

Last order date: 31.10.2012



Disc Size: 10 mm



Disc Size: 20 mm



Disc Size: 25 mm

390 - 1000VAC · 3500 - 13000 A · 10 - 25 mm

**Description**

- Radial Leaded Varistor
- Low leakage current
- VDE, UL, CSA approvals

Standards

- IEC 61051 - Varistors for Use in Electronic Equipment
- UL 1414 - Across-the-Line Components
- UL 1449 - Transient Voltage Surge Suppressors
- CSA C22.2 - Accessories and Parts for Electronic Equipment

Approvals

- VDE Certificate Number: 40026011
- UL File Number: E340137 (UL 1449), E325083 (UL 1414)
- CSA File Number: 2088244

Applications

- Overvoltage Protection for three-phase applications
- Surge Protection according to IEC 61000-4-5

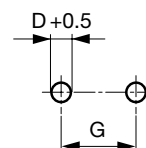
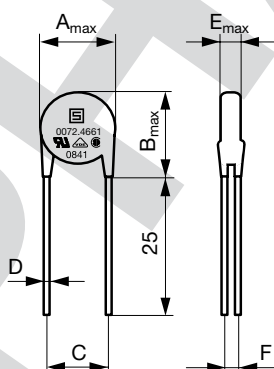
Weblinks

[pdf-datasheet](#), [html-datasheet](#), [General Product Information](#), [Approvals](#), [CE declaration of conformity](#), [RoHS](#), [CHINA-RoHS](#), [e-Shop](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#), [Detailed request for product](#)

Technical Data

Rated Voltage	390 - 1000VAC, 500 - 1200VDC
Disc Size	10 - 25 mm
Peak Current 8/20 μ s, 1 Pulse	3500 - 13000 A
Max. Energy Absorption	25 - 875 J
10/1000 μ s	
Current/Energy Derating above 85 °C	- 2.5% / °C
Voltage/Temperature Coefficient	- 0.05% / °C
Mounting	PCB, THT
Admissible Ambient Air Temp.	- 40 °C to 85 °C
Material: Terminals	Tin-Plated Copper Alloy
Material: Tube	Zinc Oxide
Storage Conditions	0 °C to 60 °C max. 70% r.h.
Product Marking	Order Number, Approvals, Data Code

Soldering Methods	Wave
Solderability	235 °C / 2 sec IEC 60068-2-20, Test Ta, method 1
Resistance to Soldering Heat	260 °C / 5 sec acc. to IEC 60068-2-20, Test Tb, method 1A
Insulation Resistance	>10'000 M Ω
HiPot Encapsulation	2500 VDC
Impulse Response Time	< 50 ns
DC Leakage Current	< 200 μ A
Flammability	UL 94V-0

