

TVS

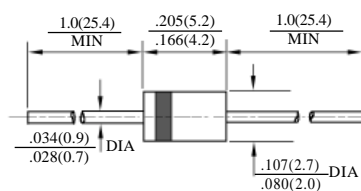
## 瞬态电压抑制二极管

## Transient Voltage Suppressor

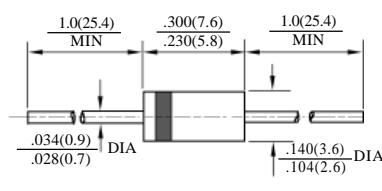
400WP4KE6.8-440A	外 型: DO-41	Outline:DO-41
600WP6KE6.8-440A	外 型: DO-15	Outline:DO-41
1500W 1.5KE6.8-440A	外 型: DO-201AD	Outline:DO-201AD

型 号 TYPE	击穿电压 Breakdown Voltage $V_{BR}$		@ $I_r$ (mA)	反向工作电压 Working Peak Reverse Voltage $V_{wm}$	最大反向 漏电流 Maximum Reverse Leakage $I_D(V_{WM})$	最大峰值 浪涌电流 Maximum Peak Impulse Surge Current $I_{PPM}$			最大箝位电压 Maximun Clamping Voltage $V_C(@I_{PPM})$	$V_{BR}$ 最大温度系数 Maximun Temperature Coefficient of $V_{BR}$ (%/°C)
	(V)					(A)				
	Min	Max				400W	600W	1500W		
6.8	6.12	7.48	10	5.50	1000	38	56	139	10.8	0.057
6.8A	6.45	7.14		5.80	1000	40	57	143	10.5	0.057
7.5	6.75	8.25		6.05	500	36	51	128	11.7	0.061
7.5A	7.13	7.88		6.40	500	37	53	132	11.3	0.061
8.2	7.38	9.02		6.63	200	33	48	120	12.5	0.065
8.2A	7.79	8.61		7.20	200	35	50	124	12.1	0.065
9.1	8.19	10.0	1.0	7.37	50	30	44	109	13.8	0.068
9.1A	8.65	9.55		7.78	50	31	45	112	13.4	0.068
10	9.00	11.0		8.10	10	28	40	100	15.0	0.073
10A	9.50	10.5		8.55	10	29	41	103	14.5	0.073
11	9.90	12.1	1.0	8.92	5.0	26	37	93.0	16.2	0.075
11A	10.5	11.6		9.40		27	38	96.0	15.6	0.075
12	10.8	13.2		9.72		24	35	87.0	17.3	0.076
12A	11.4	12.6		10.2		25	36	90.0	16.7	0.078
13	11.7	14.3		10.5		22	32	79.0	19.0	0.081
13A	12.4	13.7		11.1		23	33	82.0	18.2	0.081
15	13.5	16.5	1.0	12.1	5.0	19	27	68.0	22.0	0.084
15A	15.3	15.8		12.8		20	28	71.0	21.2	0.084
16	14.4	17.6		12.9		18	26	64.0	23.5	0.086
16A	15.2	16.8		13.6		19	27	67.0	22.5	0.086
18	16.2	19.8		14.5		16	23	56.5	26.5	0.088
18A	17.1	18.9		15.3		17	24	59.5	25.2	0.088
20	18.0	22.0	1.0	16.2	5.0	14	21	51.5	29.1	0.090
20A	19.0	21.0		17.1		15	22	54.0	27.7	0.090
22	19.8	24.2		17.8		13	19	47.0	31.9	0.092
22A	20.9	23.1		18.8		14	20	49.0	30.6	0.092
24	21.6	26.4		19.4		12	17	43.0	34.7	0.094
24A	22.8	25.2		20.5		13	18	45.0	33.2	0.094

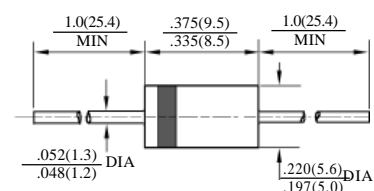
 备注: 型号后带“A”标记, 表示  $V_{BR}$  范围  $\pm 5\% V_{BR}$  (标称) 无标记表示  $V_{BR}$  范围  $\pm 10\% V_{BR}$  (标称)

 Note: Devices with suffix "A" mean its  $V_{BR}$  range of  $\pm 5\%$ ; Devices without suffix "A" indicate its  $V_{BR}$  range of  $\pm 10\%$ .


