

Last order date: 31.10.2012



Disc Size: 7 mm



Disc Size: 14 mm



Disc Size: 25 mm

120 - 360 VAC · 800 - 13000 A · 5 - 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

- Surge protection
- Primary Protection Single-Phase
- Surge Protection according to IEC 61000-4-5

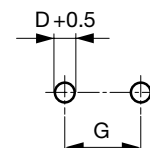
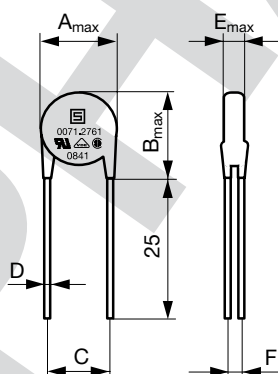
References
[Packaging Details](#)
Weblinks

[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	120 - 360 VAC, 160 - 470 VDC
Disc Size	5 - 25 mm
Peak Current 8/20 μ s, 1 Pulse	800 - 13000 A
Max. Energy Absorption	8 - 440 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 acc. to 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

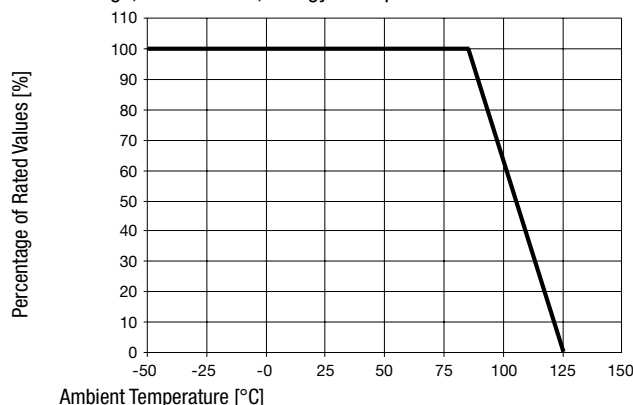
Rated Voltage	Disc size	A max	B max	C	D	E	F	G	Order Number
[VAC]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	
120	5	7	8.5	5	0.6	3.6	1.5	5.2	0071.1211.xx
120	7	9	11	5	0.6	3.6	1.5	5.2	0071.1221.xx
120	10	12	14.5	7.5	0.8	4.2	1.6	7.7	0071.1241.xx
120	14	15.5	18.5	7.5	0.8	4.2	1.6	7.7	0071.1261.xx
120	20	21.5	25.5	10	1	4.6	1.8	10.2	0071.1281.xx
130	5	7	8.5	5	0.6	3.6	1.6	5.2	0071.1311.xx
130	7	9	11	5	0.6	3.6	1.6	5.2	0071.1321.xx
130	10	12	14.5	7.5	0.8	4.2	1.8	7.7	0071.1341.xx
130	14	15.5	18.5	7.5	0.8	4.2	1.9	7.7	0071.1361.xx
130	20	21.5	25.5	10	1	4.7	2	10.2	0071.1381.xx
130	25	27.9	31.8	10	1	4.7	2	10.2	0071.1391.xx
140	5	7	8.5	5	0.6	3.7	1.7	5.3	0071.1411.xx
140	7	9	11	5	0.6	3.7	1.7	5.3	0071.1421.xx
140	10	12	14.5	7.5	0.8	4.3	1.9	7.7	0071.1441.xx
140	14	15.5	18.5	7.5	0.8	4.3	2	7.8	0071.1461.xx
140	20	21.5	25.5	10	1	4.8	2.1	10.2	0071.1481.xx
140	25	27.9	31.8	10	1	4.8	2.1	10.2	0071.1491.xx
150	5	7	8.5	5	0.6	3.8	1.8	5.3	0071.1511.xx
150	7	9	11	5	0.6	3.8	1.8	5.3	0071.1521.xx
150	10	12	14.5	7.5	0.8	4.4	2	7.8	0071.1541.xx
150	14	15.5	18.5	7.5	0.8	4.4	2.1	7.8	0071.1561.xx
150	20	21.5	25.5	10	1	4.9	2.2	10.2	0071.1581.xx
150	25	27.9	31.8	10	1	4.9	2.2	10.2	0071.1591.xx
180	5	7	8.5	5	0.6	3.9	2	5.4	0071.1811.xx
180	7	9	11	5	0.6	4	2	5.4	0071.1821.xx
180	10	12	14.5	7.5	0.8	4.6	2.2	7.8	0071.1841.xx
180	14	15.5	18.5	7.5	0.8	4.6	2.2	7.8	0071.1861.xx
180	20	21.5	25.5	10	1	5	2.3	10.3	0071.1881.xx
230	5	7	8.5	5	0.6	4	1.8	5.3	0071.2311.xx
230	7	9	11	5	0.6	4	1.8	5.3	0071.2321.xx
230	10	12	14.5	7.5	0.8	4.7	2	7.8	0071.2341.xx
230	14	15.5	18.5	7.5	0.8	4.7	2	7.8	0071.2361.xx
230	20	21.5	25.5	10	1	5.1	2.1	10.2	0071.2381.xx
250	5	7	8.5	5	0.6	4.2	1.8	5.3	0071.2511.xx
250	7	9	11	5	0.6	4.2	1.8	5.3	0071.2521.xx
250	10	12	14.5	7.5	0.8	4.8	2	7.8	0071.2541.xx
250	14	15.5	18.5	7.5	0.8	4.8	2	7.8	0071.2561.xx
250	20	21.5	25.5	10	1	5.3	2.2	10.2	0071.2581.xx
250	25	27.9	31.8	10	1	5.3	2.2	10.2	0071.2591.xx
270	5	7	8.5	5	0.6	4.3	2	5.4	0071.2711.xx
270	7	9	11	5	0.6	4.4	2	5.4	0071.2721.xx
270	10	12	14.5	7.5	0.8	4.4	2.2	7.8	0071.2741.xx
270	14	15.5	18.5	7.5	0.8	5	2.2	7.8	0071.2761.xx
270	20	21.5	25.5	10	1	5.4	2.3	10.3	0071.2781.xx
270	25	27.9	31.8	10	1	5.4	2.3	10.3	0071.2791.xx
300	5	7	8.5	5	0.6	4.5	2.1	5.4	0071.3011.xx
300	7	9	11	5	0.6	4.5	2.1	5.4	0071.3021.xx
300	10	12	14.5	7.5	0.8	5.1	2.3	7.8	0071.3041.xx
300	14	15.5	18.5	7.5	0.8	5.2	2.3	7.8	0071.3061.xx
300	20	21.5	25.5	10	1	5.6	2.4	10.3	0071.3081.xx
300	25	27.9	31.8	10	1	5.6	2.4	10.3	0071.3091.xx
320	10	12	14.5	7.5	0.8	5.4	2.4	7.9	0071.3241.xx
320	14	15.5	18.5	7.5	0.8	5.4	2.4	7.9	0071.3261.xx
320	20	21.5	25.5	10	1	5.8	2.6	10.3	0071.3281.xx

