

# SPECIFICATION FOR APPROVAL

## 承认书

客户名称 (CUSTOMER):	
产品名称 (PRODUCT ITEM):	MYG VARISTORS
客户料号 (CUSTOMER PART NO.):	
规格型号 (PART NO.):	MYG SERIES
文件编号 (FILE NO.):	MYG-171211001
编制日期 (DATE):	2023-11-16

客户确认(CUSTOMER CONFIRM)	批准 (APPROVE)
	审核 (CHECK)



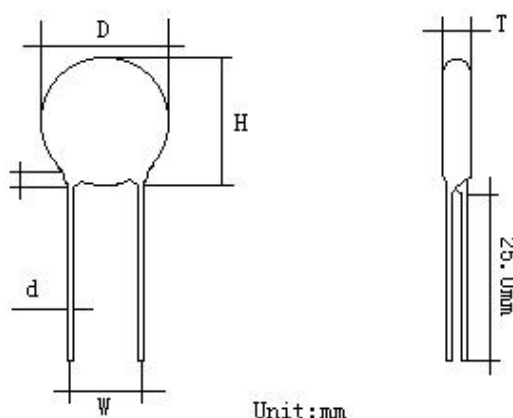
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压敏电阻 (Varistors) MYG SERIES



1. 外形尺寸( Dimension)(mm):

代号 Code Name	类型和尺寸 Type and Dimensions				
	MYG-05	MYG-07	MYG-10	MYG-14	MYG-20
$D_{MAX}(180-271)$	7.0	8.2	11.5	15.5	22.5
$D_{MAX}(331-471)$	7.0	8.7	12.0	16.0	23.0
$D_{MAX}(511-681)$		9.0	12.3	16.3	23.2
$D_{MAX}(751-182)$			12.8	16.8	23.5
$d(\pm 0.1)$	0.6	0.6	0.8	0.8	1.0
$T_{MAX}(180-271)$	4.0	4.2	4.5	5.0	5.5
$T_{MAX}(331-471)$	4.6	4.8	5.2	5.5	6.0
$T_{MAX}(511-681)$			7.2	7.5	8.0
$T_{MAX}(751-182)$			10.0	10.5	11.0
$W(\pm 1)$	5.0	5.0	7.5	7.5	10.0
L	25.0	25.0	25.0	23.0	23.0



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2. 电性能参数(Parameter):

MYG05K series

型号规格 Type	特性项目和额定值								
	压敏电压 (V) V0.1m A (V)	最大连续工作电压 (V) Maximum Allowable Voltage (V)		等级电压 (V) Clamping Voltage (max.)	等级电流 (A) Clamping Current (max.)	最大峰值电流 Maximum Peak Current (A) (8/20 μ S)	能量 Energy(10/1000 μ S) J	漏电流 (uA) Drain Current ( uA)	电容量 (参考值) Capacitance (Typical) PF
	V	ACrms	D.C	Vc	Ip			I <sub>l</sub>	C
MYG05-180	18	11	14	40	1	125	0.6	≤20	1600
MYG05-220	22	14	18	48	1	125	0.7	≤20	1300
MYG05-270	27	17	22	60	1	125	0.9	≤20	1050
MYG05-330	33	20	26	73	1	125	1.1	≤20	900
MYG05-390	39	25	31	86	1	125	1.2	≤20	500
MYG05-470	47	30	38	104	1	125	1.5	≤20	450
MYG05-560	56	35	45	123	1	125	1.8	≤20	400
MYG05-680	68	40	56	150	1	125	2.2	≤20	350
MYG05-820	82	50	65	145	5	600	4	≤10	250
MYG05-101	100	60	85	175	5	600	4	≤10	200
MYG05-121	120	75	100	210	5	600	5	≤10	170
MYG05-151	150	95	125	260	5	600	7	≤10	140
MYG05-201	200	130	170	355	5	600	9	≤10	80
MYG05-221	220	140	180	380	5	600	9	≤10	70
MYG05-241	240	150	200	415	5	600	11	≤10	70
MYG05-271	270	175	225	475	5	600	11	≤10	65
MYG05-361	360	230	300	620	5	600	16	≤10	50
MYG05-391	390	250	320	675	5	600	17	≤10	50
MYG05-431	430	275	350	745	5	600	20	≤10	45
MYG05K471	470	300	385	810	5	600	21	≤10	40



