

Products Description:

TMOV temperature fuse varistor is a type with over temperature cut-off functions. A temperature fuse is connected with MOV in serie. When the operating current increasing continuously or MOV failuer, the temperature fuse will be cut-off because of temperatuer over the limit. Which make the current to MOV cut-off, and the temperature of MOV would not increase further, thereby prevent from fires caused by MOV failure. It adopts standard leads as outlet terminals, very suitable to be installed on PCBs. TMOV can be widely used in computer switching power supply, Power socket, UPS, telecommunication, network, railway, etc.



Construction and Features:

- Construction: Round varistors element,connected with a temperature fuse, leaded and coated;
- Coating materials: Epoxy resin, flame retardant to UL94V-0;
- Terminals: Tinned copper wire;
- Package : Bulk.

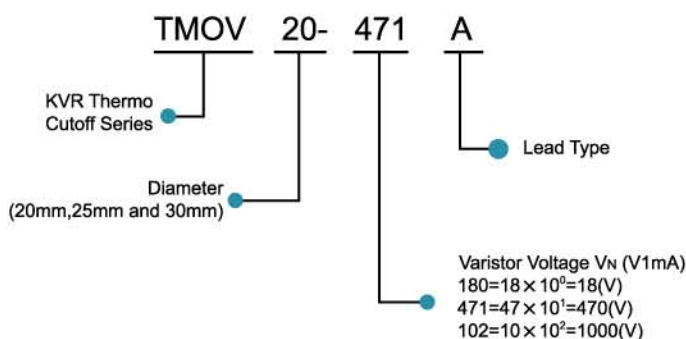
Key Characteristic Parameters:

Max AC Operating Voltage	$V_{RMS}(V)$	50~680
Max Energy Absorption	$W_{max}(J)$	40~760
Peak Current (8/20 μ s)	$I_{max}(kA)$	8~20
MOV Diameter	D(mm)	20~32

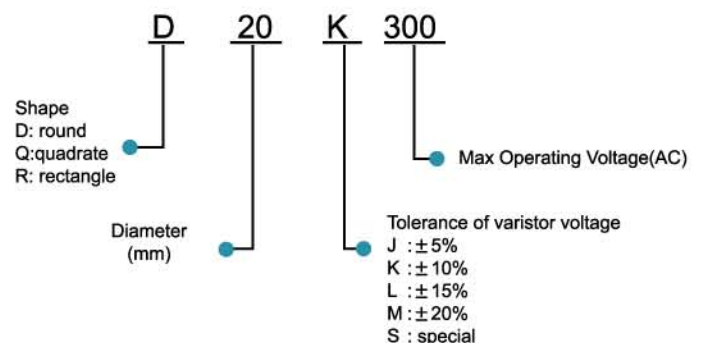
Technical Data:

Characteristics	Parameters	Standards
Climatic Category	40/85/56	
LCT	-40 $^{\circ}C$	
UCT	+85 $^{\circ}C$	IEC68-2-3
Operating Temperature	-40 $^{\circ}C$ ~+85 $^{\circ}C$	CECC 42 000
Storage Temperature	-40 $^{\circ}C$ ~+100 $^{\circ}C$	
Electric Strength	$\geq 2500V(AC)$	CECC 42 000
Insulation Resistance	$\geq 10M\Omega$	CECC 42 000
Response Time	<25 ns	

Type Designation:



Material Code Designation:



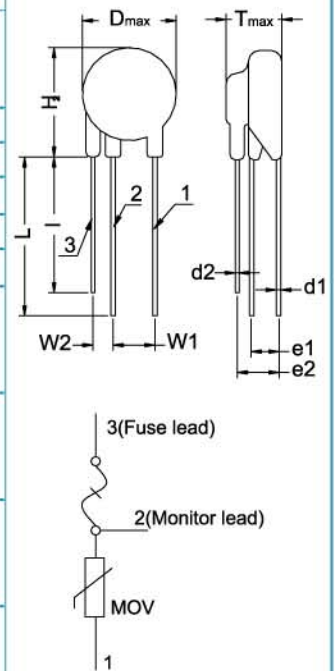
TMOV Series

Catalogue Album of product



Type	Material code	Characteristics TA=+25°C					Maximum ratings T =+85 C					V/I Characteristic curve	Derating curve
		Varistor voltage	Tolerance	Clamping voltage at I _p (8/20μs)		Capacitance (1kHz)	Max continuous operating voltage		Max energy absorption (2ms)	Peak current (8/20μs)	Max power rating		
				V _N (V)	ΔV _N (±%)		V _P (V)	I _p (A)				C (pF)	V _{RMS} (V)
TMOV20-820	D20K50	82	10	135	100	8200	50	65	40	10000	1.0	93	96
TMOV20-101	D20K60	100	10	165	100	8000	60	81	50	10000	1.0	93	96
TMOV20-121	D20K75	120	10	200	100	5500	75	100	60	10000	1.0	93	96
TMOV20-151	D20K95	150	10	250	100	4200	95	125	75	10000	1.0	93	96
TMOV20-181	D20K115	180	10	300	100	2500	115	150	84	10000	1.0	93	96
TMOV20-201	D20K130	205	10	340	100	2300	130	170	100	10000	1.0	93	96
TMOV25-201	D25K130	205	10	340	150	3700	130	170	150	15000	1.0	94	96
TMOV32-201	D32K130	205	10	340	200	4100	130	170	210	25000	1.2	95	97
TMOV20-221	D20K140	220	10	360	100	2200	140	180	110	10000	1.0	93	96
TMOV25-221	D25K140	220	10	360	150	3400	140	180	155	15000	1.0	94	96
TMOV32-221	D32K140	220	10	360	200	3700	140	180	225	25000	1.2	95	97
TMOV20-241	D20K150	240	10	395	100	2200	150	200	120	10000	1.0	93	96
TMOV25-241	D25K150	240	10	395	150	3100	150	200	160	15000	1.0	94	96
TMOV32-241	D32K150	240	10	395	200	3400	150	200	240	25000	1.2	95	97
TMOV20-271	D20K175	270	10	455	100	2100	175	225	135	10000	1.0	93	96
TMOV25-271	D25K175	270	10	455	150	2600	175	225	170	15000	1.0	94	96
TMOV32-271	D32K175	270	10	455	200	2900	175	225	250	25000	1.2	95	97
TMOV20-331	D20K210	330	10	550	100	1750	210	275	160	10000	1.0	93	96
TMOV25-331	D25K210	330	10	550	150	2200	210	275	180	15000	1.0	94	96
TMOV32-331	D32K210	330	10	550	200	2600	210	275	270	25000	1.2	95	97
TMOV20-361	D20K230	360	10	595	100	1700	230	300	180	10000	1.0	93	96
TMOV25-361	D25K230	360	10	595	150	2100	230	300	190	15000	1.0	94	96
TMOV32-361	D32K230	360	10	595	200	2300	230	300	300	25000	1.2	95	97
TMOV20-391	D20K250	390	10	650	100	1400	250	320	195	10000	1.0	93	96
TMOV25-391	D25K250	390	10	650	150	1900	250	320	210	15000	1.0	94	96
TMOV32-391	D32K250	390	10	650	200	2100	250	320	330	25000	1.2	95	97
TMOV20-431	D20K275	430	10	710	100	1350	275	350	215	10000	1.0	93	96
TMOV25-431	D25K275	430	10	710	150	1800	275	350	230	15000	1.0	94	96
TMOV32-431	D32K275	430	10	710	200	2000	275	350	360	25000	1.2	95	97
TMOV20-471	D20K300	470	10	775	100	1200	300	385	250	10000	1.0	93	96
TMOV25-471	D25K300	470	10	775	150	1600	300	385	240	15000	1.0	94	96
TMOV32-471	D32K300	470	10	775	200	1700	300	385	380	25000	1.2	95	97
TMOV20-511	D20K320	510	10	845	100	1050	320	410	273	10000	1.0	93	96
TMOV25-511	D25K320	510	10	840	150	1500	320	410	275	15000	1.0	94	96
TMOV32-511	D32K320	510	10	840	200	1600	320	410	430	25000	1.2	95	97
TMOV20-561	D20K350	560	10	915	100	850	350	460	273	10000	1.0	93	96
TMOV25-561	D25K350	560	10	915	150	1300	350	460	300	15000	1.0	94	96
TMOV32-561	D32K350	560	10	915	200	1400	350	460	490	25000	1.2	95	97
TMOV20-621	D20K385	620	10	1025	100	570	385	505	273	10000	1.0	93	96
TMOV25-621	D25K385	620	10	1025	150	1200	385	505	320	15000	1.0	94	96
TMOV32-621	D32K385	620	10	1025	200	1300	385	505	550	25000	1.2	95	97
TMOV20-681	D20K420	680	10	1120	100	550	420	560	273	10000	1.0	93	96
TMOV25-681	D25K420	680	10	1120	150	1100	420	560	360	15000	1.0	94	96
TMOV32-681	D32K420	680	10	1120	200	1300	420	560	600	25000	1.2	95	97
TMOV20-751	D20K460	750	10	1240	100	530	460	615	300	10000	1.0	93	96
TMOV25-751	D25K460	750	10	1240	150	1000	460	615	390	15000	1.0	94	96
TMOV32-751	D32K460	750	10	1240	200	1100	460	615	520	25000	1.2	95	97