Dimensions

Drilling diagram

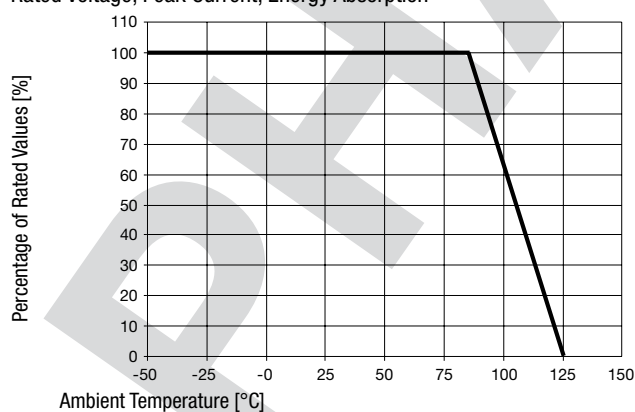
Dimensions

Rated Voltage	Disc size	A max	B max	C	D	E	F	G	Order Number
[VAC]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	
390	10	12	15	7.5	0.8	5.8	2.7	8.0	0072.3941.xx
390	14	15.5	19	7.5	0.8	5.9	2.7	8.0	0072.3961.xx
390	20	21.5	26	10	1	6.3	2.8	10.4	0072.3981.xx
390	25	27.9	31.8	10	1	6.3	2.8	10.4	0072.3991.xx
420	10	12	15	7.5	0.8	6.1	2.9	8.0	0072.4241.xx
420	14	15.5	19	7.5	0.8	6.1	2.9	8.0	0072.4261.xx
420	20	21.5	26	10	1	6.5	3.1	10.5	0072.4281.xx
420	25	27.9	31.8	10	1	6.5	3.1	10.5	0072.4291.xx
460	10	12	15	7.5	0.8	6.3	3.1	8.1	0072.4641.xx
460	14	15.5	19	7.5	0.8	6.4	3.1	8.1	0072.4661.xx
460	20	21.5	26	10	1	6.8	3.3	10.5	0072.4681.xx
460	25	27.9	31.8	10	1	6.8	3.3	10.5	0072.4691.xx
480	10	12	15	7.5	0.8	6.3	3.1	8.1	0072.4841.xx
480	14	15.5	19	7.5	0.8	6.4	3.1	8.1	0072.4861.xx
480	20	21.5	26	10	1	6.8	3.3	10.5	0072.4881.xx
480	25	27.9	31.8	10	1	6.8	3.3	10.5	0072.4891.xx
510	10	12	15	7.5	0.8	6.7	3.4	8.2	0072.5141.xx
510	14	15.5	19	7.5	0.8	6.8	3.4	8.2	0072.5161.xx
510	20	21.5	26	10	1	7.1	3.5	10.6	0072.5181.xx
510	25	27.9	31.8	10	1	7.1	3.5	10.6	0072.5191.xx
550	10	12	15	7.5	0.8	7.1	3.7	8.4	0072.5541.xx
550	14	15.5	19	7.5	0.8	7.2	3.7	8.4	0072.5561.xx
550	20	21.5	26	10	1	7.5	3.9	10.7	0072.5581.xx
550	25	27.9	31.8	10	1	7.5	3.9	10.7	0072.5591.xx
620	10	12	15	7.5	0.8	7.5	4	8.5	0072.6241.xx
620	14	15.5	19	7.5	0.8	7.5	4	8.5	0072.6261.xx
620	20	21.5	26	10	1	7.9	4.2	10.8	0072.6281.xx
620	25	27.9	31.8	10	1	7.9	4.2	10.8	0072.6291.xx
680	10	12	15	7.5	0.8	7.9	4.4	8.7	0072.6841.xx
680	14	15.5	19	7.5	0.8	8	4.4	8.7	0072.6861.xx
680	20	21.5	26	10	1	8.4	4.5	11.0	0072.6881.xx
680	25	27.9	31.8	10	1	8.4	4.5	11.0	0072.6891.xx
1000	14	15.5	19	7.5	0.8	11	6.7	10.1	0072.1061.xx
1000	20	21.5	26	10	1	11.4	6.9	12.1	0072.1081.xx
1000	25	27.9	31.8	10	1	11.4	6.9	12.1	0072.1091.xx

Electrical parameters can be found in the table of variants below.

Temperature Derating Curves

Rated Voltage, Peak Current, Energy Absorption



Variants

Rated Voltage	Rated Voltage	Disc size	Peak Current, 8/20 μ s, 1 Pulse	Peak Current, 8/20 μ s, 2 Pulses	Energy, 10/1000 μ s	Min. Voltage @ 1 mA DC	Max. Voltage @ 1 mA DC	Max. Clamping Voltage	Peak Current, 8/20 μ s, Clamping	Typ. Capacity @ 1 kHz				Order Number
[VAC]	[VDC]	[mm]	[A]	[A]	[J]	[V]	[V]	[V]	[A]	[pF]		1)	2)	
390	500	10	3500	2500	107	552	674	1025	25	146	●	●	●	0072.3941.xx
390	500	14	6000	4500	215	552	674	1025	50	297	●	●	●	0072.3961.xx
390	500	20	10000	6500	420	552	674	1025	100	667	●	●	●	0072.3981.xx
390	500	25	13000	9000	460	552	674	1025	100	1211		●	●	0072.3991.xx
420	560	10	3500	2500	110	594	725	1120	25	136	●	●	●	0072.4241.xx
420	560	14	6000	4500	225	594	725	1120	50	275	●	●	●	0072.4261.xx
420	560	20	10000	6500	430	594	725	1120	100	618	●	●	●	0072.4281.xx
420	560	25	13000	9000	480	594	725	1120	100	1123		●	●	0072.4291.xx
460	615	10	3500	2500	115	651	795	1240	25	124	●	●	●	0072.4641.xx
460	615	14	6000	4500	230	651	795	1240	50	251	●	●	●	0072.4661.xx
460	615	20	10000	6500	450	651	795	1240	100	565	●	●	●	0072.4681.xx
460	615	25	13000	9000	500	651	795	1240	100	1025		●	●	0072.4691.xx
480	640	10	3500	2500	120	679	829	1300	25	119	●	●	●	0072.4841.xx
480	640	14	6000	4500	235	679	829	1300	50	242	●	●	●	0072.4861.xx
480	640	20	10000	6500	460	679	829	1300	100	544	●	●	●	0072.4881.xx
480	640	25	13000	9000	510	679	829	1300	100	989		●	●	0072.4891.xx
510	675	10	3500	2500	125	722	881	1350	25	112	●	●	●	0072.5141.xx
510	675	14	6000	4500	240	722	881	1350	50	227	●	●	●	0072.5161.xx
510	675	20	10000	6500	470	722	881	1350	100	510	●	●	●	0072.5181.xx
510	675	25	13000	9000	525	722	881	1350	100	927		●	●	0072.5191.xx
550	700	10	3500	2500	130	778	950	1400	25	104	●	●	●	0072.5541.xx
550	700	14	6000	4500	255	778	950	1400	50	211	●	●	●	0072.5561.xx
550	700	20	10000	6500	510	778	950	1400	100	475	●	●	●	0072.5581.xx
550	700	25	13000	9000	540	778	950	1400	100	862		●	●	0072.5591.xx
620	800	10	3500	2500	145	877	1071	1650	25	92	●	●	●	0072.6241.xx
620	800	14	6000	4500	290	877	1071	1650	50	186	●	●	●	0072.6261.xx
620	800	20	10000	6500	565	877	1071	1650	100	419	●	●	●	0072.6281.xx
620	800	25	13000	9000	600	877	1071	1650	100	761		●	●	0072.6291.xx
680	860	10	3500	2500	155	962	1175	1800	25	84	●	●	●	0072.6841.xx
680	860	14	6000	4500	310	962	1175	1800	50	170	●	●	●	0072.6861.xx
680	860	20	10000	6500	620	962	1175	1800	100	382	●	●	●	0072.6881.xx
680	860	25	13000	9000	655	962	1175	1800	100	694		●	●	0072.6891.xx
1000	1200	14	6000	4500	510	1414	1728	2700	50	115	●	●	●	0072.1061.xx
1000	1200	20	10000	6500	860	1414	1728	2700	100	259	●	●	●	0072.1081.xx
1000	1200	25	13000	9000	875	1414	1728	2700	100	471		●	●	0072.1091.xx