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MYG07K series

型号规格 Type	特性项目和额定值								
	压敏电压 (V) V1mA (V)	最大连续工作电压 (V) Maximum Allowable Voltage (V)		等级电压 (V) Clamping Voltage (max.)	等级电流 (A) Clamping Current (max.)	最大峰值电流 Maximum Peak Current (A)	能量 Energy(10/1000 μ S)	漏电流 (uA) Drain Current (uA)	电容量 (参考值) Capacitance (Typical) PF
	V	A · Cr ms	D.C	Vc	Ip	8/20 μ S	J	I <sub>l</sub>	C
	MYG07-180	18	11	14	36	2.5	250	2	≤20
MYG07-220	22	14	18	43	2.5	250	2	≤20	2800
MYG07-270	27	17	22	53	2.5	250	3	≤20	2000
MYG07-330	33	20	26	65	2.5	250	4	≤20	1500
MYG07-390	39	25	31	77	2.5	250	4	≤20	1350
MYG07-470	47	30	38	93	2.5	250	5	≤20	1150
MYG07-560	56	35	45	110	2.5	250	6	≤20	950
MYG07-680	68	40	56	135	2.5	250	7	≤20	700
MYG07-820	82	50	65	135	10	1250	10	≤10	550
MYG07-101	100	60	85	165	10	1250	12	≤10	500
MYG07-121	120	75	100	200	10	1250	14	≤10	450
MYG07-151	150	95	125	250	10	1250	17	≤10	350
MYG07-201	200	130	170	340	10	1250	25	≤10	250
MYG07-221	220	140	180	360	10	1250	28	≤10	250
MYG07-241	240	150	200	395	10	1250	28	≤10	200
MYG07-271	270	175	225	455	10	1250	32	≤10	170
MYG07-361	360	230	300	595	10	1250	42	≤10	130
MYG07-391	390	250	320	650	10	1250	46	≤10	130
MYG07-431	430	275	350	710	10	1250	50	≤10	110
MYG07-471	470	300	385	775	10	1250	56	≤10	100



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MYG07-561	560	360	460	925	10	1250	60	≤10	90
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MYG10K series

型号规格 Type	特性项目和额定值								
	压敏电压 (V) V1mA (V)	最大连续工作电压 (V) Maximum Allowable Voltage (V)		等级电压 (V) Clamping Voltage (max.)	等级电流 (A) Clamping Current (max.)	最大峰值电流 Maximum Peak Current (A)	能量 Energy(10 /1000 μ S)	漏电流 Drain Current (uA)	电容量 (pF) (参考值) Capacitance (Typical) PF
	V	A · Cr ms	D.C	Vc	Ip	8/20 μ S	J	Ii	C
MYG10-180	18	11	14	36	5	500	3	≤20	7500
MYG10-220	22	14	18	43	5	500	5	≤20	6000
MYG10-270	27	17	22	53	5	500	6	≤20	4000
MYG10-330	33	20	26	65	5	500	7	≤20	3000
MYG10-390	39	25	31	77	5	500	9	≤20	2600
MYG10-470	47	30	38	93	5	500	11	≤20	2200
MYG10-560	56	35	45	110	5	500	13	≤20	1800
MYG10-680	68	40	56	135	5	500	15	≤20	1300
MYG10-820	82	50	65	135	25	2500	17	≤10	1800
MYG10-101	100	60	85	165	25	2500	18	≤10	1400
MYG10-121	120	75	100	200	25	2500	21	≤10	1100
MYG10-151	150	95	125	250	25	2500	25	≤10	900
MYG10-201	200	130	170	340	25	2500	42	≤10	500
MYG10-221	220	140	180	360	25	2500	46	≤10	450
MYG10-241	240	150	200	395	25	2500	50	≤10	400
MYG10-271	270	175	225	455	25	2500	57	≤10	350
MYG10-361	360	230	300	595	25	2500	74	≤10	300



