

浪涌抑制压敏电阻器

Surge Suppression Pressure Sensitive Resistor



■结构Structure

主要介质：氧化锌
Main Dielectric: Zinc Oxide
封装：阻燃环氧树脂
Encapsulation: Flame retardant epoxy resin

■应用Application

主要用于半导体器件保护，家用电器浪涌过压保护，通讯、测量仪器过压保护。
如：LED照明、开关电源、电度表、排插等。
Mainly used in semiconductor devices to protect, Waves through the voltage protection of home appliances, Communications, measuring instrument of over voltage protection.
Such as, LED lighting, Switch power supply, Meter, Platoon insert, etc.



■产品料号代码 How To Order

M 10 D 471 K 0 1 S S35 00000
1 2~3 4 5~7 8 9 10 11 12~14 15~19

- 1、压敏电阻(M)
- 2~3、产品直径:如07代表7mm,10代表10mm
- 4、形状类型: D表示圆片
- 5~7、压敏电压, 如: 471、561
- 8、压敏电压偏差: K ±10%
- 9、能量等级: O:普通品, 称为K级; J:高焦耳, KJ级; H:超高焦耳, KH级
- 10、脚距:

脚距	P=10MM	P=7.5MM	P=5MM	P=2.5MM
代码	1	2	3	4
- 11、脚型

脚型	直脚	外弯脚	内弯脚	前后弯脚
代码	S	O	I	H
- 12~14、包装方式: S:散装, 后面二位数代表脚长,35表示切脚3.5±0.5; 00表示长脚
B:编带, 后面二位数代表编带尺寸, 12(12.7 mm)、15(15 mm)
- 15~19、内部识别码

■安全认证标志1Mark of Safety Certificate1

认证标志 certification mark	证书号码 Certificate number	引用标准 Reference standard	容量范围 Capacitance Range	认证国家 Certification from which country
VDE	40041629	EN64051-1 IEC61051-1 IEC61051-2/-2	18V-1800V	德国Germany
UL,CUL	E472470	IEC60065 IEC60950-1 IEC62368-1	18V-1800V	美国America 加拿大Canada
CQC	CQC15001121599 CQC15001121600 CQC15001121601 CQC15001121603 CQC15001121623	GB/T10193-1997 GB/T10194-1997 GB/T4943.1-2001 GB8898-2011	18V-1800V	中国China

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■压敏电阻技术术语Varistor Technical Term