1) UL 1449 - Transient Voltage Surge Suppressors - Component

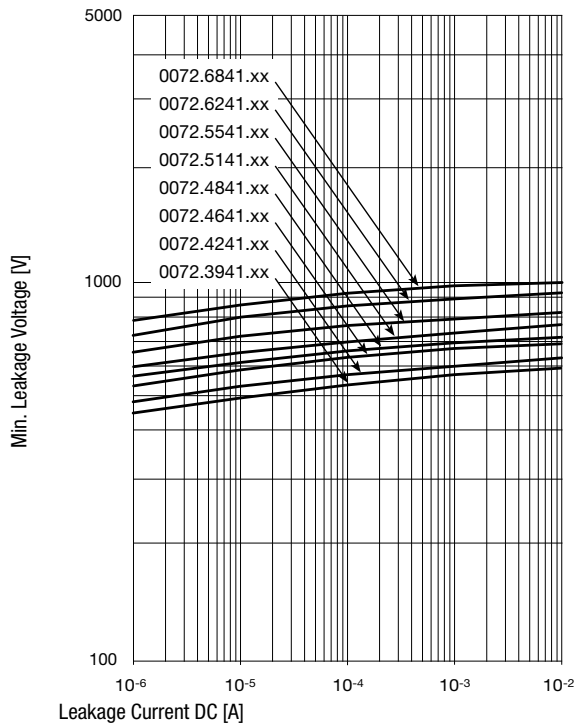
2) UL 1414 - Across-the-line Capacitors, Antenna-coupling and Line-bypass Components

Packaging Unit

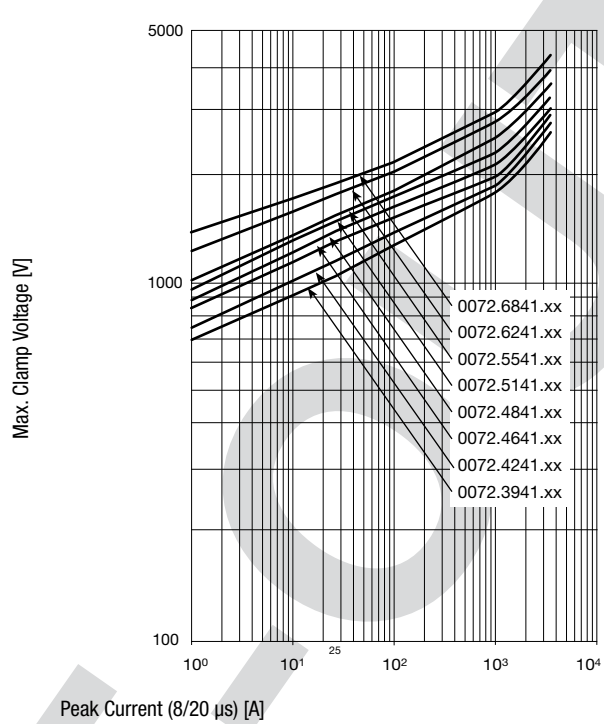
.xx = .B1 Plastic Bag (100 pcs.)
Tape&Reel and Ammo Pack not available

