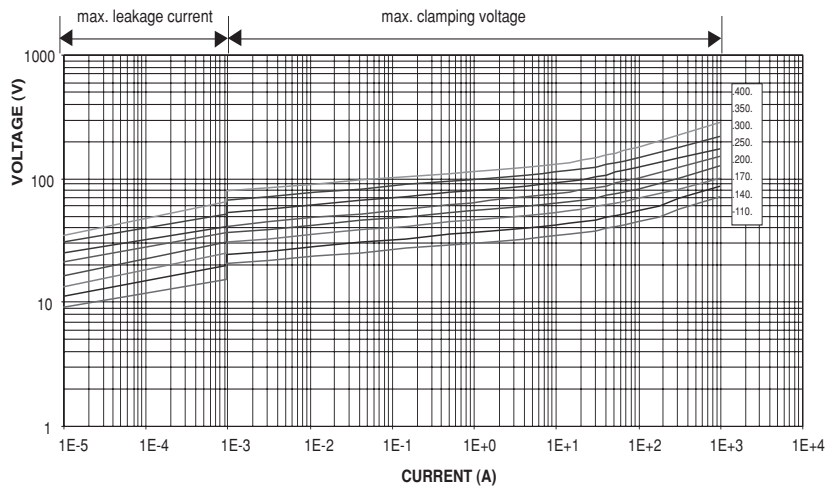




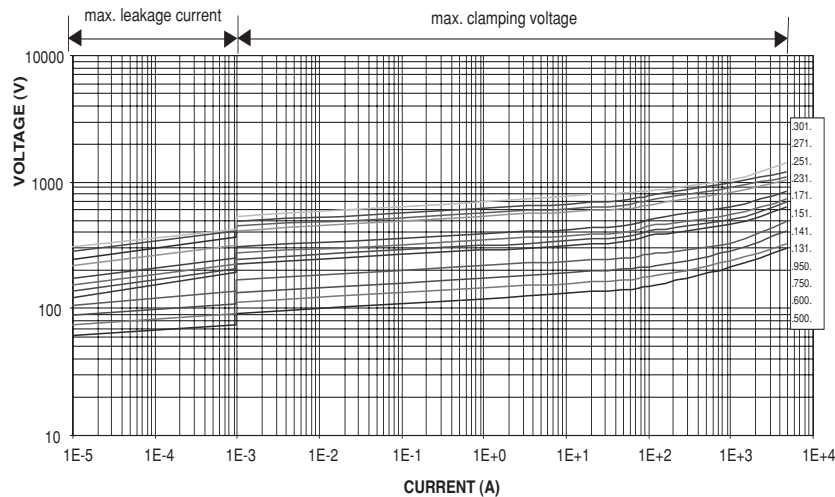
V/I CHARACTERISTIC, 300 TO 385 V (RMS); 2322 585 series



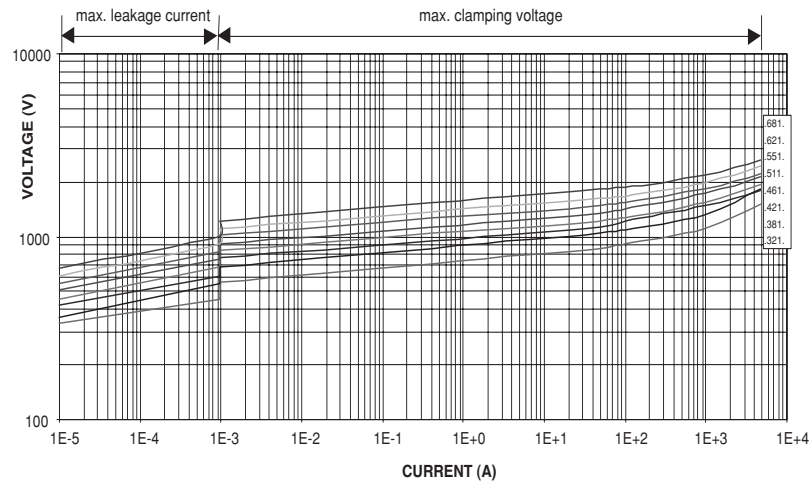
V/I CHARACTERISTIC, 11 TO 40 V (RMS); 2322 586 series