项目Item	标准术语 Standard Terminology	测试设备Test equipment	要求 Requirements
压敏电压 Varistor voltage	在标准测试条件*和直流1mA电流下,压敏电阻两端的电压,称为压敏电压。近似于拐点电压。用V1mA表示。 The voltage between two terminals with the standard test condition* and the specified measuring current 1mA DC applied is called varistor voltage. Similar to the knee-point voltage, with V1mA said.	压敏电阻三参数测试仪 Varistor three parameter tester	压敏电压测量值在偏差允许范围内: K:±10%,L:±15% The allowable tolerance on varistor voltage is: K:±10%,L:±15%
漏电流 Leakage current	在标准测试条件*下,施加最大允许直流电压时,流过压敏电阻的电流值。 Current passing through the varistor at the maximum allowable DC voltage and the standard test conditions*	压敏电阻三参数测试仪 Varistor three parameter tester	漏电流在规定的额定值内(uA级) Leakage current within the specified rating(uA)
最大允许使用电压 Maximum allowable AC voltage	施加在压敏电阻上连续工作的最大直流电压或正弦波交流电压的有效值。 Maximum a.c. r.m.s voltage of a substantially sinusoidal wave form which can be applied to the component is called maximum allowable voltage.	最大允许使用交流工频电压 = 压敏电阻的0.63倍 Maximum continuous AC voltage 0.63 multiple varistor voltage	实际使用的交流工频电压 = 压敏电阻的0.45倍 Actual continuous AC voltage 0.45 multiple varistor voltage
组合波开路为1.2/50uS电压波,短路为8/20uS电流波 6KV/3KA Composite wave form of pulse current(Open circuit having pulse shape of 1.2/50uS for voltage and short circuit having 8/20uS for current) 6KV/3KA	 1.2/50uS voltage wave form	T1=1.2uS±30% T2=50uS±20% 脉冲发生器 Impulse generator 记忆示波器 Storage oscilloscope	冲击规定次数后外观无可见损伤,限制电压变化率≤±10% After pulsing with stipulated times no appearance damage clamping voltage change rate is ≤ ±10%
限制电压 Clamping voltage 8/20uS波形 10/1000uS波形	 The peak voltage developed across the terminations under standard atmospheric conditions, when passing an 8/20 class current pulse, the peak value of two terminations is called clamping voltage. 8/20uS 10/1000uS current wave form	8/20uS波形: T1=8uS±10% T2=20uS±10% 10/1000uS波形: T1=10uS±10% T2=1000uS±20% 脉冲发生器 Impulse generator 记忆示波器 Storage oscilloscope	限制电压小于规定的额定值,各规格规定的电流峰值和限制电压见本书说明。 Clamping voltage less than the rated value, all specifications, peak current and clamping voltage see instruction.
能量耐量 Pulse currents 2ms波形	 The maximum energy within the varistor voltage change of ±10% when one impulse of 2000uS rectangular wave or 10/1000uS surge pulse current is applied. Energy (J)=K*Ip*Vc*10-6. For the 2000uS, K=2000; For the 10/1000uS, K=1391 Ip-peak value of current Vc-peak value of voltage across the varistor current	2000uS方波: T=2000uS±10% T<=3000uS 脉冲发生器 Impulse generator 记忆示波器 Storage oscilloscope 压敏电阻三参数测试仪 Varistor three parameter tester	施加本说明书规定的最大冲击能量后,压敏电阻无外观损伤,压敏电压变化率≤±10% After applied the maximum impact energy in this instruction: no appearance damage; varistor voltage change rate ≤ ±10%.
通流量 Withstanding surge current	施加给压敏电阻波形为8/20uS的脉冲电流,使压敏电压变化率在±10%以内的最大电流峰值。 The maximum peak current within the varistor voltage change of ±10% with the standard impulse current(8/20uS) applied one time.	脉冲发生器 Impulse generator 记忆示波器 Storage oscilloscope 压敏电阻三参数测试仪 Varistor three parameter tester	施加本说明书规定的最大脉冲电流后,压敏电压变化率≤±10% After applied the maximum pulse current in this instruction: varistor voltage change rate ≤ ±10%.
电压温度系数 Voltage temperature coefficient	压敏电阻温度从25°C到85°C时压敏电压的变化率,用%/°C表示: [V1mA(85°C)-V1mA(25°C)]/V1mA(25°C) *1/60*100% The varistor voltage change rate of varistor at temperature form 25°C to 85°C, showed as %/°C.	恒温恒湿箱 Impulse generator storage oscilloscope 三参数测试仪 Varistor three parameter tester	≤-0.05%/°C
静态功率 Rated wattage	在25°C±1°C环境下的最大耗散功率。 The maximum allowable power dissipation under the ambient temperature of 25°C ± 1°C.	/	各规格静态功率见本书说明 The rated wattage of all specifications see instruction
静态容量 Typical Capacitance	使用1KHZ,电平1Vrms的电信号,测得压敏电阻的容量。 Typical capacitance measured at less than 1Vrms and frequency of 1KHZ.	容量测试仪 capacity tester	容量仅供参考,各规格电容量见说明 Capacitance for reference only, all specifications, capacitance see instruction.

*标准测试条件: 温度15°C-35°C,相对湿度45%-75%。
*Standard test condition temperature: 15°C-35°C, relative humidity: 45%-75%.