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MYG10-391	390	250	320	650	25	2500	81	≤10	270
MYG10-431	430	275	350	710	25	2500	88	≤10	250
MYG10-471	470	300	385	775	25	2500	94	≤10	230
MYG10-561	560	360	460	925	25	2500	100	≤10	190
MYG10-621	620	385	505	1025	25	2500	102	≤10	130
MYG10-681	680	420	565	1120	25	2500	102	≤10	130
MYG10-751	750	460	615	1240	25	2500	125	≤10	120
MYG10-781	780	485	640	1290	25	2500	125	≤10	120
MYG10-821	820	510	670	1355	25	2500	125	≤10	110
MYG10-911	910	550	745	1500	25	2500	133	≤10	100
MYG10-102	1000	625	825	1650	25	2500	140	≤10	90
MYG10-112	1100	680	895	1815	25	2500	155	≤10	80

MYG14K series

型号规格 Type	特性项目和额定值								
	压敏电压 (V) V1mA (V)	最大连续工作电压 (V) Maximum Allowable Voltage (V)		等级电压 Clamping Voltage (max.) (V)	等级电流 Clamping Current (max.) (A)	最大峰值电流 Maximum Peak Current (A)	能量 Energy(10 /1000 μ S)	漏电流 (uA) Drain Current (uA)	电容量 (pF) (参考值) Capacitance (Typical) PF
	V	A •Crms	D.C	Vc	Ip	8/20 μ S	J	I <sub>l</sub>	C
MYG14-180	18	11	14	36	10	1000	7	≤20	18000
MYG14-220	22	14	18	43	10	1000	8	≤20	15000
MYG14-270	27	17	22	53	10	1000	10	≤20	10000
MYG14-330	33	20	26	65	10	1000	12	≤20	7500
MYG14-390	39	25	31	77	10	1000	13	≤20	6500
MYG14-470	47	30	38	93	10	1000	17	≤20	5500
MYG14-560	56	35	45	110	10	1000	20	≤20	4500
MYG14-680	68	40	56	135	10	1000	24	≤20	3300
MYG14-820	82	50	65	135	50	4500	29	≤10	2900



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MYG14-101	100	60	85	165	50	4500	35	≤10	2400
MYG14-121	120	75	100	200	50	4500	42	≤10	1900
MYG14-151	150	95	125	250	50	4500	53	≤10	1500
MYG14-201	200	130	170	340	50	4500	80	≤10	1000
MYG14-221	220	140	180	360	50	4500	80	≤10	1000
MYG14-241	240	150	200	395	50	4500	84	≤10	900
MYG14-271	270	175	225	455	50	4500	99	≤10	750
MYG14-361	360	230	300	595	50	4500	130	≤10	550
MYG14-391	390	250	320	650	50	4500	140	≤10	500
MYG14-431	430	275	350	710	50	4500	155	≤10	450
MYG14-471	470	300	385	775	50	4500	175	≤10	440
MYG14-561	560	360	460	925	50	4500	190	≤10	340
MYG14-621	620	385	505	1025	50	4500	190	≤10	250
MYG14-681	680	420	565	1120	50	4500	190	≤10	250
MYG14-751	750	460	615	1240	50	4500	210	≤10	230
MYG14-781	780	485	640	1290	50	4500	210	≤10	230
MYG14-821	820	510	670	1355	50	4500	235	≤10	200
MYG14-911	910	550	745	1500	50	4500	255	≤10	180
MYG14-102	1000	625	825	1650	50	4500	280	≤10	150
MYG14-112	1100	680	895	1815	50	4500	310	≤10	150
MYG14-182	1800	1000	1465	2970	50	4500	510	≤10	100