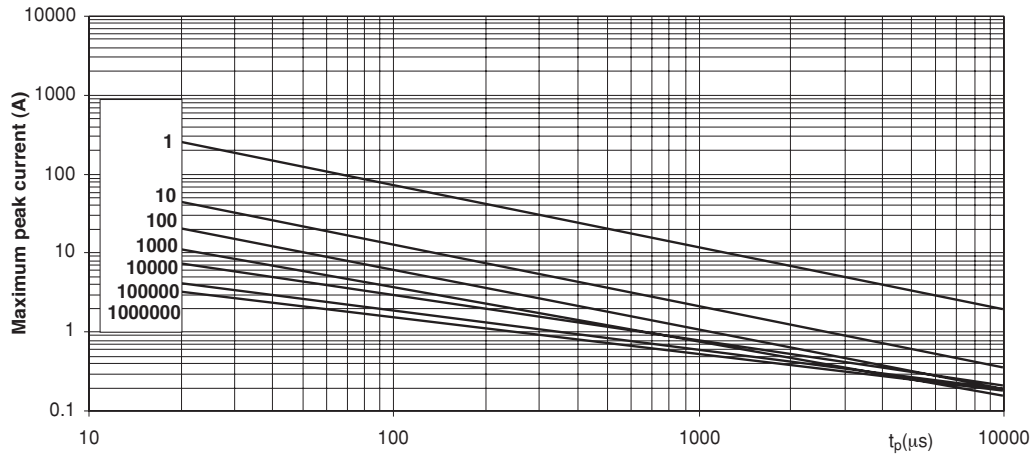
V/I CHARACTERISTIC, 50 TO 300 V (RMS); 2322 586 series



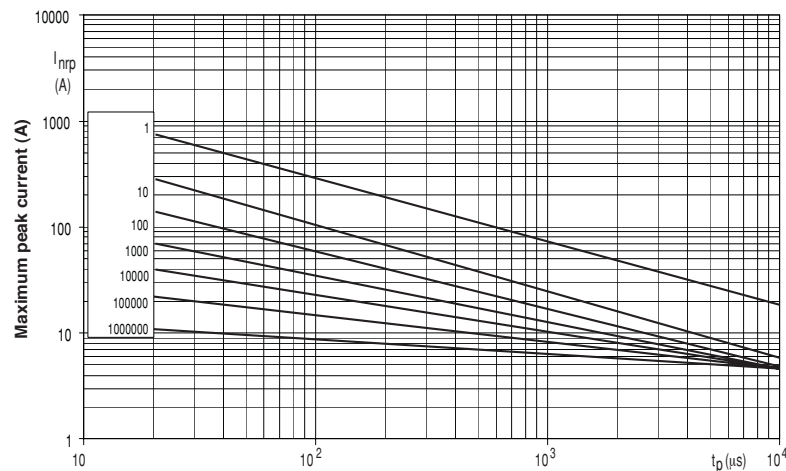
V/I CHARACTERISTIC, 320 TO 680 V (RMS); 2322 586 series