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■5D系列压敏电阻Varistor With 5MM Diameter

型号规格 Part No.	压敏电压 Varistor Voltage		最大允许使用电压 Maximum Allowable Voltage		最大限制电压 Maximum Clamping Voltage	通流量 Withstanding Surge Current (8/20 us) 1 time		静电功率 Rated Wattage	能量耐量 Energy (2ms)		静态电容量 (参考值) Typical Capacitance
	V1mA(V)	AC(V)	DC(V)	Vca (V)	K(A)	KJ(A)	(W)		K(J)	KJ(J)	
M-05D180	18	16-20	11	14	.40	100	250	0.01	0.3	0.4	2400
M-05D220	22	20-24	14	18	.48	100	250	0.01	0.4	0.5	1800
M-05D270	27	24-30	17	22	.60	100	250	0.01	0.5	0.6	1500
M-05D330	33	30-36	20	26	.73	100	250	0.01	0.6	0.7	1200
M-05D390	39	35-43	25	31	.86	100	250	0.01	0.7	0.9	1000
M-05D470	47	42-52	30	38	1.04	100	250	0.01	0.8	1.1	850
M-05D560	56	50-62	35	45	1.23	100	250	0.01	1.0	1.3	700
M-05D680	68	61-75	40	56	1.50	100	250	0.01	1.2	1.5	560
M-05D820	82	74-90	50	65	1.45	400	800	0.1	1.5	1.8	480
M-05D101	100	90-110	60	85	1.75	400	800	0.1	1.8	2.3	420
M-05D121	120	108-132	75	100	2.10	400	800	0.1	2.2	2.7	360
M-05D151	150	135-165	95	125	2.60	400	800	0.1	2.7	3.4	280
M-05D181	180	162-198	115	150	3.20	400	800	0.1	3.2	4.1	200
M-05D201	200	180-220	130	170	3.55	400	800	0.1	3.6	4.5	160
M-05D221	220	198-242	140	180	3.80	400	800	0.1	4.0	5.0	110
M-05D241	240	216-264	150	200	4.15	400	800	0.1	4.3	5.4	85
M-05D271	270	243-297	175	225	4.75	400	800	0.1	4.9	6.1	75
M-05D301	300	270-330	195	250	5.25	400	800	0.1	5.4	6.8	75
M-05D331	330	297-363	210	275	5.75	400	800	0.1	5.9	7.4	75
M-05D361	360	324-396	230	300	6.20	400	800	0.1	6.5	8.1	70
M-05D391	390	351-429	250	320	6.75	400	800	0.1	7.0	8.8	70
M-05D431	430	387-473	275	350	7.45	400	800	0.1	7.7	9.7	65
M-05D471	470	423-517	300	385	8.10	400	800	0.1	8.5	10.6	55
M-05D511	510	459-561	320	418	8.82	400	800	0.1	9.2	11.5	55
M-05D561	560	504-616	350	460	9.68	400	800	0.1	10.1	12.6	50
M-05D621	620	558-682	385	505	10.72	400	800	0.1	11.2	14.0	45
M-05D681	680	612-748	420	560	11.76	400	800	0.1	12.2	15.3	40
M-05D751	750	675-825	460	615	13.00	400	800	0.1	13.5	16.8	35

Note: 1. The clamping voltage from 180 to 680 is tested with current 1A.

2. The energy (10/1000us) is about 1.4 times of energy(2ms).

备注: 1. 180至680最大限制电压测试电流是1A。

2. 10/1000us的能量耐量值约为2ms能量耐量值的1.4倍。

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■7D系列压敏电阻Varistor With 7MM Diameter