Voltage-Current Curves

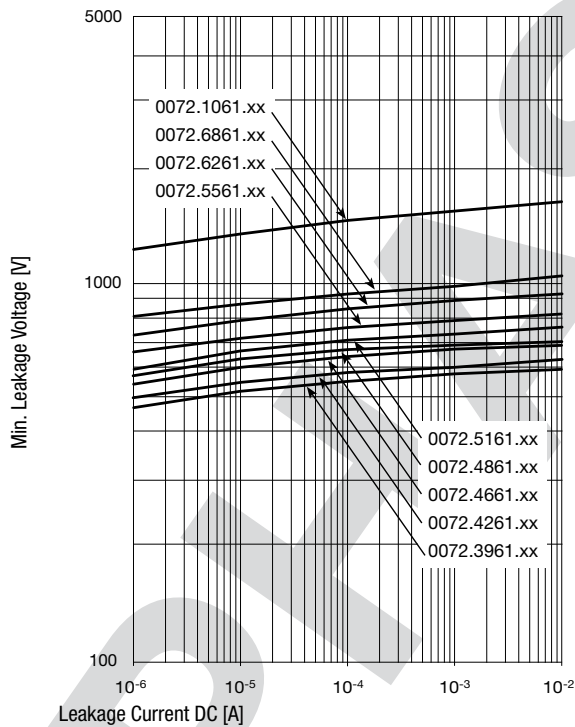
Disc Size: 10 mm



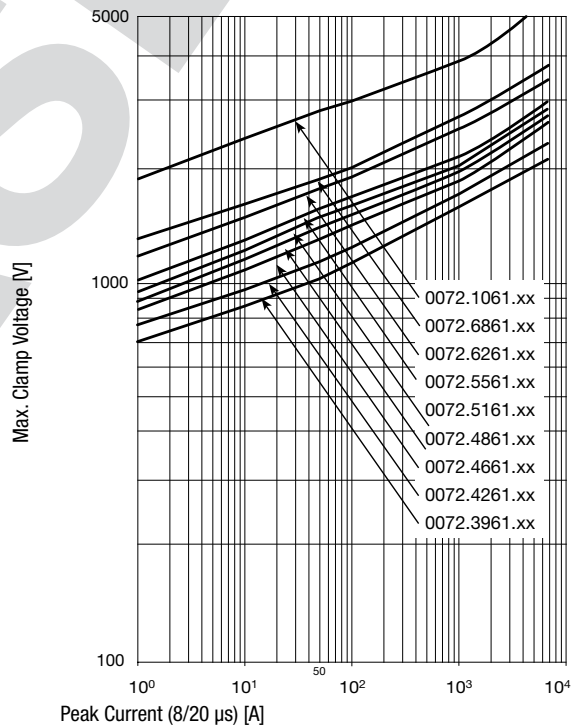
Disc Size: 10 mm



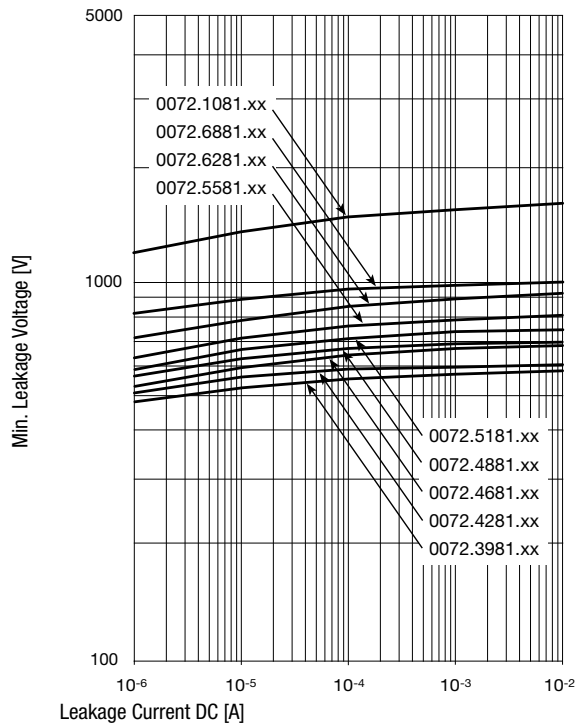
Disc Size: 14 mm



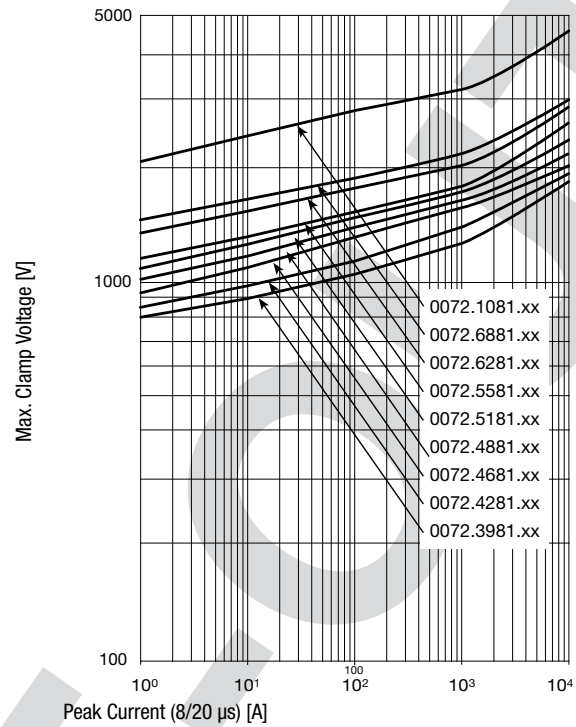
Disc Size: 14 mm