MAXIMUM APPLICABLE TRANSIENT CURRENT AS A FUNCTION OF PULSE DURATION, 11V TO 40 V (RMS); 2322 582 series

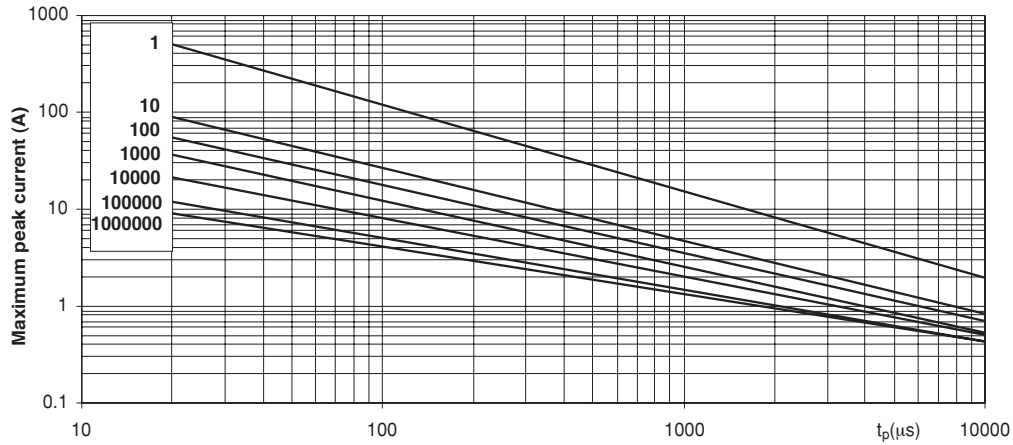


MAXIMUM APPLICABLE TRANSIENT CURRENT AS A FUNCTION OF PULSE DURATION, 50V TO 300 V (RMS); 2322 582 series

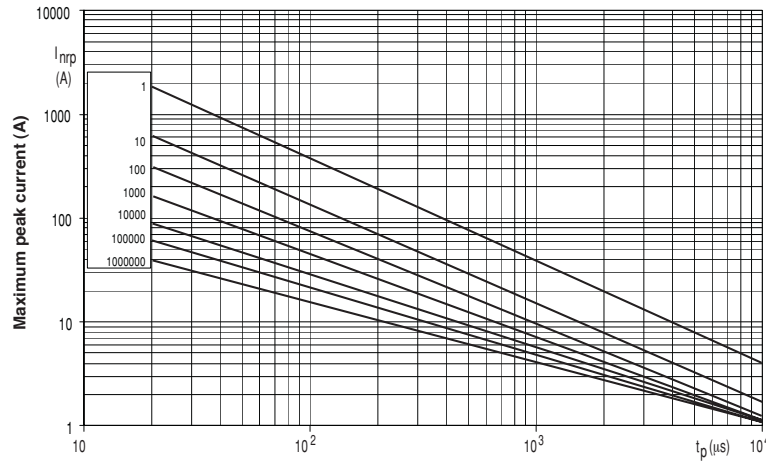




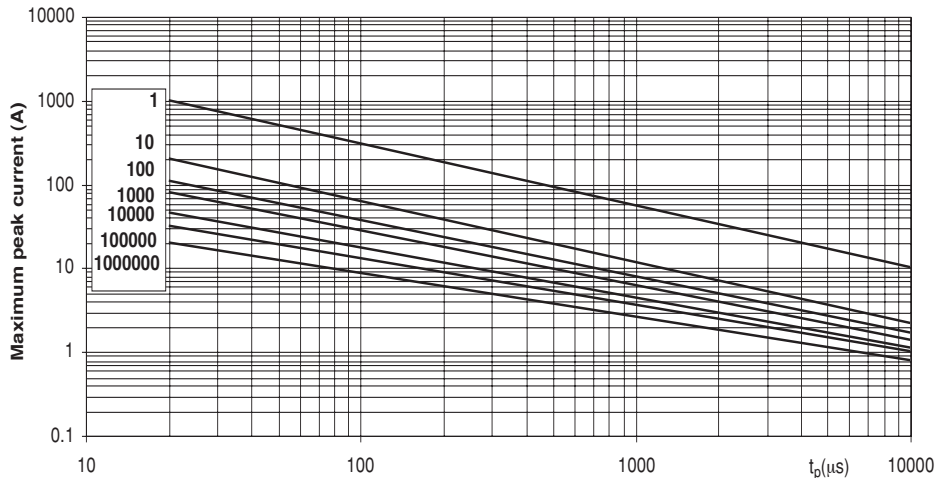
MAXIMUM APPLICABLE TRANSIENT CURRENT AS A FUNCTION OF PULSE DURATION, 11V TO 40 V (RMS); 2322 583 series