Rated Voltage	Disc size	A max	B max	C	D	E	F	G	Order Number
[VAC]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	
320	25	27.9	31.8	10	1	5.8	2.6	10.3	0071.3291.xx
360	10	12	15	7.5	0.8	5.8	2.7	8.0	0071.3641.xx
360	14	15.5	19	7.5	0.8	5.9	2.7	8.0	0071.3661.xx
360	20	21.5	26	10	1	6.3	2.8	10.4	0071.3681.xx
360	25	27.9	31.8	10	1	6.3	2.8	10.4	0071.3691.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 µs, 1 Pulse	Peak Current, 8/20 µs, 2 Pulses	Energy, 10/1000 µs	Min. Voltage @ 1 mA DC	Max. Voltage @ 1 mA DC	Max. Clamping Voltage	Peak Current, 8/20 µs, Clamping	Typ. Capacity @ 1 kHz	VDE	UL	SP	Order Number
[VAC]	[VDC]	[mm]	[A]	[A]	[J]	[V]	[V]	[V]	[A]	[pF]		1)	2)	
120	160	5	800	600	8	170	207	310	5	118	●			0071.1211.xx
120	160	7	1750	1250	16	170	207	320	10	225	●	●		0071.1221.xx
120	160	10	3500	2500	33	170	207	320	25	469	●	●		0071.1241.xx
120	160	14	6000	5000	52	170	207	320	50	1019	●	●		0071.1261.xx
120	160	20	10000	7000	130	170	207	320	100	2331	●	●		0071.1281.xx
130	175	5	800	600	8.5	184	224	350	5	116	●	●	●	0071.1311.xx
130	175	7	1750	1250	17.5	184	224	340	10	250	●	●	●	0071.1321.xx
130	175	10	3500	2500	45	184	224	340	25	438	●	●	●	0071.1341.xx
130	175	14	6500	5000	70	184	224	340	50	890	●	●	●	0071.1361.xx
130	175	20	12000	9000	150	184	224	340	100	2001	●	●	●	0071.1381.xx
130	175	25	18000	13000	170	184	224	340	100	3634	●	●	●	0071.1391.xx
140	180	5	800	600	9	198	242	380	5	111	●	●		0071.1411.xx
140	180	7	1750	1250	20	198	242	360	10	232	●	●	●	0071.1421.xx
140	180	10	3500	2500	50	198	242	360	25	407	●	●	●	0071.1441.xx
140	180	14	6500	5000	78	198	242	360	50	825	●	●	●	0071.1461.xx
140	180	20	12000	9000	160	198	242	360	100	1855	●	●	●	0071.1481.xx
140	180	25	18000	13000	180	198	242	360	100	3370	●	●	●	0071.1491.xx
150	200	5	800	600	10.5	212	259	430	5	101	●	●		0071.1511.xx
150	200	7	1750	1250	21	212	259	395	10	212	●	●	●	0071.1521.xx
150	200	10	3500	2500	55	212	259	395	25	373	●	●	●	0071.1541.xx
150	200	14	6500	5000	84	212	259	395	50	756	●	●	●	0071.1561.xx
150	200	20	12000	9000	170	212	259	395	100	1701	●	●	●	0071.1581.xx
150	200	25	18000	13000	190	212	259	395	100	3089	●	●	●	0071.1591.xx
180	230	5	800	600	11	255	311	510	5	87	●	●		0071.1811.xx
180	230	7	1750	1250	24	255	311	445	10	182	●	●	●	0071.1821.xx
180	230	10	3500	2500	60	255	311	465	25	319	●	●	●	0071.1841.xx
180	230	14	6000	5000	100	255	311	465	50	648	●	●	●	0071.1861.xx