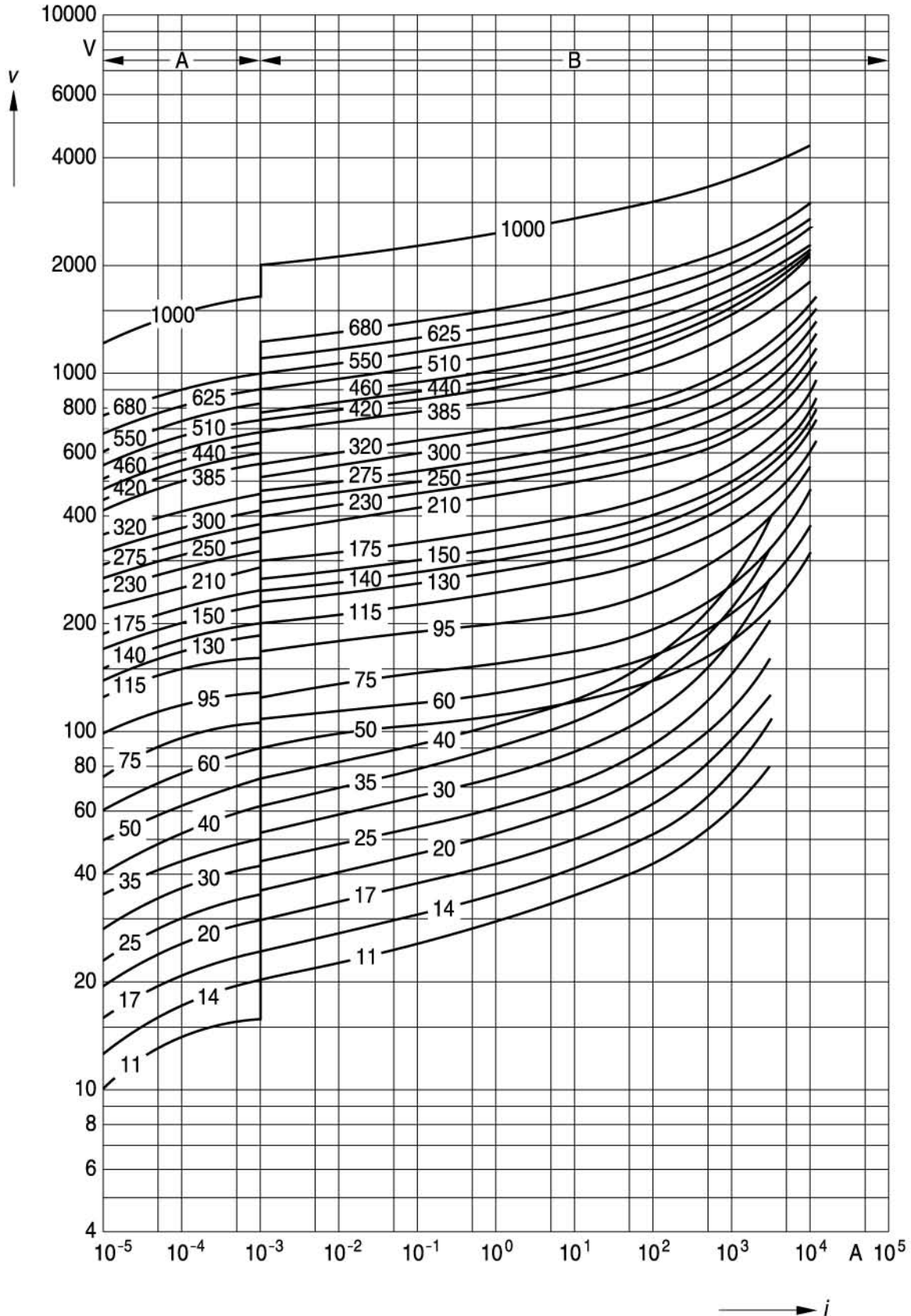
Type	Dimensions											Certification			
	D _{max} (mm)	H _{2max} (mm)	T _{max} (mm)	W1±1.0 (mm)	W2±1.0 (mm)	L _{min} (mm)	l _{min} (mm)	e1 _{max} (mm)	e2 _{max} (mm)	d1±0.1 (mm)	d2±0.1 (mm)	CE	UL	VDE	CCC
TMOV20-820	25.0	29.0	8.6	7.5	4.0	20.0	15.0	1.8	3.3	1.0	0.8				
TMOV20-101	25.0	29.0	8.6	7.5	4.0	20.0	15.0	1.8	3.3	1.0	0.8				
TMOV20-121	25.0	29.0	8.6	7.5	4.0	20.0	15.0	1.9	3.4	1.0	0.8				
TMOV20-151	25.0	29.0	8.6	7.5	4.0	20.0	15.0	1.9	3.4	1.0	0.8				
TMOV20-181	25.0	29.0	8.6	7.5	4.0	20.0	15.0	1.9	3.4	1.0	0.8				
TMOV20-201	25.0	29.0	8.9	7.5	4.0	20.0	15.0	2.0	3.6	1.0	0.8				
TMOV25-201	29.0	33.0	8.9	10.0	5.0	20.0	15.0	2.1	3.7	1.0	1.0				
TMOV32-201	36.0	41.0	8.9	12.0	6.0	20.0	15.0	2.6	4.1	1.2	1.5				
TMOV20-221	25.0	29.0	9.1	7.5	4.0	20.0	15.0	2.1	3.7	1.0	0.8				
TMOV25-221	29.0	33.0	9.2	10.0	5.0	20.0	15.0	2.2	3.8	1.0	1.0				
TMOV32-221	36.0	41.0	9.2	12.0	6.0	20.0	15.0	2.7	4.2	1.2	1.5				
TMOV20-241	25.0	29.0	9.2	7.5	4.0	20.0	15.0	2.2	3.8	1.0	0.8				
TMOV25-241	29.0	33.0	9.3	10.0	5.0	20.0	15.0	2.3	3.9	1.0	1.0				
TMOV32-241	36.0	41.0	9.3	12.0	6.0	20.0	15.0	2.8	4.3	1.2	1.5				
TMOV20-271	25.0	29.0	9.3	7.5	4.0	20.0	15.0	2.3	3.9	1.0	0.8				
TMOV25-271	29.0	33.0	9.4	10.0	5.0	20.0	15.0	2.4	4.0	1.0	1.0				
TMOV32-271	36.0	41.0	9.5	12.0	6.0	20.0	15.0	2.9	4.4	1.2	1.6				
TMOV20-331	25.0	29.0	9.5	7.5	4.0	20.0	15.0	2.7	4.3	1.0	0.8				
TMOV25-331	29.0	33.0	9.8	10.0	5.0	20.0	15.0	2.8	4.4	1.0	1.0				
TMOV32-331	36.0	41.0	10.0	12.0	6.0	20.0	15.0	3.3	4.8	1.2	1.5				
TMOV20-361	25.0	29.0	9.6	7.5	4.0	20.0	15.0	2.8	4.4	1.0	0.8				
TMOV25-361	29.0	33.0	9.9	10.0	5.0	20.0	15.0	2.9	4.5	1.0	1.0				
TMOV32-361	36.0	41.0	10.0	12.0	6.0	20.0	15.0	3.5	5.0	1.2	1.5				
TMOV20-391	25.0	29.0	9.7	7.5	4.0	20.0	15.0	3.0	4.6	1.0	0.8				
TMOV25-391	29.0	33.0	10.0	10.0	5.0	20.0	15.0	3.1	4.7	1.0	1.0				
TMOV32-391	36.0	41.0	10.0	12.0	6.0	20.0	15.0	3.6	5.1	1.2	1.5				
TMOV20-431	25.0	29.0	9.8	7.5	4.0	20.0	15.0	3.2	4.8	1.0	0.8				
TMOV25-431	29.0	33.0	10.2	10.0	5.0	20.0	15.0	3.3	4.9	1.0	1.0				
TMOV32-431	36.0	41.0	10.2	12.0	6.0	20.0	15.0	3.8	5.3	1.2	1.5				
TMOV20-471	25.0	29.0	10.1	7.5	4.0	20.0	15.0	3.4	5.1	1.0	0.8				
TMOV25-471	29.0	33.0	10.5	10.0	5.0	20.0	15.0	3.5	5.2	1.0	1.0				
TMOV32-471	36.0	41.0	10.7	12.0	6.0	20.0	15.0	4.0	5.5	1.2	1.5				
TMOV20-511	25.0	29.0	10.5	7.5	4.0	20.0	15.0	3.6	5.4	1.0	0.8				
TMOV25-511	29.0	33.0	10.9	10.0	5.0	20.0	15.0	3.7	5.5	1.0	1.0				
TMOV32-511	36.0	41.0	10.9	12.0	6.0	20.0	15.0	4.3	5.8	1.2	1.5				
TMOV20-561	25.0	29.0	10.7	7.5	4.0	20.0	15.0	3.8	5.6	1.0	0.8				
TMOV25-561	29.0	33.0	11.1	10.0	5.0	20.0	15.0	3.9	5.7	1.0	1.0				
TMOV32-561	36.0	41.0	11.3	12.0	6.0	20.0	15.0	4.9	6.4	1.2	1.5				
TMOV20-621	25.0	29.0	11.1	7.5	4.0	20.0	15.0	4.1	5.9	1.0	0.8				
TMOV25-621	29.0	33.0	11.4	10.0	5.0	20.0	15.0	4.2	6.0	1.0	1.0				
TMOV32-621	36.0	41.0	11.4	12.0	6.0	20.0	15.0	4.9	6.4	1.2	1.5				
TMOV20-681	25.0	29.0	11.4	7.5	4.0	20.0	15.0	4.4	6.2	1.0	0.8				
TMOV25-681	29.0	33.0	11.7	10.0	5.0	20.0	15.0	4.5	6.3	1.0	1.0				
TMOV32-681	36.0	41.0	11.7	12.0	6.0	20.0	15.0	5.1	6.6	1.2	1.5				
TMOV20-751	25.0	29.0	11.7	7.5	4.0	20.0	15.0	4.7	6.6	1.0	0.8				
TMOV25-751	29.0	33.0	12.2	10.0	5.0	20.0	15.0	4.8	6.7	1.0	1.0				
TMOV32-751	36.0	41.0	12.1	12.0	6.0	20.0	15.0	5.5	7.0	1.2	1.5				