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DO - 15



DO - 201AD

## 瞬态电压抑制二极管(TVS)

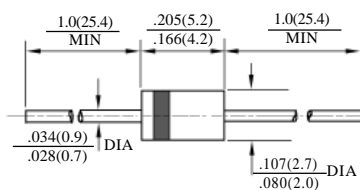
### Transient Voltage Suppressor(TVS)

400WP4KE6.8-440A      外 型: DO-41      Outline:DO-41  
 600WP6KE6.8-440A      外 型: DO-15      Outline:DO-41  
 1500W 1.5KE6.8-440A      外 型: DO-201AD      Outline:DO-201AD

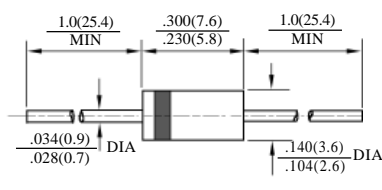
型 号 TYPE	击穿电压 Breakdown Voltage $V_{BR}$		@ $I_r$ (mA)	反向工作电压 Working Peak Reverse Voltage $V_{wm}$ ( V )	最大反向 漏电流 Maximum Reverse Leakage Current $I_D(V_{WM})$ ( $\mu$ A)	最大峰值 浪涌电流 Maximum Peak Impulse Surge Current $I_{PPM}$ (A)			最大箝位电压 Maximun Clamping Voltage $V_c(@I_{PPM})$	$V_{BR}$ 最大温度系数 Maximun Temperature Coefficient of $V_{BR}$ (%/ °C)
	(V)					(A)				
	Min	Max				400W	600W	500W		
27	24.3	29.7	1.0	21.8	5.0	11	15.0	38.5	39.1	0.096
27A	25.7	28.4		23.1		11.2	16.0	40.0	37.5	0.096
30	27.0	33.0		24.3		10	14.0	34.5	43.5	0.097
30A	28.5	31.5		25.6		10	14.4	36.0	41.4	0.097
33	29.7	36.3		26.8		9.0	12.6	31.5	47.7	0.098
33A	31.4	31.7		28.2		8.0	13.2	33.0	45.7	0.098
36	32.4	39.6	1.0	29.1	5.0	8.0	11.6	29.0	52.0	0.099
36A	34.2	37.8		30.8		8.4	12.0	30.0	49.9	0.099
39	35.1	42.9		31.6		7.4	10.6	26.5	56.4	0.100
39A	37.1	41.0		33.3		7.8	11.2	28.0	53.9	0.100
43	38.7	47.3		34.8		6.8	9.6	24.0	61.9	0.101
43A	40.9	45.2		36.8		7.1	10.1	25.3	59.3	0.101
47	42.3	51.7	1.0	38.1	5.0	6.2	8.9	22.2	67.8	0.101
47A	44.7	49.4		40.2		5.0	9.3	23.2	64.8	0.101
51	45.9	56.1		41.3		5.7	8.2	20.4	73.5	0.102
51A	48.5	53.6		43.6		6.0	8.6	21.4	70.1	0.102
56	50.4	61.6		45.4		5.2	7.4	18.6	80.5	0.103
56A	53.2	58.8		47.8		5.5	7.8	19.5	77.0	0.103
62	55.8	68.2	1.0	50.2	5.0	4.7	6.8	16.9	89.0	0.104
62A	58.9	65.1		53.0		5.0	7.1	17.7	85.0	0.104
68	61.2	74.8		58.1		4.3	6.1	15.3	92.0	0.104
68A	64.6	71.4		58.1		4.6	6.5	16.3	92.0	0.104
75	67.5	82.5		60.7		3.9	5.5	13.9	108	0.105
75A	71.3	78.8		64.1		4.1	5.8	14.6	103	0.105