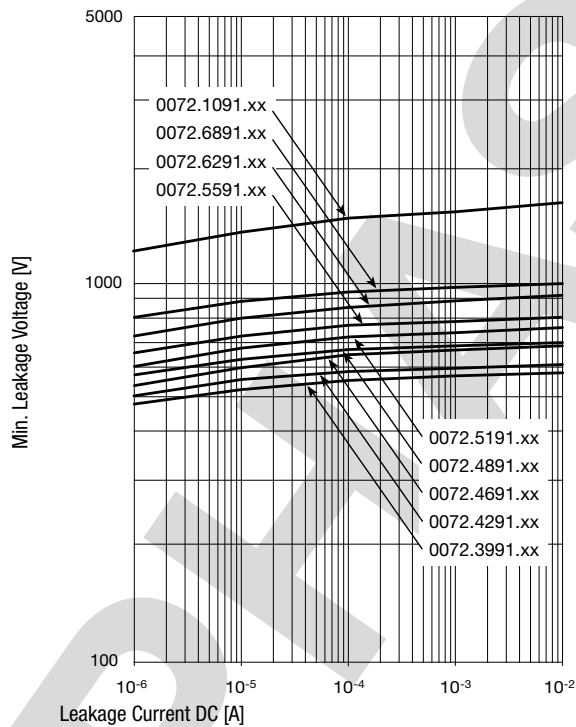
Disc Size: 20 mm



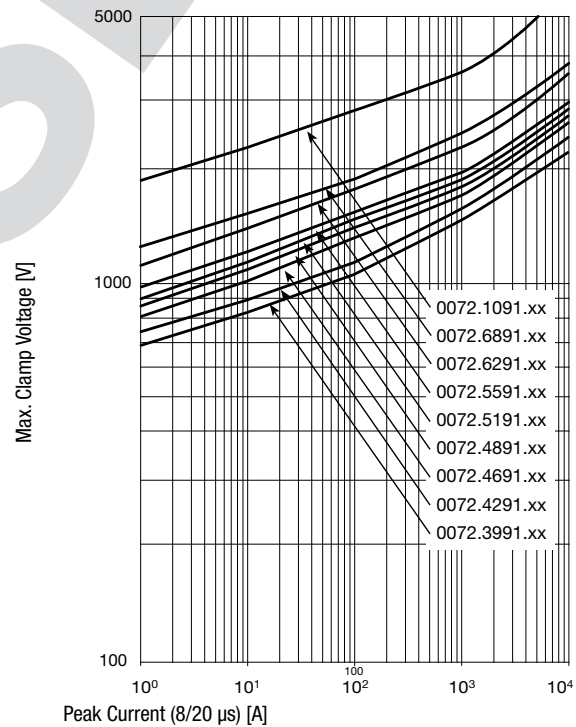
Disc Size: 20 mm Varistor



Disc Size: 25 mm



Disc Size: 25 mm



Pulse Derating Curves

Derating at Quantity of Pulses and Pulse Duration

1, 10, ... = Quantity of Pulses