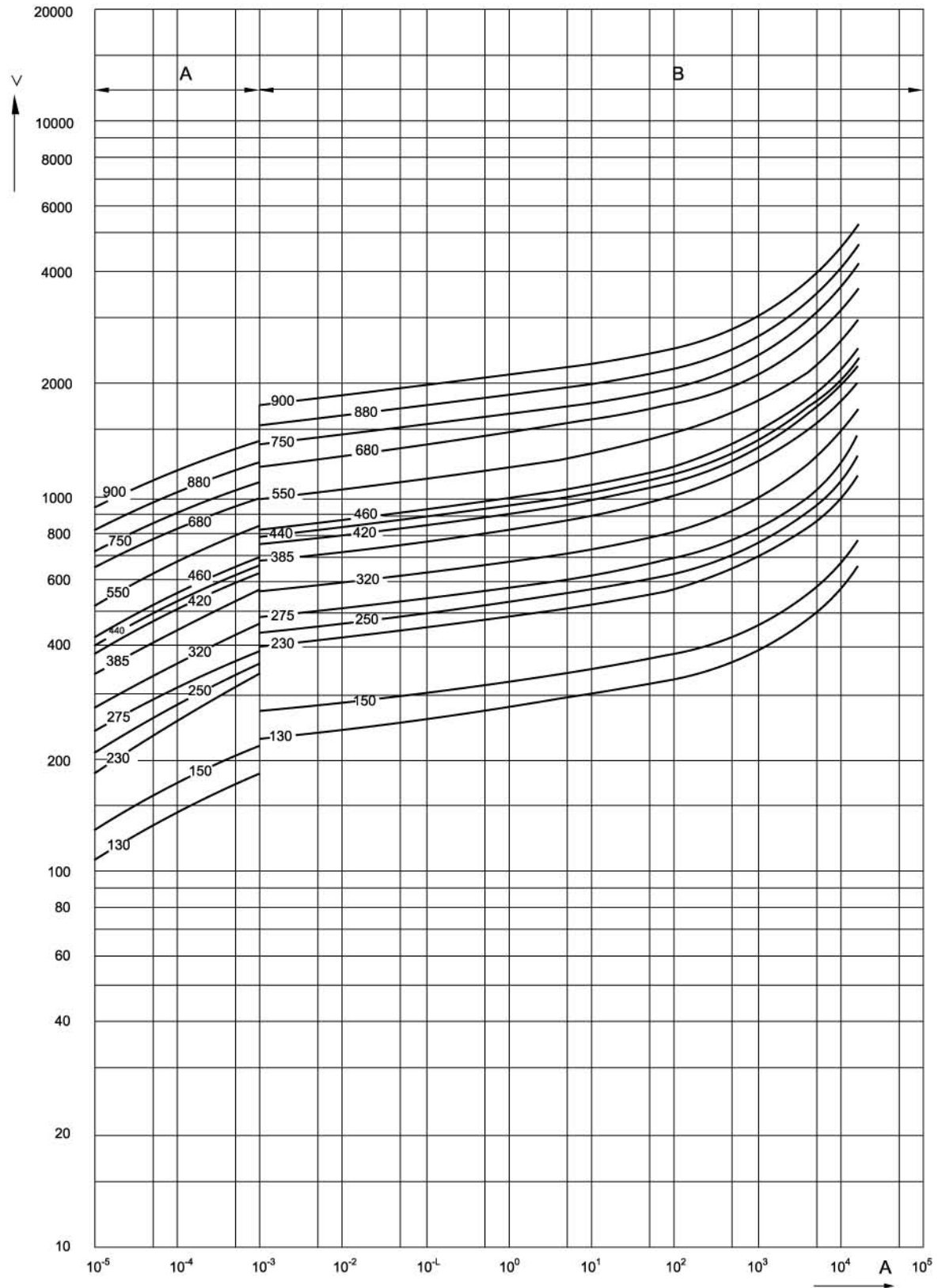
Type	Material code	Characteristics TA = +25 °C					Maximum ratings T =+85 C					V/I Characteristic curve	Derating curve
		Varistor voltage	Tolerance	Clamping voltage at Ip (8/20µs)		Capacitance (1kHz)	Max continuous operating voltage		Max energy absorption (2ms)	Peak current (8/20µs)	Max power rating		
		VN (V)	ΔVN (±%)	Vp (V)	Ip (A)	C (pF)	V _{RMS} (V)	V _{DC} (V)	W _{max} (J)	I _{max} (A)	P _{max} (W)	Page	Page
TMOV20-781	D20K485	780	10	1290	100	530	485	640	315	10000	1.0	93	96
TMOV25-781	D25K485	780	10	1290	150	990	485	640	397	15000	1.0	94	96
TMOV32-781	D32K485	780	10	1290	200	1100	485	640	550	25000	1.2	95	97
TMOV20-821	D20K510	820	10	1355	100	530	510	670	325	10000	1.0	93	96
TMOV25-821	D25K510	820	10	1355	150	930	510	670	410	15000	1.0	94	96
TMOV32-821	D32K510	820	10	1355	200	1000	510	670	580	25000	1.2	95	97
TMOV20-911	D20K550	910	10	1500	100	480	550	745	360	10000	1.0	93	96
TMOV25-911	D25K550	910	10	1500	150	860	550	745	425	15000	1.0	94	96
TMOV32-911	D32K550	910	10	1500	200	950	550	745	620	25000	1.2	95	97
TMOV20-102	D20K625	1000	10	1650	100	480	625	825	400	7500	1.0	93	96
TMOV25-102	D25K625	1000	10	1650	150	760	625	825	480	15000	1.0	94	96
TMOV32-102	D32K625	1000	10	1650	200	840	625	825	680	25000	1.2	95	97
TMOV20-112	D20K680	1100	10	1815	100	400	680	895	440	7500	1.0	93	96
TMOV25-112	D25K680	1100	10	1815	150	690	680	895	525	15000	1.0	94	96
TMOV32-112	D32K680	1100	10	1815	200	770	680	895	760	25000	1.2	95	97