MYG20K series

型号规格 Type	特性项目和额定值								
	压敏电压 (V)	最大连续工作电压 Maximum Allowable Voltage (V)		等级电压 Clamping Voltage (max.) (V)	等级电流 Clamping Current (max.) (A)	最大峰值电流 Maximum Peak Current (A)	能量 Energy(10 /1000 μ S)	漏电流 (uA) Drain Current (uA)	电容量 (pF) (参考值) Capacitance (Typical) PF
	V1mA (V)	A •Crms	D.C	Vc	Ip	8/20 μ S	J	Ii	C
MYG20-180	18	11	14	36	20	2000	13	≤20	37000
MYG20-220	22	14	18	43	20	2000	16	≤20	30000
MYG20-270	27	17	22	53	20	2000	19	≤20	22000
MYG20-330	33	20	26	65	20	2000	24	≤20	17000



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MYG20-390	39	25	31	77	20	2000	28	≤20	15000
MYG20-470	47	30	38	93	20	2000	34	≤20	13000
MYG20-560	56	35	45	110	20	2000	41	≤20	11000
MYG20-680	68	40	56	135	20	2000	49	≤20	7000
MYG20-820	82	50	65	135	100	6500	56	≤10	5500
MYG20-101	100	60	85	165	100	6500	70	≤10	4800
MYG20-121	120	75	100	200	100	6500	85	≤10	3800
MYG20-151	150	95	125	250	100	6500	106	≤10	3000
MYG20-201	200	130	170	340	100	6500	140	≤10	2000
MYG20-221	220	140	180	360	100	6500	155	≤10	2000
MYG20-241	240	150	200	395	100	6500	168	≤10	1800
MYG20-271	270	175	225	455	100	6500	190	≤10	1600
MYG20-361	360	230	300	595	100	6500	255	≤10	1200
MYG20-391	390	250	320	650	100	6500	275	≤10	1000
MYG20-431	430	275	350	710	100	6500	305	≤10	900
MYG20-471	470	300	385	775	100	6500	350	≤10	900
MYG20-621	620	385	505	1025	100	6500	380	≤10	500
MYG20-681	680	420	565	1120	100	6500	380	≤10	460
MYG20-751	750	460	615	1240	100	6500	420	≤10	420
MYG20-781	780	485	640	1290	100	6500	420	≤10	420
MYG20-821	820	510	670	1355	100	6500	460	≤10	400
MYG20-911	910	550	745	1500	100	6500	510	≤10	350
MYG20-102	1000	625	825	1650	100	6500	560	≤10	320
MYG20-112	1100	680	895	1815	100	6500	620	≤10	300
MYG20-182	1800	1000	1465	2970	100	6500	860	≤10	200





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4.电性能 Electrical Characteristics

项目 Items	测试方法 Test Methods	规范 Specifications
测试条件 Standard Test Condition	测试温度为 5 ~35℃；相对湿度为<85% Electrical measurements (initial/after tests ) shall be conducted at temperature of 5 to 35℃,relative humidity of maximum 85%	
压敏电压 Varistor Voltage	施加 1mA 的直流测试电流在电阻的引线两端测得的电压为压敏电压（测试尽可能的快避免温度的影响）。 The voltage between two terminals with the specified measuring current 1mA DC applied is called Varistor Voltage or $V_{1mA}$ .The measurement shall be made as fast as possible to avoid heat affection.	按照规范要求 To meet the specified value.
最大允许电压 Maximum Allowable Voltage	连续施加的最大交流电压的有效值或者直流电压。The maximum sinusoidal RMS voltage or maximum DC voltage that can be applied continuously.	按照规范要求 To meet the specified value.
等级电压 Clamping voltage	施加(脉宽为 8/20μs) 的脉冲电流在电阻的引线两端测得的电压 The maximum voltage between two terminals with the specified standard impulse current (8/20μs).	按照规范要求 To meet the specified value.
引线拉伸强度 Terminal Pull Strength	对电阻的引线施加拉力（如下），维持 10±1 秒。引线没有可见损伤。 After gradually applying the force specified below and keeping the unit fixed for 10 ± 1 seconds, the terminal shall be visually examined for any damage. 引线尺寸                      拉力 Terminal diameter              Force φ 0.6mm                              9.8N(1.0kgf) φ 0.8mm,1.0mm                      19.6N(2.0kgf)	没有明显的机械损伤 No remarkable mechanical damage
引线的弯曲强度 Terminal Bending Strength	引线被弯曲 90° 后恢复到原来的位置，然后在相反的方向再弯曲 90° 恢复到原来的位置,引线没有可见损伤。The terminal shall gradually be bent by, 90° in one direction, then 90° in the opposite direction, and	没有明显的机械损伤 No remarkable mechanical damage