Rated Voltage	Rated Voltage	Disc size	Peak Current, 8/20 µs, 1 Pulse	Peak Current, 8/20 µs, 2 Pulses	Energy, 10/1000 µs	Min. Voltage @ 1 mA DC	Max. Voltage @ 1 mA DC	Max. Clamping Voltage	Peak Current, 8/20 µs, Clamping	Typ. Capacity @ 1 kHz				Order Number
[VAC]	[VDC]	[mm]	[A]	[A]	[J]	[V]	[V]	[V]	[A]	[pF]		1)	2)	
180	230	20	10000	7000	190	255	311	465	100	1548	●	●	●	0071.1881.xx
230	300	5	800	600	16	326	397	595	5	68		●		0071.2311.xx
230	300	7	1750	1250	32	326	397	595	10	141	●	●	●	0071.2321.xx
230	300	10	3500	2500	65	326	397	595	25	248	●	●	●	0071.2341.xx
230	300	14	6000	4500	135	326	397	595	50	504	●	●	●	0071.2361.xx
230	300	20	10000	6500	270	326	397	595	100	1134	●	●	●	0071.2381.xx
250	330	5	800	600	17	354	432	675	5	62		●		0071.2511.xx
250	330	7	1750	1250	35	354	432	650	10	131	●	●	●	0071.2521.xx
250	330	10	3500	2500	70	354	432	650	25	229	●	●	●	0071.2541.xx
250	330	14	6000	4500	145	354	432	650	50	465	●	●	●	0071.2561.xx
250	330	20	10000	6500	300	354	432	650	100	1047	●	●	●	0071.2581.xx
250	330	25	13000	9000	315	354	432	650	100	1901		●	●	0071.2591.xx
270	360	5	800	600	20	382	466	740	5	58		●		0071.2711.xx
270	360	7	1750	1250	40	382	466	710	10	121	●	●	●	0071.2721.xx
270	360	10	3500	2500	80	382	466	710	25	213	●	●	●	0071.2741.xx
270	360	14	6000	4500	160	382	466	710	50	432	●	●	●	0071.2761.xx
270	360	20	10000	6500	325	382	466	710	100	972	●	●	●	0071.2781.xx
270	360	25	13000	9000	340	382	466	710	100	1765		●	●	0071.2791.xx
300	390	5	800	600	21	425	518	810	5	52		●		0071.3011.xx
300	390	7	1750	1250	42	425	518	790	10	108	●	●	●	0071.3021.xx
300	390	10	3500	2500	85	425	518	790	25	190	●	●	●	0071.3041.xx
300	390	14	6000	4500	175	425	518	790	50	386	●	●	●	0071.3061.xx
300	390	20	10000	6500	350	425	518	790	100	869	●	●	●	0071.3081.xx
300	390	25	13000	9000	360	425	518	790	100	1577		●	●	0071.3091.xx
320	420	10	3500	2500	92	453	553	850	25	179	●	●	●	0071.3241.xx
320	420	14	6000	4500	190	453	553	850	50	363	●	●	●	0071.3261.xx
320	420	20	10000	6500	385	453	553	850	100	816	●	●	●	0071.3281.xx
320	420	25	13000	9000	430	453	553	850	100	1483		●	●	0071.3291.xx
360	470	10	3500	2500	97	522	638	960	25	154	●	●	●	0071.3641.xx
360	470	14	6000	4500	205	522	638	960	50	313	●	●	●	0071.3661.xx
360	470	20	10000	6500	410	522	638	960	100	704	●	●	●	0071.3681.xx
360	470	25	13000	9000	440	522	638	960	100	1278		●	●	0071.3691.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.)