Type	Dimensions											Certification				
	D _{max} (mm)	H _{2max} (mm)	T _{max} (mm)	W1±1.0 (mm)	W2±1.0 (mm)	L _{min} (mm)	l _{min} (mm)	e1 _{max} (mm)	e2 _{max} (mm)	d1±0.1 (mm)	d2±0.1 (mm)	CE	UL	VDE	SP	
TMOV20-781	25.0	29.0	11.9	7.5	4.0	20.0	15.0	4.9	6.8	1.0	0.8					
TMOV25-781	29.0	33.0	12.3	10.0	5.0	20.0	15.0	5.0	6.9	1.0	1.0					
TMOV32-781	36.0	41.0	12.3	12.0	6.0	20.0	15.0	5.7	7.2	1.2	1.5					
TMOV20-821	25.0	29.0	12.0	7.5	4.0	20.0	15.0	5.1	7.0	1.0	0.8					
TMOV25-821	29.0	33.0	12.4	10.0	5.0	20.0	15.0	5.2	7.1	1.0	1.0					
TMOV32-821	36.0	41.0	12.4	12.0	6.0	20.0	15.0	6.0	7.5	1.2	1.5					
TMOV20-911	25.0	29.0	12.5	7.5	4.0	20.0	15.0	5.5	7.5	1.0	0.8					
TMOV25-911	29.0	33.0	12.8	10.0	5.0	20.0	15.0	5.6	7.6	1.0	1.0					
TMOV32-911	36.0	41.0	12.8	12.0	6.0	20.0	15.0	6.5	8.0	1.2	1.5					
TMOV20-102	25.0	29.0	13.0	7.5	4.0	20.0	15.0	6.0	8.0	1.0	0.8					
TMOV25-102	29.0	33.0	13.4	10.0	5.0	20.0	15.0	6.1	8.1	1.0	1.0					
TMOV32-102	36.0	41.0	13.4	12.0	6.0	20.0	15.0	7.0	8.5	1.2	1.5					
TMOV20-112	25.0	29.0	13.2	7.5	4.0	20.0	15.0	6.5	8.6	1.0	0.8					
TMOV25-112	29.0	33.0	13.6	10.0	5.0	20.0	15.0	6.6	8.7	1.0	1.0					
TMOV32-112	36.0	41.0	13.6	12.0	6.0	20.0	15.0	7.1	8.6	1.2	1.5					