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	<p>again back to original position. The damage of the terminal shall be visually examined.</p> <p>引线尺寸                      拉力</p> <p>Terminal diameter              Force</p> <p>φ 0.6mm                              4.9N(0.5kgf)</p> <p>φ 0.8mm,1.0mm                      9.8N(1.0kgf)</p>	
震动 Vibration	<p>频率范围: 10-55Hz , 振幅: 0.75mm 或 98M/S<sup>2</sup> 方向, 每个坐标方向震动 2 小时。然后进行外观检查。</p> <p>Frequency range 10-55Hz, Amplitude:0.75mm or 98M/S<sup>2</sup>, Direction:three mutually perpendicular directions for 2 hours each. Thereafter,the unit shall visually examined.</p>	<p>没有明显的机械损伤</p> <p>No remarkable mechanical damage</p>
可焊性 Solderability	<p>浸入深度距端部 3mm Terminal except 3mm shall be immersed in the solder.</p> <p>焊接温度 solder temperature:235±5℃</p> <p>浸入时间 Immersion time :2.0±0.5sec</p>	<p>浸入面积最少达 95% 以上</p> <p>Approximately 95% of the terminals shall be covered with new solder uniformly.</p>
耐焊接热 Resistance to Soldering Heat	<p>浸入深度距端部 2.0 to 2.5mm Terminal except 2.0 to 2.5mm shall be immersed in the solder.</p> <p>焊接温度 solder temperature:255±10℃</p> <p>浸入时间 Immersion time :10±1 sec(5D: 5±1s)</p>	<p>Δ V<sub>cmA</sub>/V<sub>cmA</sub> ≤ ±5%.</p> <p>没有明显的机械损伤</p> <p>No remarkable mechanical damage</p>
稳态湿热 ity(Steady State)	<p>没有负载的情况下将产品放在温度为 40±2℃, 湿度为 90 到 95%, 1000 小时; 然后将电阻放在室温中 1 到 2 小时后进行测量。</p> <p>The specimen shall be subjected to 40±2℃,90 to 95% RH for 1000 hours without load and then stored at room temperature and normal humidity for 1 to 2 hours. Thereafter , the change of V<sub>cmA</sub> shall be measured.</p>	<p>Δ V<sub>cmA</sub>/V<sub>cmA</sub> ≤ ±5%</p>
容量 Capacitance	<p>容量在 1kHz ± 10%,1V<sub>rms</sub> max.(1MHZ ± 10% below 100pF),0V bias and 20±2℃ 条件下测量。</p> <p>Capacitance shall be measured at 1kHz ± 10%,1V<sub>rms</sub> max.(1MHZ± 10% below 100pF),0V bias and 20±2℃</p>	<p>按照规范要求</p> <p>To meet the specified value.</p>
上限类别温度耐久性 High Temperature	<p>将连续施加最大允许电压的产品放在温度为 85±2℃, 1000 小时; 然后将电阻放在室温中 1 到 2 小时后进行测量。</p>	<p>Δ V<sub>cmA</sub>/V<sub>cmA</sub> ≤ ±10%</p>