备注: 型号后带“A”标记, 表示  $V_{BR}$  范围  $\pm 5\% V_{BR}$  (标称) 无标记表示  $V_{BR}$  范围  $\pm 10\% V_{BR}$  (标称)

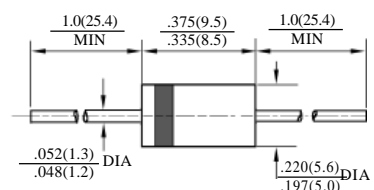
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DO - 15



DO - 201AD

## 瞬态电压抑制二极管(TVS)

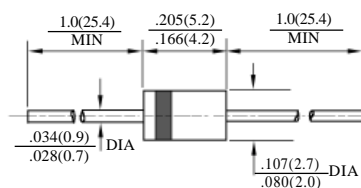
### Transient Voltage Suppressor(TVS)

400WP4KE6.8-440A 外 型: DO-41 Outline:DO-41  
 600WP6KE6.8-440A 外 型: DO-15 Outline:DO-41  
 1500W 1.5KE6.8-440A 外 型: DO-201AD Outline:DO-201AD

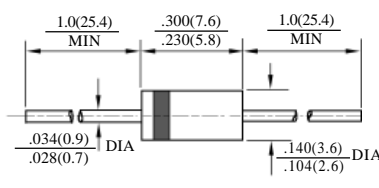
型 号 TYPE	击穿电压 Breakdown Voltage V <sub>BR</sub>		@ I <sub>r</sub>	反向工作电压 Working Peak Reverse Voltage V <sub>wm</sub>	最大反向 漏电流 Maximum Reverse Leakage I <sub>b</sub> (V <sub>wm</sub> )	最大峰值 浪涌电流 Maximum Peak Impulse Surge Current I <sub>PPM</sub>			最大箝位电压 Maximun Clamping Voltage V <sub>c</sub> (@I <sub>PPM</sub> )	V <sub>BR</sub> 最大温度系数 Maximun Temperature Coefficient of V <sub>BR</sub>		
	(V)					(A)					V <sub>c</sub>	(%/ °C)
	Min	Max				400W	600W	1500W				
82	73.8	90.2	1.0	66.4	5.0	3.6	5.1	12.7	118	0.105		
82A	77.9	86.1		70.1		3.7	5.3	13.3	113			
91	81.9	100		73.7		3.2	4.5	11.4	131			
91A	86.5	95.5		77.8		3.4	4.8	12.0	125	0.106		
100	90.0	110		81.0		2.9	4.2	10.4	144			
100A	95.0	105		85.5		3.1	4.4	11.0	137			
110	99.0	121	1.0	89.2	5.0	2.7	3.8	9.5	158	0.107		
110A	105	116		94.0		2.8	4.0	9.9	152			
120	108	132		97.2		2.4	3.5	8.7	173			
120A	114	126		102		2.5	3.6	9.1	165			
130	117	143		105		2.2	3.2	8.0	187			
130A	124	137		111		2.3	3.3	8.4	179			
150	135	165	1.0	121	5.0	2.0	2.8	7.0	215	0.108		
150A	143	158		128		2.0	2.9	7.2	207			
160	144	176		130		1.8	2.6	6.5	230			
160A	152	168		136		1.9	2.7	6.8	219			
170	153	187		138		1.7	2.5	6.2	244			
170A	162	179		145		1.8	2.6	6.4	234			
180	162	198	1.0	146	5.0	1.6	2.3	5.8	258	0.108		
180A	171	189		154		1.7	2.4	6.1	246			
200	180	220		162		1.5	2.1	5.2	287			
200A	190	210		171		1.53	2.2	5.5	274			
220	198	242		175		1.16	1.75	4.3	344			
220A	209	231		185		1.22	1.83	4.6	328			
250	225	275	1.0	202	5.0	1.11	1.67	5.0	360	0.110		
250A	237	267		214		1.16	1.75	5.0	344			
300	270	330		243		0.93	1.40	5.0	430			
300A	285	315		256		0.97	1.45	5.0	414			
350	315	385		284		0.79	1.20	4.0	504			
350A	332	368		300		0.83	1.25	4.0	482			
400	360	440	1.0	324	5.0	0.70	1.05	4.0	574	0.110		
400A	380	420		342		0.73	1.10	4.0	548			
440	396	484		356		0.95	0.95	2.38	631			
440A	418	462		376		1.0	1.0	2.50	602			