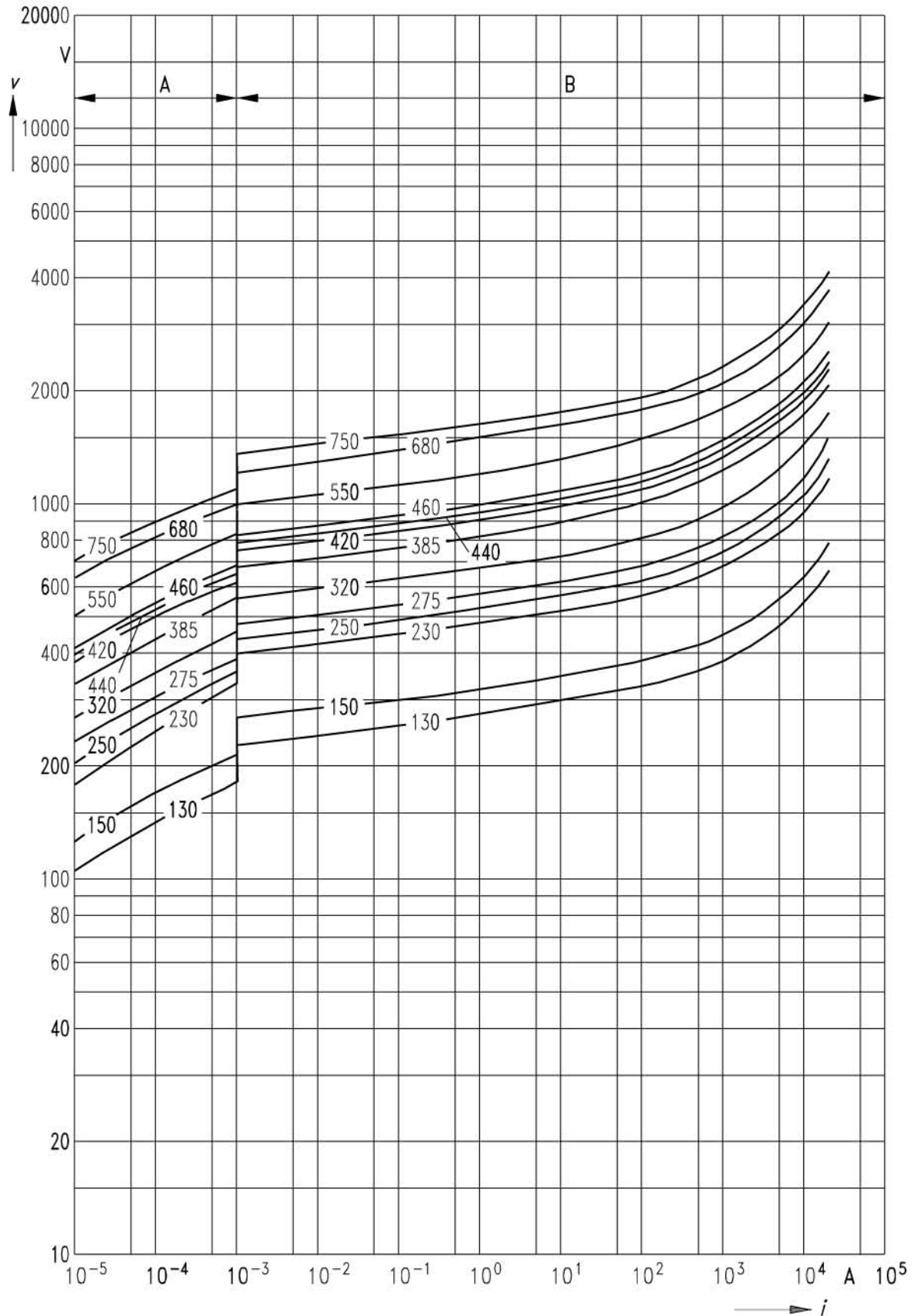
D20K50~D20K680 V/I Characteristics Curve