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Load/Dry Heat Load	After being continuously applied the Maximum Allowable Voltage at $85 \pm 2^{\circ}\text{C}$ for 1000 hours,the specimen shall be stored at room temperature and normal humidity for 1 to 2 hours. Thereafter , the change of $V_{\text{cmA}}$ shall be measured.	
高温储存 Dry Heat (High Temperature Storage)	将产品放在温度为 $125 \pm 2^{\circ}\text{C}$ 容器中, 1000 小时; 然后将电阻放在室温中 1 到 2 小时后进行测量。 The specimen shall be subjected to $125 \pm 2^{\circ}\text{C}$ for 1000 hours in a thermostatic bath without load and then stored at room temperature and normal humidity for 1 to 2 hours. Thereafter , the change of $V_{\text{cmA}}$ shall be measured.	$\Delta V_{\text{cmA}}/V_{\text{cmA}} \leq \pm 5\%$
下限类别温度耐久性 Low Temperature storage/Cold	将产品放在温度为 $-40 \pm 2^{\circ}\text{C}$ , 1000 小时; 然后将电阻放在室温中 1 到 2 小时后进行测量。 The specimen shall be subjected to $-40 \pm 2^{\circ}\text{C}$ without load for 1000 hours and then stored at room temperature and normal humidity for 1 to 2 hours. Thereafter , the change of $V_{\text{cmA}}$ shall be measured.	$\Delta V_{\text{cmA}}/V_{\text{cmA}} \leq \pm 5\%$
湿中负荷 Damp Heat Load/ Humidity Load	将施加最大允许电压产品放在温度为 $40 \pm 2^{\circ}\text{C}$ , 湿度为 90 到 95%, 1000 小时; 然后将电阻放在室温中 1 到 2 小时后进行测量。 The specimen shall be subjected to $40 \pm 2^{\circ}\text{C}$ , 90 to 95% RH and the Maximum Allowable Voltage for 1000 hours and then stored at room temperature and normal humidity for 1 to 2 hours. Thereafter , the change of $V_{\text{cmA}}$ shall be measured.	$\Delta V_{\text{cmA}}/V_{\text{cmA}} \leq \pm 10\%$



ALLCONNE INTERNATIONAL CO.,LIMITED.

Product specification

产品技术规格

规格型号(PART NO.)	MYG SERIES
文件编号(FILE NO.)	MYG-171211001

温度循环 Temperature Cycle	将产品进行以下 5 个循环的冲击，然后将电阻放在室温中 1 到 2 小时后进行测量。 The temperature cycle shown below shall be repeated 5 cycles and then the specimen shall be stored at room temperature and normal humidity for 1to 2 hours, the change of $V_{cmA}$ and mechanical damage shall be examined.	$\Delta V_{cmA}/V_{cmA} \leq \pm 5\%$ 没有明显的机械损伤 No remarkable mechanical damage										
	<table border="1"> <thead> <tr> <th>温度 Temperature(°C)</th> <th>周期 Period(minutes)</th> </tr> </thead> <tbody> <tr> <td>-40±3</td> <td>30±3</td> </tr> <tr> <td>室温 Room Temp</td> <td>15±3</td> </tr> <tr> <td>85±3</td> <td>30±3</td> </tr> <tr> <td>室温 Room Temp</td> <td>15±3</td> </tr> </tbody> </table>	温度 Temperature(°C)	周期 Period(minutes)	-40±3	30±3	室温 Room Temp	15±3	85±3	30±3	室温 Room Temp	15±3	
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①最大峰值电流 (8/20 $\mu$ S) Maximum Peak Current (Withstanding Surge Current )	施加脉冲宽度 8/20 $\mu$ S 的脉冲电流冲击二次,时间间隔 5 分钟。 压敏电压变化率 $\pm 10\%$ 范围内的最大峰值电流。The maximum current within the varistor voltage change of $\pm 10\%$ when a standard impulse current of 8/20 $\mu$ S is applied two times with an interval of 5 minutes.	$\Delta V_{cmA}/V_{cmA} \leq \pm 10\%$ 没有明显的机械损伤 No remarkable mechanical damage										
② 最大峰值电流 ( 10/1000 $\mu$ S ) Maximum Peak Current (Withstanding Surge Current )	施加 10/1000 $\mu$ S 的脉冲电流冲击二次,时间间隔 5 分钟。压敏电压变化率 $\pm 10\%$ 范围内的最大峰值电流。The maximum current within the varistor voltage change of $\pm 10\%$ when a standard impulse current of 10/1000 $\mu$ S is applied two times with an interval of 5 minutes.	$\Delta V_{cmA}/V_{cmA} \leq \pm 10\%$ 没有明显的机械损伤 No remarkable mechanical damage										