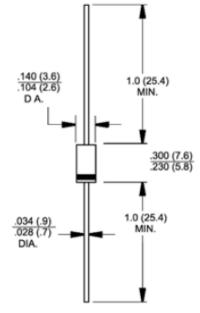


## **Transient Voltage Suppressors**

### **FEATURES**

- Peak Pulse Power 500W
- Stand Off Voltage 5.0 to 180V
- Plastic package has Underwriters Laboratory Flammability
   Classification 94V-0
- Glass passivated junction
- Excellent clamping capability
- Low incremental surge resistance
- Very fast response time
- 500W peak pulse power surge capability with a 10/100us waveform, repetition rate (duty cycle): 0.01%
- High temperature soldering guaranteed: 265oC/10 seconds 0.375" (9.5mm) lead length, 5lbs. (2.3kg) tension



### Dimensions in inches and (millimeters)

### **MECHANICAL DATA**

- Case: JEDEC DO-204AC(DO-15) molded plastic body over passivated junction
- Terminals: Solder plated axial leads, solder-able per MIL-STD-750, Method 2026
- Polarity: For unidirectional types the color band denotes the cathode, which is positive with respect to the anode under normal TVS operation
- Mounting Position: Any
- Weight: 0.015oz., 0.4g



## Pb-free; RoHS-compliant



## MAXIMUM RATINGS (T<sub>A</sub>=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak pulse power dissipation with a 10/1000us waveform (1) (Fig. 1)	РРРМ	500 (Min.)	W
Peak pulse current with a 10/1000us waveform (1)	ІРРМ	See Next Table	А
Steady state power dissipation at TA =75°C lead lengths, 0.375" (9.5mm) (2)	PM(AV)	3.0	W
Peak forward surge current, 10ms single half sine-wave unidirectional only	IFSM	70	А
Maximum instantaneous forward voltage at 35A for unidirectional only	VF	3.5	Volts
Operating junction and storage temperature range	ТЈ, ТЅТС	-55 to +175	$^{\circ}$

### NOTE:

- 1. Non-repetitive current pulse, per Fig. 3 and derated above TA=25℃ per Fig. 2.
- 2. Mounted on copper pad area of 1.6 x 1.6" (40 x 40mm) per Fig. 5.
- 3. 8.3ms single half sine-wave or equivalent square wave, duty cycle = 4 pulses per minute maximum.

3



# **ELECTRICAL CHARACTERISTICS** (TA = 25°C, unless otherwise specified.)

	Breakdown voltage V <sub>(BR)</sub> (Volts) (1)		Test current	Stand-off voltage	Maximum reverse leakage at V <sub>wm</sub>	Maximum peak pulse surge current	Maximum clamping voltage	Maximum temperature coefficient
Device type	Min.	Max.	at I <sub>T</sub> (mA)	V <sub>wм</sub> (Volts)	I <sub>D</sub> (3)**** (uA)	I <sub>PPM</sub> (2) (A)	at I <sub>ppM</sub> V <sub>c</sub> (Volts)	of V <sub>(BR)</sub> (mV / °C)
SA5.0	6.40	7.30	10	5.0	600	52.1	9.6	5.0
SA5.0A (4)	6.40	7.07	10	5.0	600	54.3	9.2	5.0
SA6.0	6.67	8.15	10	6.0	600	43.9	11.4	5.0
SA6.0A	6.67	7.37	10	6.0	600	48.5	10.3	5.0
SA6.5	7.22	8.82	10	6.5	400	40.7	12.3	5.0
SA6.5A	7.22	7.98	10	6.5	400	44.7	11.2	5.0
SA7.0	7.78	9.51	10	7.0	150	37.6	13.3	6.0
SA7.0A	7.78	8.60	10	7.0	150	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	1.0	7.5	50	38.8	12.9	7.0
SA8.0	8.89	10.9	1.0	8.0	25	33.3	15.0	7.0
SA8.0A	8.89	9.83	1.0	8.0	25	36.8	13.6	7.0
SA8.5	9.44	11.5	1.0	8.5	10	31.4	15.9	8.0
SA8.5A	9.44	10.4	1.0	8.5	10	34.7	14.4	8.0
SA9.0	10.0	12.2	1.0	9.0	5.0	29.6	16.9	9.0
SA9.0A	10.0	11.1	1.0	9.0	5.0	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	1.0	10.0	1.0	29.4	17.0	10.0
SA11	12.2	14.9	1.0	11.0	1.0	24.9	20.1	11.0
SA11A	12.2	13.5	1.0	11.0	1.0	27.5	18.2	11.0
SA12	13.3	16.3	1.0	12.0	1.0	22.7	22.0	12.0
SA12A	13.3	14.7	1.0	12.0	1.0	25.1	19.9	12.0
SA13	14.4	17.6	1.0	13.0	1.0	21.0	23.8	13.0
SA13A	14.4	15.9	1.0	13.0	1.0	23.3	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	1.0	14.0	1.0	21.6	23.2	14.0
SA15	16.7	20.4	1.0	15.0	1.0	18.6	26.9	16.0
SA15A	16.7	18.5	1.0	15.0	1.0	20.5	24.4	16.0
SA16	17.8	21.8	1.0	16.0	1.0	17.4	28.8	19.0
SA16A	17.8	19.7	1.0	16.0	1.0	19.2	26.0	17.0
SA17	18.9	23.1	1.0	17.0	1.0	16.4	30.5	20.0
SA17A	18.9	20.9	1.0	17.0	1.0	18.1	27.6	19.0
SA18	20.0	24.4	1.0	18.0	1.0	15.5	32.2	21.0
SA18A	20.0	22.1	1.0	18.0	1.0	17.1	29.2	20.0
SA20	22.2	27.1	1.0	20.0	1.0	14.0	35.8	25.0
SA20A	22.2	24.5	1.0	20.0	1.0	15.4	32.4	23.0
SA22	24.4	29.8	1.0	22.0	1.0	13.1	39.4	28.0
SA22A	24.4	26.9	1.0	22.0	1.0	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	1.0	24.0	1.0	12.9	38.9	28.0
SA26	28.9	35.3	1.0	26.0	1.0	10.7	46.6	31.0
SA26A	28.9	31.9	1.0	26.0	1.0	11.9	42.1	30.0
SA28	31.1	38.0	1.0	28.0	1.0	10.0	50.1	35.0
SA28A	31.1	34.4	1.0	28.0	1.0	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	1.0	30.0	1.0	10	48.4	36.0