型号规格 Part No.	压敏电压 Varistor Voltage		最大允许 使用电压 Maximum Allowable Voltage		最大限制 电压 Maximum Clamping Voltage	通流量 Withstanding Surge Current (8/20 us) 1 time		静电功率 Rated Wattage	能量耐量 Energy (2ms)		静态电容量 (参考值) Typical Capacitance
	V1mA(V)	AC(V)	DC(V)	V _{10A} (V)		K(A)	KJ(A)		(W)	K(J)	
M-07D180	18	16-20	11	14	.38	250	500	0.02	0.8	0.9	3500
M-07D220	22	20-24	14	18	.43	250	500	0.02	0.9	1.2	2800
M-07D270	27	24-30	17	22	.53	250	500	0.02	1.1	1.4	2200
M-07D330	33	30-36	20	26	.65	250	500	0.02	1.4	1.7	1800
M-07D390	39	35-43	25	31	.77	250	500	0.02	1.6	2.0	1450
M-07D470	47	42-52	30	38	.93	250	500	0.02	2.0	2.5	1150
M-07D560	56	50-62	35	45	.110	250	500	0.02	2.4	2.9	1050
M-07D680	68	61-75	40	56	.135	250	500	0.02	2.9	3.6	970
M-07D820	82	74-90	50	65	135	1200	1750	0.25	3.4	4.3	930
M-07D101	100	90-110	60	85	165	1200	1750	0.25	4.2	5.3	860
M-07D121	120	108-132	75	100	200	1200	1750	0.25	5.0	6.3	670
M-07D151	150	135-165	95	125	250	1200	1750	0.25	6.3	7.9	490
M-07D181	180	162-198	115	150	300	1200	1750	0.25	7.6	9.5	330
M-07D201	200	180-220	130	170	340	1200	1750	0.25	8.4	10.5	240
M-07D221	220	198-242	140	180	360	1200	1750	0.25	9.2	11.6	190
M-07D241	240	216-264	150	200	395	1200	1750	0.25	10.1	12.6	165
M-07D271	270	243-297	175	225	455	1200	1750	0.25	11.3	14.2	150
M-07D301	300	270-330	195	250	505	1200	1750	0.25	12.6	15.8	135
M-07D331	330	297-363	210	275	550	1200	1750	0.25	13.9	17.3	130
M-07D361	360	324-396	230	300	595	1200	1750	0.25	15.1	18.9	125
M-07D391	390	351-429	250	320	650	1200	1750	0.25	16.4	20.5	105
M-07D431	430	387-473	275	350	710	1200	1750	0.25	18.1	22.6	100
M-07D471	470	423-517	300	385	775	1200	1750	0.25	19.7	24.7	90
M-07D511	510	459-561	320	418	842	1200	1750	0.25	21.4	26.8	80
M-07D561	560	504-616	350	460	920	1200	1750	0.25	23.5	29.4	75
M-07D621	620	558-682	385	505	1025	1200	1750	0.25	26.0	32.6	70
M-07D681	680	612-748	420	560	1120	1200	1750	0.25	28.6	35.7	65
M-07D751	750	675-825	460	615	1240	1200	1750	0.25	31.5	39.4	61
M-07D781	780	702-858	485	640	1290	1200	1750	0.25	32.8	41.0	54
M-07D821	820	738-9025	510	670	1355	1200	1750	0.25	34.4	43.1	48

Note : 1.The clamping voltage from 180 to 680 is tested with current 2.5A。 2.The energy (10/1000us)is about 1.4 times of energy(2ms)。
备注：1.180至680最大限制电压测试电流是2.5A。 2.10/1000us的能量耐量值约为2ms能量耐量值的1.4倍。