MAXIMUM APPLICABLE TRANSIENT CURRENT AS A FUNCTION OF PULSE DURATION, 50V TO 300 V (RMS); 2322 583 series

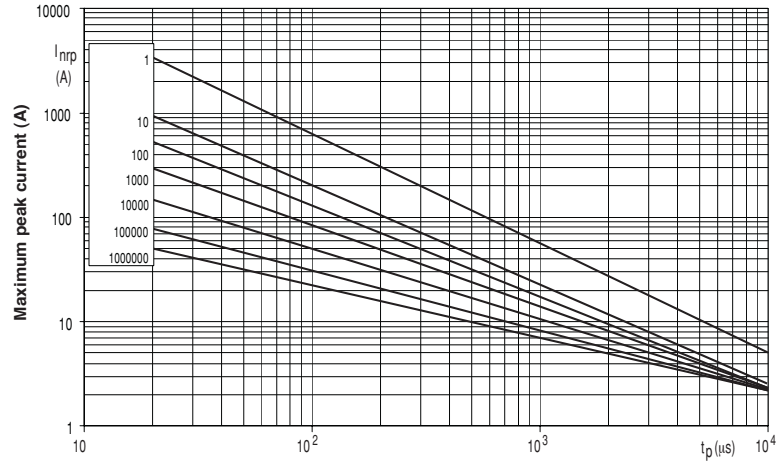


MAXIMUM APPLICABLE TRANSIENT CURRENT AS A FUNCTION OF PULSE DURATION, 11V TO 40 V (RMS); 2322 584 series

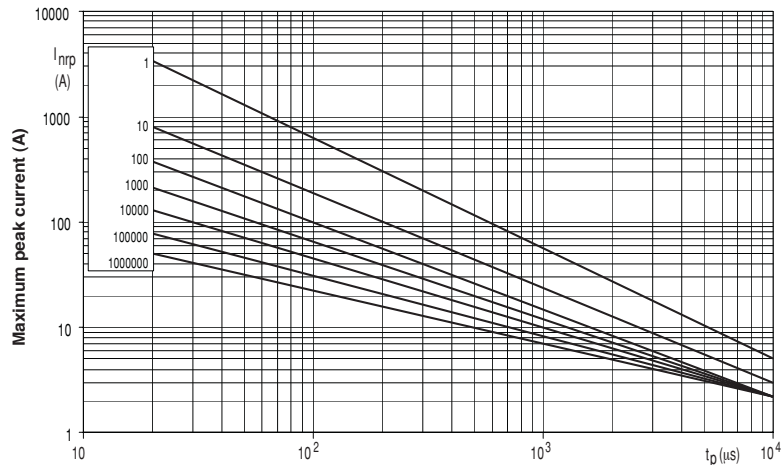




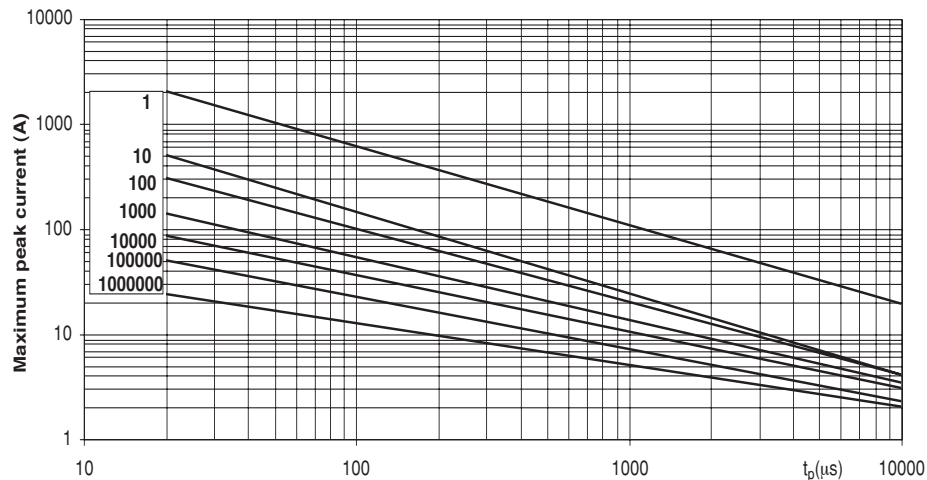
MAXIMUM APPLICABLE TRANSIENT CURRENT AS A FUNCTION OF PULSE DURATION, 50V TO 300 V (RMS); 2322 584 series