.xx = .T2 Tape&Reel:

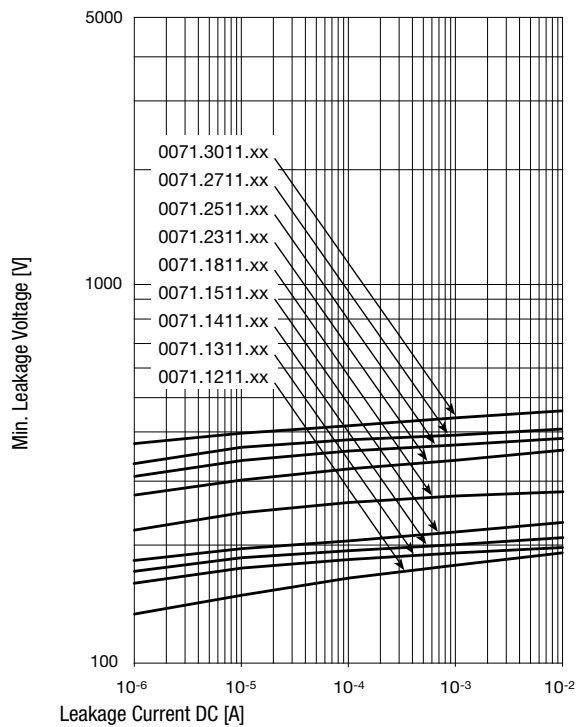
120 - 300 VAC, 5 + 7 mm Disc Size 1500 pieces
 120 - 180 VAC, 10 mm Disc Size 1000 pieces
 230 - 300 VAC, 10 mm Disc Size 500 pieces
 120 - 180 VAC, 14 mm Disc Size 1000 pieces
 230 - 300 VAC, 14 mm Disc Size 500 pieces
 120 - 180 VAC, 20 mm Disc Size 500 pieces
 230 - 300 VAC, 20 mm Disc Size 400 pieces

.xx = .A2 Ammo Pack:

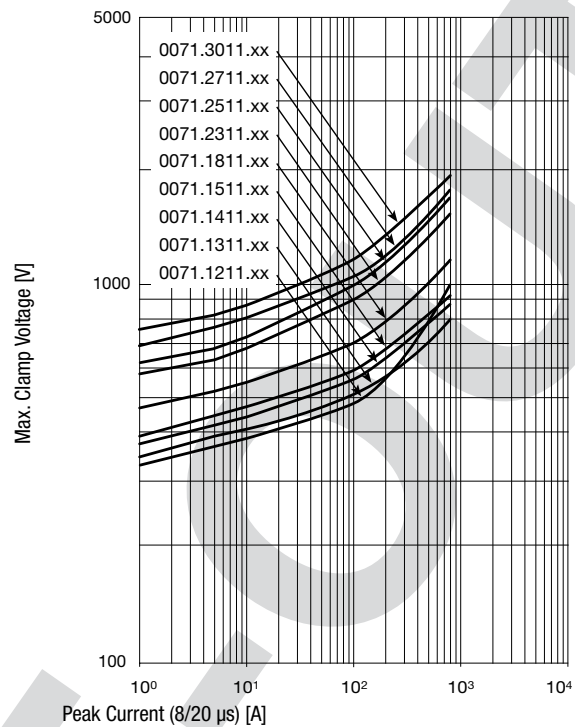
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 120 - 180 VAC, 10 mm Disc Size 1000 pieces
 230 - 300 VAC, 10 mm Disc Size 500 pieces
 120 - 180 VAC, 14 mm Disc Size 1000 pieces
 230 - 300 VAC, 14 mm Disc Size 500 pieces
 120 - 180 VAC, 20 mm Disc Size 500 pieces
 230 - 300 VAC, 20 mm Disc Size 400 pieces