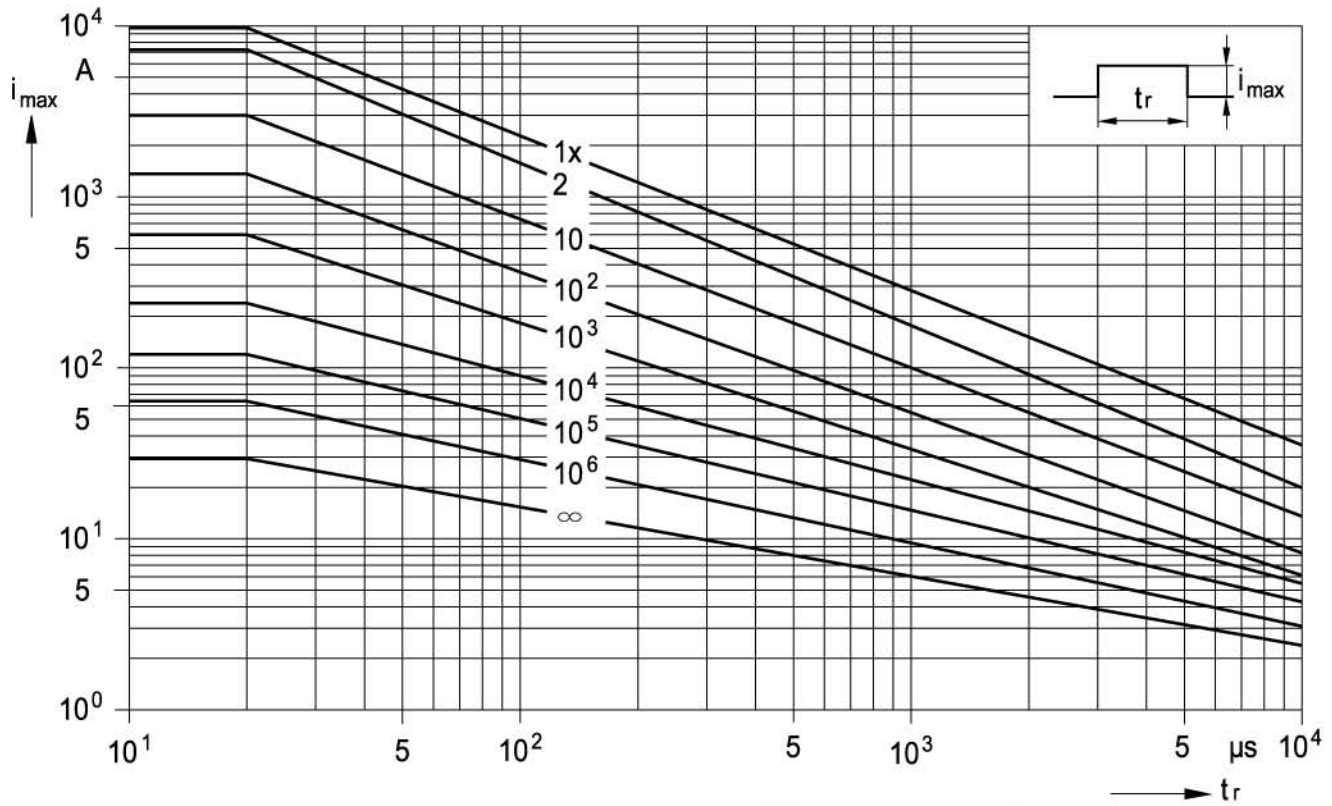
D25K130~D25K680 V/I Characteristics Curve



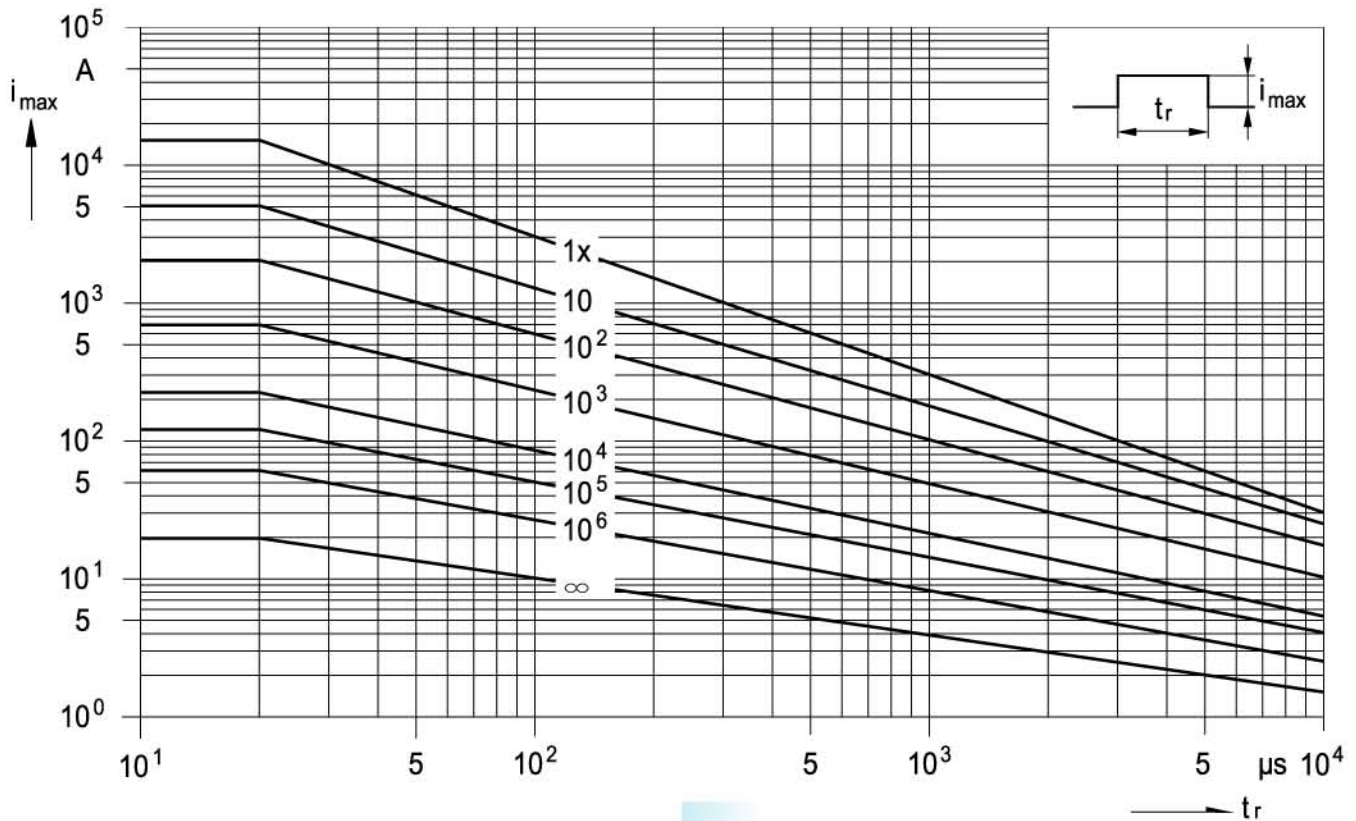
D32K130~D32K680 V/I Characteristics Curve