浪涌抑制压敏电阻器

Surge Suppression Pressure Sensitive Resistor



■10D系列压敏电阻Varistor With 10MM Diameter

型号规格 Part No.	压敏电压 Varistor Voltage		最大允许 使用电压 Maximum Allowable Voltage		最大限制 电压 Maximum Clamping Voltage	通流量 Withstanding Surge Current (8/20 us) 1 time		静电功率 Rated Wattage	能量耐量 Energy (2ms)		静态电容量 (参考值) Typical Capacitance
	V1mA(V)	AC(V)	DC(V)	V _{10A} (V)		K(A)	KJ(A)		(W)	K(J)	
M-10D180	18	16-20	11	14	.38	500	1000	0.05	1.6	2.0	7500
M-10D220	22	20-24	14	18	.43	500	1000	0.05	2.0	2.5	6000
M-10D270	27	24-30	17	22	.53	500	1000	0.05	2.4	3.0	4800
M-10D330	33	30-36	20	26	.65	500	1000	0.05	3.0	3.7	4200
M-10D390	39	35-43	25	31	.77	500	1000	0.05	3.5	4.4	3700
M-10D470	47	42-52	30	38	.93	500	1000	0.05	4.2	5.3	3300
M-10D560	56	50-62	35	45	.110	500	1000	0.05	5.0	6.3	2900
M-10D680	68	61-75	40	56	.135	500	1000	0.05	6.1	7.7	2500
M-10D820	82	74-90	50	65	135	2500	3500	0.4	7.4	9.2	2100
M-10D101	100	90-110	60	85	165	2500	3500	0.4	9.0	11.3	1700
M-10D121	120	108-132	75	100	200	2500	3500	0.4	10.8	13.5	1500
M-10D151	150	135-165	95	125	250	2500	3500	0.4	13.5	16.9	1300
M-10D181	180	162-198	115	150	300	2500	3500	0.4	16.2	20.3	470
M-10D201	200	180-220	130	170	340	2500	3500	0.4	18.0	22.5	430
M-10D221	220	198-242	140	180	360	2500	3500	0.4	19.8	24.8	390
M-10D241	240	216-264	150	200	395	2500	3500	0.4	21.6	27.0	360
M-10D271	270	243-297	175	225	455	2500	3500	0.4	24.3	30.4	330
M-10D301	300	270-330	195	250	505	2500	3500	0.4	27.0	33.8	290
M-10D331	330	297-363	210	275	550	2500	3500	0.4	29.7	37.1	280
M-10D361	360	324-396	230	300	595	2500	3500	0.4	32.4	40.5	260
M-10D391	390	351-429	250	320	650	2500	3500	0.4	35.1	43.9	240
M-10D431	430	387-473	275	350	710	2500	3500	0.4	38.7	48.4	220
M-10D471	470	423-517	300	385	775	2500	3500	0.4	42.3	52.9	190
M-10D511	510	459-561	320	418	842	2500	3500	0.4	42.3	52.9	180
M-10D561	560	504-616	350	460	920	2500	3500	0.4	42.3	52.9	180
M-10D621	620	558-682	385	505	1025	2500	3500	0.4	42.3	52.9	160
M-10D681	680	612-748	420	560	1120	2500	3500	0.4	42.3	52.9	140
M-10D751	750	675-825	460	615	1240	2500	3500	0.4	42.3	52.9	130
M-10D781	780	702-858	485	640	1290	2500	3500	0.4	42.3	52.9	130
M-10D821	820	738-9025	510	670	1355	2500	3500	0.4	44.3	55.4	130
M-10D911	910	819-1001	550	745	1500	2500	3500	0.4	49.1	61.4	120
M-10D951	950	855-1045	580	780	1570	2500	3500	0.4	51.3	64.1	110
M-10D102	1000	900-1100	625	825	1650	2500	3500	0.4	54.0	57.5	100
M-10D112	1100	990-1210	680	895	1815	2500	3500	0.4	59.4	74.3	90
M-10D152	1500	1350-1650	900	1220	2475	2500	3500	0.4	80.0	100.0	80
M-10D182	1800	1620-1980	1000	1465	2970	2500	3500	0.4	97.2	121.5	60

Note : 1.The clamping voltage from 180 to 680 is tested with current 10A。 2.The energy (10/1000us)is about 1.4 times of energy(2ms)。
备注：1.180至680最大限制电压测试电流是10A。 2.10/1000us的能量耐量值约为2ms能量耐量值的1.4倍。