Voltage-Current Curves

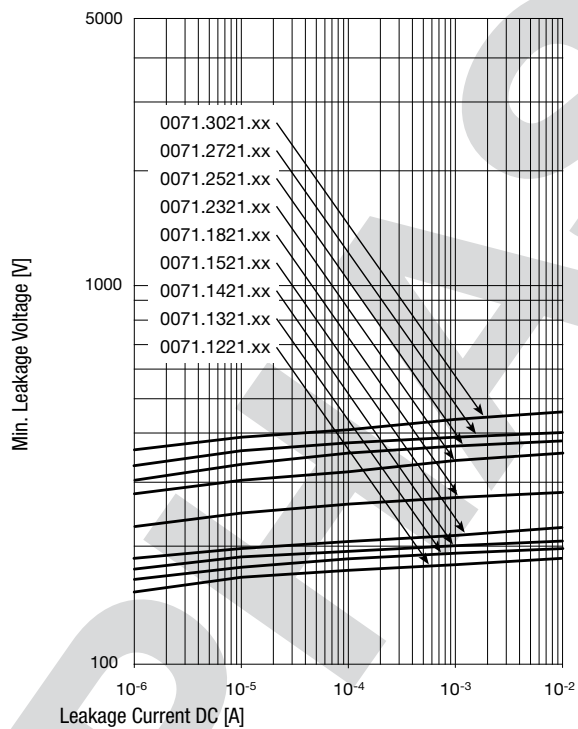
Disc Size: 5 mm Varistor



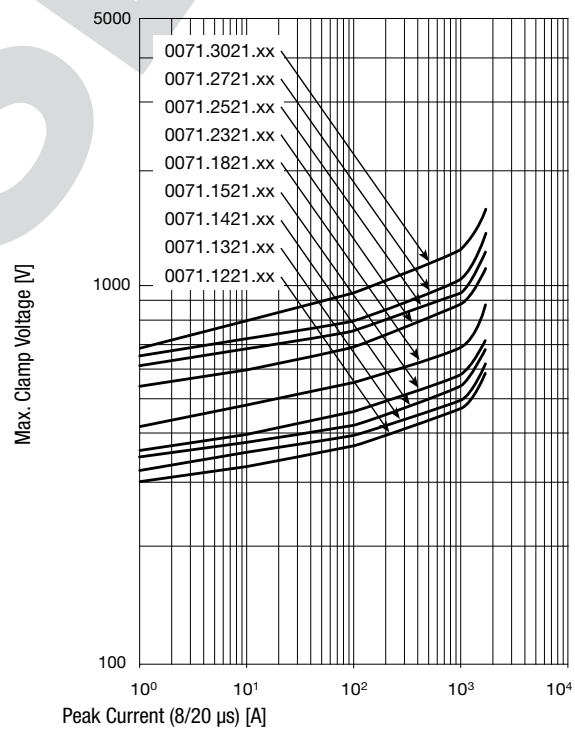
Disc Size: 5 mm Varistor



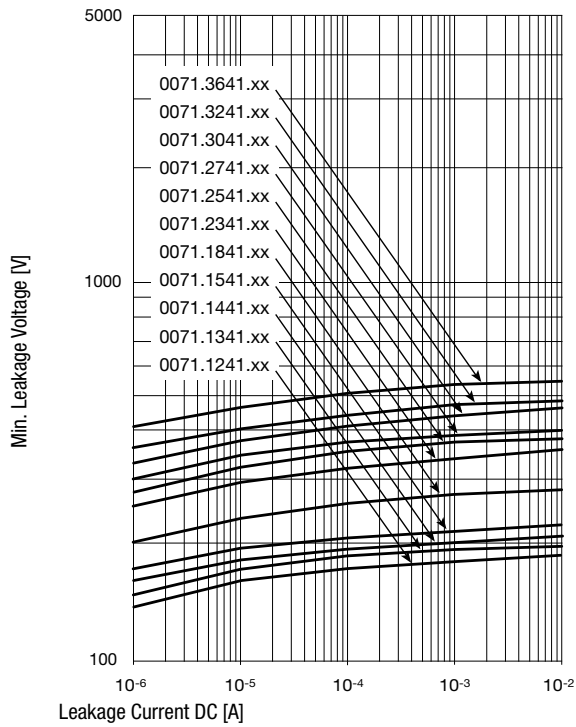
Disc Size: 7 mm



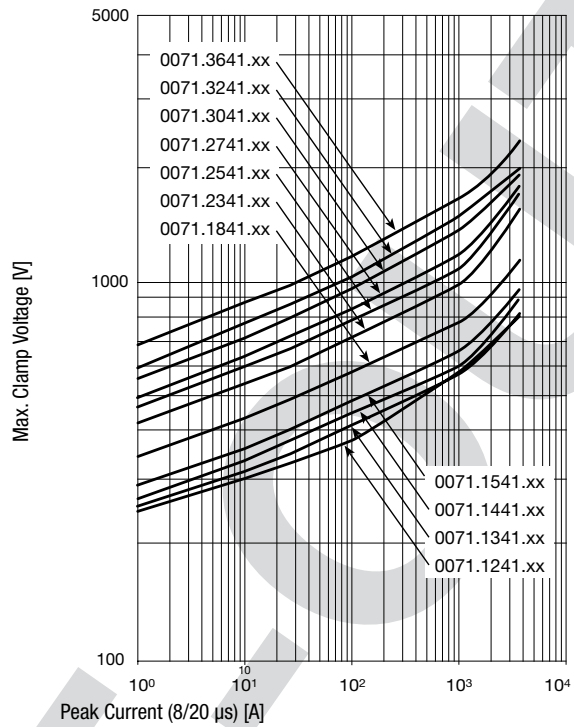