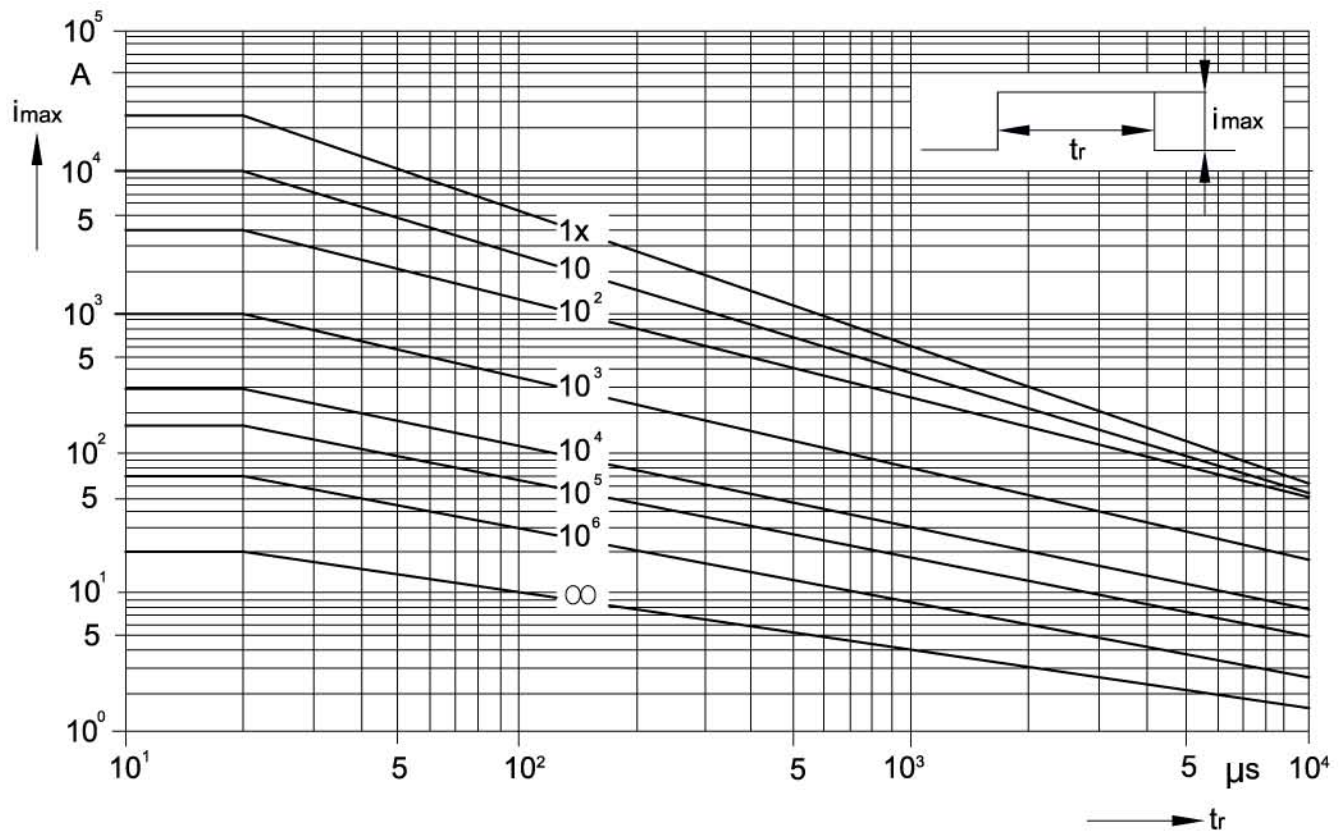
D20K50~D20K680 Derating Curve



D25K130~D25K680 Derating Curve



D32K130~D32K680 Derating Curve





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