备注: 型号后带“A” 标记, 表示 V<sub>BR</sub> 范围 ± 5% V<sub>BR</sub> (标称) 无标记表示 V<sub>BR</sub> 范围 ± 10% V<sub>BR</sub> (标称)

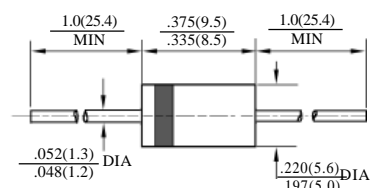
Note: Devices with suffix "A" mean its V<sub>BR</sub> range of ±5%; Devices without suffix "A" indicate its V<sub>BR</sub> range of ±10%.



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DO - 15



DO - 201AD

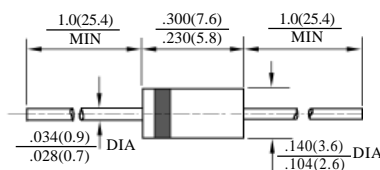
## 瞬态电压抑制二极管(TVS) Transient Voltage Suppressor(TVS)

500W SA5.0-SA170A 外型: DO-15 Outline:DO-

15

型号 TYPE	击穿电压 Breakdown Voltage $V_{BR}$		$@ I_r$ (mA)	反向工作电压 Working Peak Reverse Voltage $V_{wm}$ (V)	最大反向 漏电流 Maximum Reverse Leakage Current $I_D(V_{WM})$ ( $\mu$ A)	最大峰值 浪涌电流 Maximum Peak Impulse Surge Current $I_{PPM}$ (A)	最大箝位电压 Maximun Clamping Voltage $V_C(@I_{PPM})$	$V_{BR}$ 最大温度系数 Maximun Temperature Coefficient of $V_{BR}$ (%/ $^{\circ}$ C)
	Min	Max						
SA5.0	6.40	7.30	10	5.0	600	52.0	9.60	5.0
SA5.0A	6.40	7.00		5.0		54.3	9.20	5.0
SA6.0	6.67	8.15		6.0		43.9	11.4	5.0
SA6.0A	6.67	7.37		6.0		48.5	10.3	5.0
SA6.5	7.22	8.82		6.5	40.7	12.3	5.0	
SA6.5A	7.22	7.98		6.5	44.7	11.2	5.0	
SA7.0	7.78	9.51		7.0	37.8	13.3	6.0	
SA7.0A	7.78	8.60		7.0	41.7	12.0	6.0	
SA7.5	8.33	10.2	1.0	7.5	50	35.0	14.3	7.0
SA7.5A	8.33	9.21		7.5	38.8	12.9	7.0	
SA8.0	8.89	10.9		8.0	25	33.3	15.0	7.0
SA8.0A	8.89	9.83		8.0	36.7	13.6	7.0	
SA8.5	9.44	11.5		8.5	10	31.4	15.9	8.0
SA8.5A	9.44	10.4		8.5	34.7	14.4	8.0	
SA9.0	10.0	12.2		9.0	5.0	29.5	16.9	9.0
SA9.0A	10.0	11.1		9.0	32.5	15.4	9.0	
SA10	11.1	13.6	1.0	10.0	1.0	26.6	18.8	10.0
SA10A	11.1	12.3		10.0		29.4	17.0	10.0
SA11	12.2	14.9		11.0		24.9	20.1	11.0
SA11A	12.2	13.5		11.0		27.4	18.2	11.0
SA12	13.3	16.3		12.0		22.7	22.0	12.0
SA12A	13.3	14.7		12.0		25.1	19.1	12.0
SA13	14.4	17.6		13.0		21.0	23.8	13.0
SA13A	14.4	15.9		13.0		23.2	21.5	13.0
SA14	15.6	19.1	1.0	14.0	1.0	19.4	25.8	14.0
SA14A	15.6	17.2		14.0		21.5	23.2	14.0
SA15	16.7	20.4		15.0		18.8	26.9	16.0
SA15A	16.7	18.5		15.0		20.6	24.4	16.0
SA16	17.8	21.8		16.0		17.6	28.8	19.0
SA16A	17.8	19.7		16.0		17.6	26.0	17.0
SA17	18.9	23.1		17.0		16.4	30.5	20.0
SA17A	18.9	20.9		17.0		16.1	27.6	19.0