浪涌抑制压敏电阻器

Surge Suppression Pressure Sensitive Resistor



■14D系列压敏电阻Varistor With 14MM Diameter

型号规格 Part No.	压敏电压 Varistor Voltage		最大允许 使用电压 Maximum Allowable Voltage		最大限制 电压 Maximum Clamping Voltage	通流量 Withstanding Surge Current (8/20 us) 1 time		静电功率 Rated Wattage	能量耐量 Energy (2ms)		静态电容 (参考值) Typical Capacitance
	V1mA(V)	AC(V)	DC(V)	V _{33A} (V)		K(A)	KJ(A)		(W)	K(J)	
M-14K180	18	16-20	11	14	.38	1000	2000	0.1	3.2	4.1	18000
M-14K220	22	20-24	14	18	.43	1000	2000	0.1	4.0	5.0	15000
M-14K270	27	24-30	17	22	.53	1000	2000	0.1	4.9	6.1	10000
M-14K330	33	30-36	20	26	.65	1000	2000	0.1	5.9	7.4	8500
M-14K390	39	35-43	25	31	.77	1000	2000	0.1	7.0	8.8	7500
M-14K470	47	42-52	30	38	.93	1000	2000	0.1	8.5	10.6	6500
M-14K560	56	50-62	35	45	.110	1000	2000	0.1	10.1	12.6	5600
M-14K680	68	61-75	40	56	.135	1000	2000	0.1	12.2	15.3	4700
M-14K820	82	74-90	50	65	135	4500	6000	0.6	14.8	18.5	3900
M-14K101	100	90-110	60	85	165	4500	6000	0.6	18.0	22.5	3400
M-14K121	120	108-132	75	100	200	4500	6000	0.6	21.6	27.0	3100
M-14K151	150	135-165	95	125	250	4500	6000	0.6	27.0	33.8	3000
M-14K181	180	162-198	115	150	300	4500	6000	0.6	32.4	40.5	1030
M-14K201	200	180-220	130	170	340	4500	6000	0.6	36.0	45.0	970
M-14K221	220	198-242	140	180	360	4500	6000	0.6	39.6	49.5	840
M-14K241	240	216-264	150	200	395	4500	6000	0.6	43.2	54.0	710
M-14K271	270	243-297	175	225	455	4500	6000	0.6	48.6	60.8	650
M-14K301	300	270-330	195	250	505	4500	6000	0.6	54.0	67.5	600
M-14K331	330	297-363	210	275	550	4500	6000	0.6	59.4	74.3	550
M-14K361	360	324-396	230	300	595	4500	6000	0.6	64.8	81.0	500
M-14K391	390	351-429	250	320	650	4500	6000	0.6	70.2	87.8	480
M-14K431	430	387-473	275	350	710	4500	6000	0.6	77.4	96.8	440
M-14K471	470	423-517	300	385	775	4500	6000	0.6	84.6	105.8	420
M-14K511	510	459-561	320	418	842	4500	6000	0.6	84.6	105.8	390
M-14K561	560	504-616	350	460	920	4500	6000	0.6	84.6	105.8	360
M-14K621	620	558-682	385	505	1025	4500	6000	0.6	84.6	105.8	320
M-14K681	680	612-748	420	560	1120	4500	6000	0.6	84.6	105.8	290
M-14K751	750	675-825	460	615	1240	4500	6000	0.6	90.0	112.5	260
M-14K781	780	702-858	485	640	1290	4500	6000	0.6	93.6	117.0	230
M-14K821	820	738-9025	510	670	1355	4500	6000	0.6	98.4	123.0	230
M-14K911	910	819-1001	550	745	1500	4500	6000	0.6	109.2	136.5	200
M-14K951	950	855-1045	580	780	1570	4500	6000	0.6	113.7	142.1	190
M-14K102	1000	900-1100	625	825	1650	4500	6000	0.6	120.0	150.0	180
M-14K112	1100	990-1210	680	895	1815	4500	6000	0.6	132.0	165.0	150
M-14K152	1500	1350-1650	900	1220	2475	4500	6000	0.6	179.0	223.0	140
M-14K182	1800	1620-1980	1000	1465	2970	4500	6000	0.6	216.0	270.0	120

Note : 1.The clamping voltage from 180 to 680 is tested with current 10A。 2.The energy (10/1000us)is about 1.4 times of energy(2ms)。
备注：1.180至680最大限制电压测试电流是10A。 2.10/1000us的能量耐量值约为2ms能量耐量值的1.4倍。