MAXIMUM APPLICABLE TRANSIENT CURRENT AS A FUNCTION OF PULSE DURATION, 320V TO 680 V (RMS); 2322 584 series

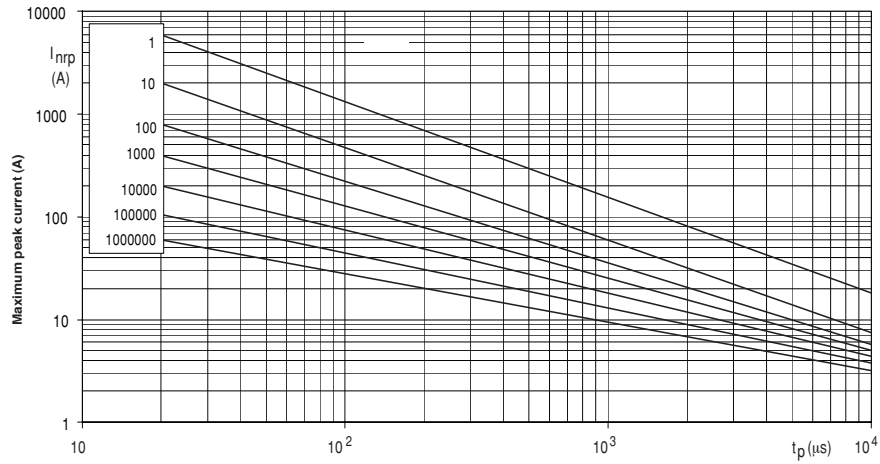


MAXIMUM APPLICABLE TRANSIENT CURRENT AS A FUNCTION OF PULSE DURATION, 11V TO 40 V (RMS); 2322 585 series

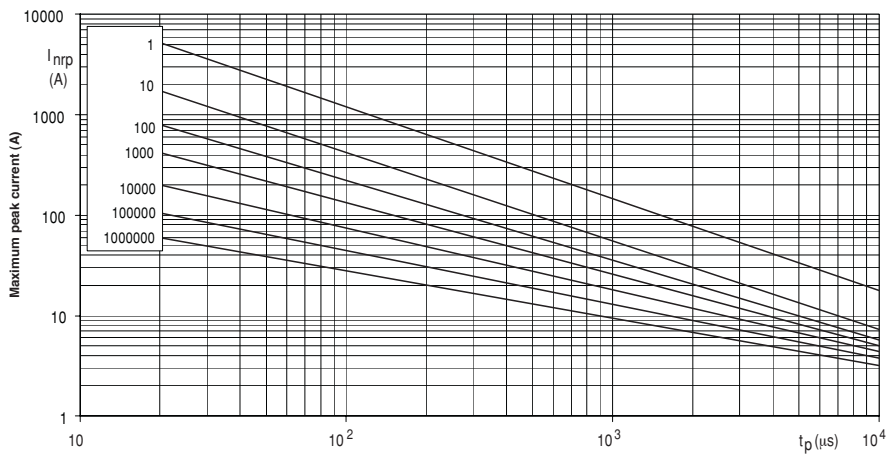




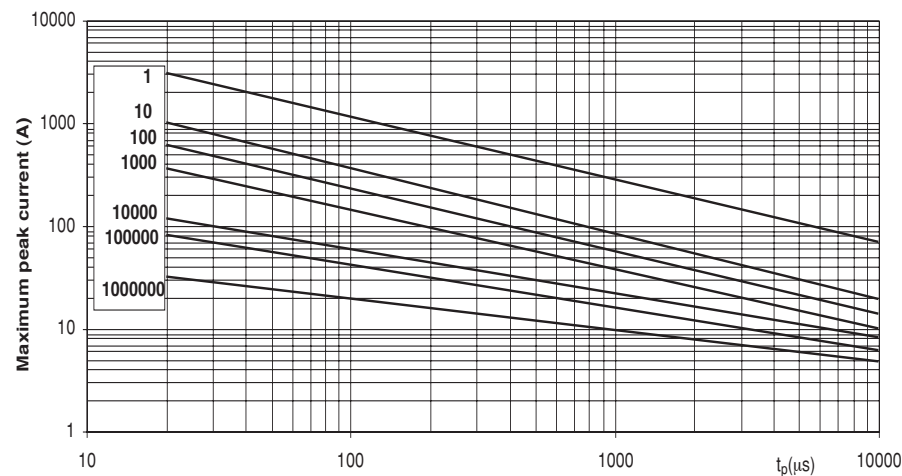
MAXIMUM APPLICABLE TRANSIENT CURRENT AS A FUNCTION OF PULSE DURATION, 50V TO 300 V (RMS); 2322 585 series



MAXIMUM APPLICABLE TRANSIENT CURRENT AS A FUNCTION OF PULSE DURATION, 320V TO 680 V (RMS); 2322 585 series

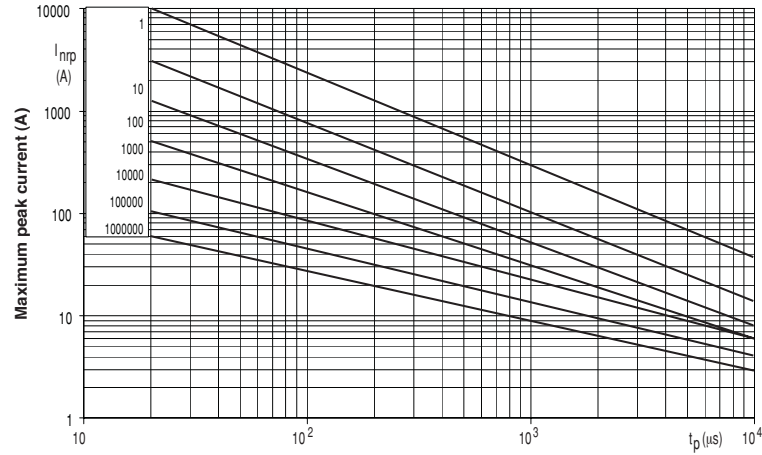


MAXIMUM APPLICABLE TRANSIENT CURRENT AS A FUNCTION OF PULSE DURATION, 11V TO 40 V (RMS); 2322 586 series





MAXIMUM APPLICABLE TRANSIENT CURRENT AS A FUNCTION OF PULSE DURATION, 50V TO 300 V (RMS); 2322 586 series



MAXIMUM APPLICABLE TRANSIENT CURRENT AS A FUNCTION OF PULSE DURATION, 320V TO 680 V (RMS); 2322 586 series