 备注: 型号后带“A”标记, 表示  $V_{BR}$  范围  $\pm 5\%$   $V_{BR}$  (标称) 无标记表示  $V_{BR}$  范围  $\pm 10\%$   $V_{BR}$  (标称)

 Note: Devices with suffix "A" mean its  $V_{BR}$  range of  $\pm 5\%$ ; Devices without suffix "A" indicate its  $V_{BR}$  range of  $\pm 10\%$ .


DO - 15

## 瞬态电压抑制二极管 (TVS)

## Transient Voltage Suppressor (TVS)

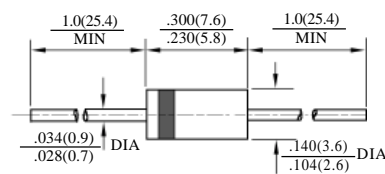
500W SA5.0-SA170A

外 型: DO-15

Outline:DO-15

型 号 TYPE	击穿电压 Breakdown Voltage $V_{BR}$		@ $I_r$ (mA)	反向工作电压 Working Peak Reverse Voltage $V_{wm}$	最大反向 漏电流 Maximum Reverse Leakage Current $I_D(V_{WM})$	最大峰值 浪涌电流 Maximum Peak Impulse Surge Current $I_{PPM}$	最大箝位电压 Maximum Clamping Voltage $V_C(@I_{PPM})$	$V_{BR}$ 最大温度系数 Maximum Temperature Coefficient of $V_{BR}$
	Min	Max		( V )	( $\mu$ A)	(A)	$V_C$	(%/ °C)
SA18	20.0	24.4	1.0	18.0	1.0	15.5	32.2	21.0
SA18A	20.0	22.1		18.0		17.2	29.2	20.0
SA20	22.2	27.1		20.0		13.9	35.8	25.0
SA20A	22.2	24.5		20.0		15.4	32.4	23.0
SA22	24.4	29.8		22.0		12.7	39.4	28.0
SA22A	24.4	26.9		22.0		14.1	35.5	25.0
SA24	26.7	32.6	1.0	24.0	1.0	11.6	43.0	31.0
SA24A	26.7	29.5		24.0		12.8	38.9	28.0
SA26	28.9	35.3		26.0		10.7	46.6	31.0
SA26A	28.9	31.9		26.0		11.9	42.1	30.0
SA28	31.1	38.0		28.0		9.9	50.1	35.0
SA28A	31.1	34.4		28.0		11.0	45.4	31.0
SA30	33.3	40.7	1.0	30.0	1.0	9.3	53.5	39.0
SA30A	33.3	36.8		30.0		10.3	48.4	36.0
SA33	36.7	44.9		33.0		8.5	59.0	42.0
SA33A	36.7	40.6		33.0		9.4	53.3	39.0
SA36	40.0	48.9		36.0		7.8	64.3	46.0
SA36A	40.0	44.2		36.0		8.5	58.1	41.0
SA40	44.4	54.3	1.0	40.0	1.0	7.0	71.4	51.0
SA40A	44.4	49.1		40.0		7.8	64.5	46.0
SA43	47.8	58.4		43.0		6.5	76.7	55.0
SA43A	47.8	52.8		43.0		7.2	69.4	50.0
SA45	50.0	61.1		45.0		6.2	80.3	58.0
SA45A	50.0	55.3		45.0		6.9	72.7	52.0
SA48	53.3	65.2	1.0	48.0	1.0	5.8	85.5	63.0
SA48A	53.3	58.9		48.0		6.5	77.4	56.0
SA51	56.7	69.3		51.0		5.5	91.1	66.0
SA51A	56.7	62.7		51.0		6.1	82.4	61.0
SA54	60.0	73.3		54.0		5.2	96.3	71.0
SA54A	60.0	66.3		54.0		5.7	87.1	65.0
SA58	64.4	78.7	1.0	58.0	1.0	4.9	103	78.0
SA58A	64.4	71.2		58.0		5.3	93.6	70.0