浪涌抑制压敏电阻器

Surge Suppression Pressure Sensitive Resistor



■20D系列压敏电阻 Varistor With 20MM Diameter

型号规格 Part No.	压敏电压 Varistor Voltage		最大允许 使用电压 Maximum Allowable Voltage		最大限制 电压 Maximum Clamping Voltage	通流量 Withstanding Surge Current (8/20 us) 1 time		静电功率 Rated Wattage	能量耐量 Energy (2ms)		静态电容 (参考值) Typical Capacitance
	V1mA(V)	AC(V)	DC(V)	V _{100A} (V)		K(A)	KJ(A)		(W)	K(J)	
M-20D180	18	16-20	11	14	.38	2000	3000	0.2	5.4	6.8	39000
M-20D220	22	20-24	14	18	.43	2000	3000	0.2	6.6	8.3	32000
M-20D270	27	24-30	17	22	.53	2000	3000	0.2	8.1	10.1	22000
M-20D330	33	30-36	20	26	.65	2000	3000	0.2	9.9	12.4	18000
M-20D390	39	35-43	25	31	.77	2000	3000	0.2	11.7	14.6	16000
M-20D470	47	42-52	30	38	.93	2000	3000	0.2	14.1	17.6	14000
M-20D560	56	50-62	35	45	.110	2000	3000	0.2	16.8	21.0	12000
M-20D680	68	61-75	40	56	.135	2000	3000	0.2	20.4	25.5	10000
M-20D820	82	74-90	50	65	135	6500	10000	1.0	24.6	30.8	5800
M-20D101	100	90-110	60	85	165	6500	10000	1.0	30.0	37.5	4800
M-20D121	120	108-132	75	100	200	6500	10000	1.0	36.0	45.0	3800
M-20D151	150	135-165	95	125	250	6500	10000	1.0	45.0	56.3	3000
M-20D181	180	162-198	115	150	300	6500	10000	1.0	54.0	67.5	2600
M-20D201	200	180-220	130	170	340	6500	10000	1.0	60.0	75.0	2400
M-20D221	220	198-242	140	180	360	6500	10000	1.0	66.0	82.5	1800
M-20D241	240	216-264	150	200	395	6500	10000	1.0	72.0	90.0	1500
M-20D271	270	243-297	175	225	455	6500	10000	1.0	81.0	101.3	1400
M-20D301	300	270-330	195	250	505	6500	10000	1.0	90.0	112.5	1350
M-20D331	330	297-363	210	275	550	6500	10000	1.0	99.0	123.8	1300
M-20D361	360	324-396	230	300	595	6500	10000	1.0	108.0	135.0	1250
M-20D391	390	351-429	250	320	650	6500	10000	1.0	117.0	146.3	1180
M-20D431	430	387-473	275	350	710	6500	10000	1.0	129.0	161.3	1100
M-20D471	470	423-517	300	385	775	6500	10000	1.0	141.0	176.3	1050
M-20D511	510	459-561	320	418	842	6500	10000	1.0	153.0	191.3	1000
M-20D561	560	504-616	350	460	920	6500	10000	1.0	168.0	210.0	970
M-20D621	620	558-682	385	505	1025	6500	10000	1.0	186.0	232.5	980
M-20D681	680	612-748	420	560	1120	6500	10000	1.0	186.0	232.5	900
M-20D751	750	675-825	460	615	1240	6500	10000	1.0	186.0	232.5	850
M-20D781	780	702-858	485	640	1290	6500	10000	1.0	187.2	234.0	750
M-20D821	820	738-9025	510	670	1355	6500	10000	1.0	196.8	246.0	700
M-20D911	910	819-1001	550	745	1500	6500	10000	1.0	218.4	273.0	600
M-20D951	950	855-1045	580	780	1570	6500	10000	1.0	228.0	285.0	580
M-20D102	1000	900-1100	625	825	1650	6500	10000	1.0	240.0	300.0	500
M-20D112	1100	990-1210	680	895	1815	6500	10000	1.0	264.0	330.0	450
M-20D152	1500	1350-1650	900	1220	2475	6500	10000	1.0	359.0	449.0	400
M-20D182	1800	1620-1980	1000	1465	2970	6500	10000	1.0	432.0	540.0	220

Note : 1.The clamping voltage from 180 to 680 is tested with current 25A。 2.The energy (10/1000us)is about 1.4 times of energy(2ms)。
备注：1.180至680最大限制电压测试电流是25A。 2.10/1000us的能量耐量值约为2ms能量耐量值的1.4倍。