Disc Size: 7 mm



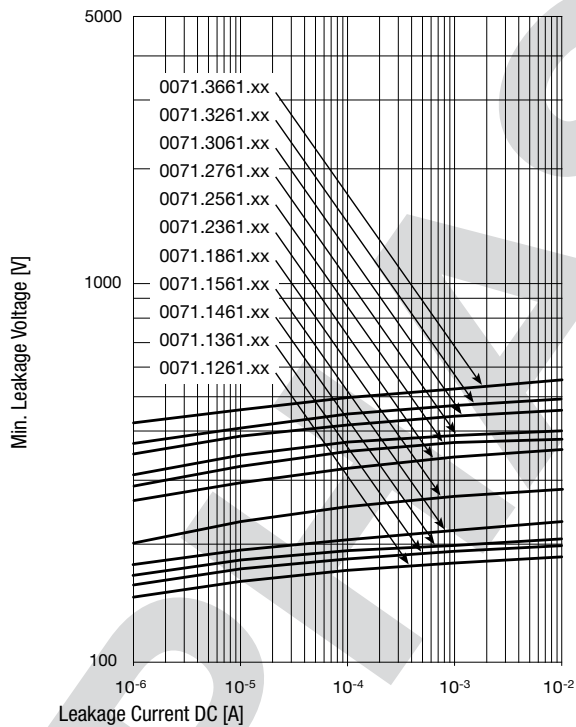
Disc Size: 10 mm



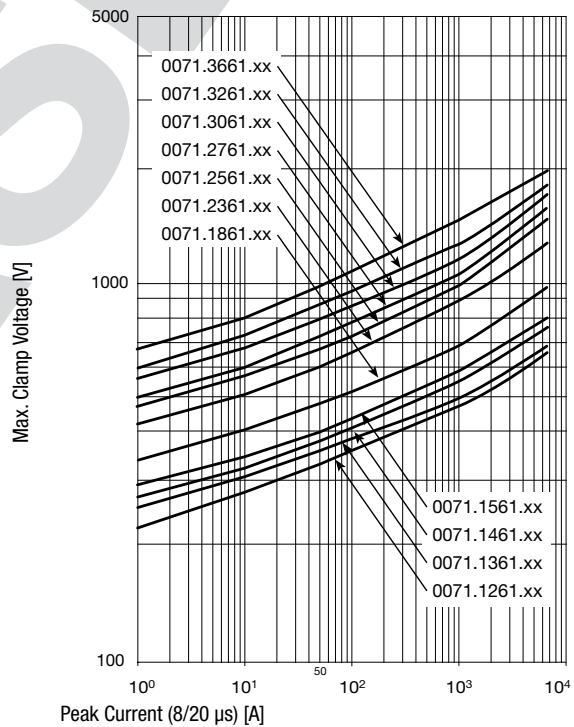
Disc Size: 10 mm



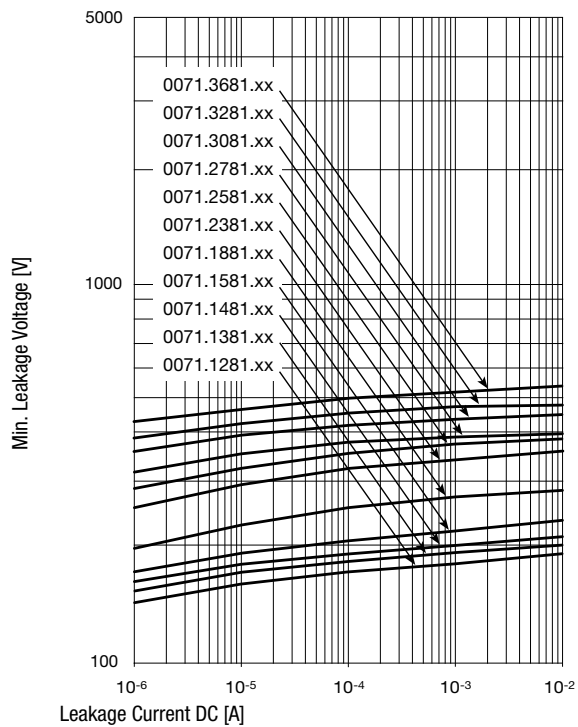
Disc Size: 14 mm



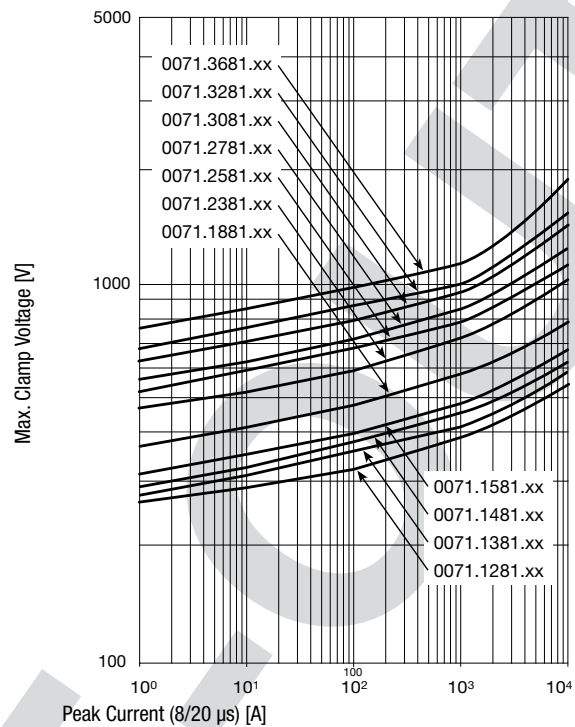
Disc Size: 14 mm