 备注: 型号后带“A”标记, 表示  $V_{BR}$  范围  $\pm 5\% V_{BR}$  (标称) 无标记表示  $V_{BR}$  范围  $\pm 10\% V_{BR}$  (标称)

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DO - 15

## 瞬态电压抑制二极管 (TVS) Transient Voltage Suppressor (TVS)

500W SA5.0-SA170A

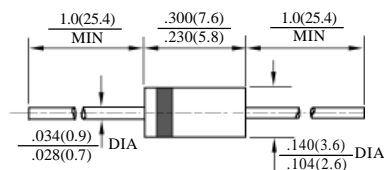
外型: DO-15

Outline:DO-15

型号 TYPE	击穿电压 Breakdown Voltage $V_{BR}$		@ $I_r$ (mA)	反向工作电压 Working Peak Reverse Voltage $V_{WM}$ (V)	最大反向 漏电流 Maximum Reverse Leakage $I_D(V_{WM})$ ( $\mu$ A)	最大峰值 浪涌电流 Maximum Peak Impulse Surge Current $I_{PPM}$ (A)	最大箝位电压 Maximun Clamping Voltage $V_C(@I_{PPM})$	$V_{BR}$ 最大温度系数 Maximun Temperature Coefficient of $V_{BR}$ (%/ °C)
	Min	Max						
SA60	66.7	81.5	1.0	60.0	1.0	4.7	107	80.0
SA60A	66.7	73.7		60.0		5.2	96.8	71.0
SA64	71.0	86.4		64.0		4.4	114	86.0
SA64A	71.0	78.6		64.0		4.9	103	76.0
SA70	77.8	95.1		70.0		4.0	125	94.0
SA70A	77.8	86.0		70.0		4.4	113	85.0
SA75	83.3	102	1.0	75.0	1.0	3.7	134	101
SA75A	83.3	92.1		75.0		4.1	121	91
SA78	86.7	106		78.0		3.6	139	105
SA78A	86.7	95.8		78.0		4.0	126	95.0
SA85	94.9	115		85.0		3.3	151	114
SA85A	94.9	104		85.0		3.6	137	103
SA90	100	122	1.0	90.0	1.0	3.1	160	121
SA90A	100	111		90.0		3.4	146	110
SA100	111	136		100		2.8	169	135
SA100A	111	123		100		2.8	156	123
SA110	122	149		110		2.6	196	148
SA110A	122	135		110		2.8	177	133
SA120	133	163	1.0	120	1.0	2.3	214	162
SA120A	133	147		120		2.0	193	146
SA130	144	176		130		2.2	230	175
SA130A	144	159		130		2.4	209	158
SA150	167	204		150		1.9	268	203
SA150A	167	185		150		2.1	243	184
SA160	178	218	1.0	160	1.0	1.7	287	217
SA160A	178	197		160		1.9	259	196
SA170	189	231		170		1.6	304	230
SA170A	189	209		170		1.8	275	208

备注: 型号后带“A”标记, 表示  $V_{BR}$  范围  $\pm 5\%$   $V_{BR}$  (标称) 无标记表示  $V_{BR}$  范围  $\pm 10\%$   $V_{BR}$  (标称)

Note: Devices with suffix "A" mean its  $V_{BR}$  range of  $\pm 5\%$ ; Devices without suffix "A" indicate its  $V_{BR}$  range of  $\pm 10\%$ .



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