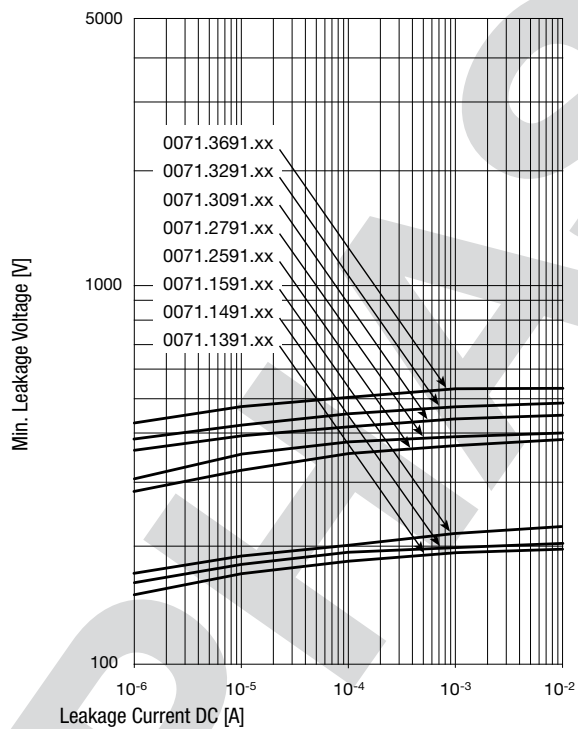
Disc Size: 20 mm



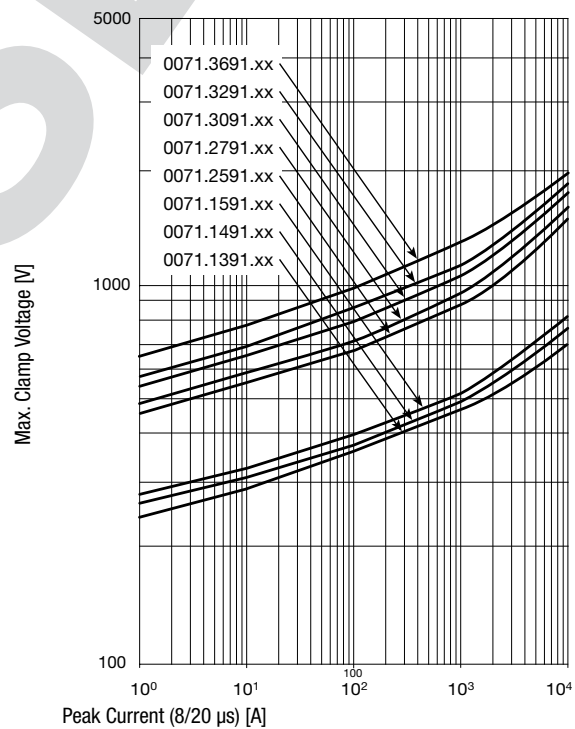
Disc Size: 20 mm Varistor



Disc Size: 25 mm



Disc Size: 25 mm



Pulse Derating Curves

Derating at Quantity of Pulses and Pulse Duration

1, 10, ... = Quantity of Pulses