## **ELECTRICAL CHARACTERISTICS** (TA = 25°C, unless otherwise specified.)

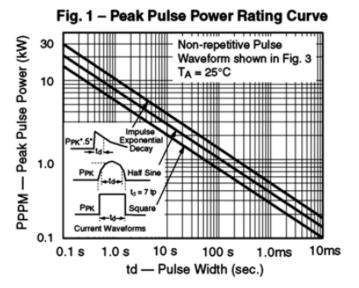
SA5.0 6.40 7 SA5.0A (4) 6.40 7 SA6.0 6.67 8 SA6.0A 6.67 7 SA6.5 7.22 8 SA6.5A 7.22 7 SA7.0 7.78 9 SA7.0A 7.78 8 SA7.5 8.33 1 SA7.5A 8.33 9 SA8.0 8.89 1 SA8.0A 8.89 9 SA8.5 9.44 1 SA8.5A 9.44 1 SA9.0 10.0 1 SA9.0A 10.0 1 SA10 11.1 1 1 SA10A 11.1 1 1 SA11 12.2 1 SA11A 12.2 1 SA11A 12.2 1 SA12 13.3 1 SA12A 13.3 1 SA13A 14.4 1 SA14 15.6 1 SA15A 16.7 2 SA15A 16.7 2 SA15A 16.7 2 SA16A 17.8 1 SA17 18.9 2 SA18 20.0 2 SA20 22.2 2 SA20A 22.2 2 SA20A 22.2 2 SA22A 24.4 2 SA24A 26.7 3 SA26A 28.9 3 SA26A 28.9 3 SA26A 28.9 3	age	Test current	Stand-off voltage	Maximum reverse leakage at V <sub>wm</sub>	Maximum peak pulse surge current	Maximum clamping voltage	Maximum temperature coefficient
SA5.0A (4)         6.40         7           SA6.0A         6.67         8           SA6.0A         6.67         7           SA6.5         7.22         8           SA6.5A         7.22         7           SA7.0         7.78         9           SA7.0A         7.78         8           SA7.5         8.33         1           SA7.5A         8.33         9           SA8.0         8.89         9           SA8.0A         8.89         9           SA8.5         9.44         1           SA9.0         10.0         1           SA9.0A         10.0         1           SA10         11.1         1           SA10         11.1         1           SA10         11.1         1           SA11         12.2         1           SA12         13.3         1           SA12         13.3         1           SA13         14.4         1           SA13         14.4         1           SA14         15.6         1           SA15A         16.7         2           SA15A         16.7<	Лах.	at I <sub>T</sub> (mA)	V <sub>wm</sub> (Volts)	I <sub>D</sub> (3) <sup>VVM</sup> (uA)	I <sub>PPM</sub> (2) (A)	at I <sub>PPM</sub> V <sub>c</sub> (Volts)	of V <sub>(BR)</sub> (mV / °C)
SA6.0         6.67         8           SA6.0A         6.67         7           SA6.5         7.22         8           SA6.5A         7.22         7           SA7.0         7.78         9           SA7.0A         7.78         8           SA7.5         8.33         1           SA7.5A         8.33         9           SA8.0         8.89         1           SA8.0A         8.89         9           SA8.5         9.44         1           SA9.0         10.0         1           SA9.0A         10.0         1           SA9.0A         10.0         1           SA10         11.1         1           SA10         11.1         1           SA10         11.1         1           SA10         11.1         1           SA11         12.2         1           SA12         13.3         1           SA12         13.3         1           SA12A         13.3         1           SA13         14.4         1           SA13         14.4         1           SA14         15.6	7.30	10	5.0	600	52.1	9.6	5.0
SA6.0A         6.67         7           SA6.5         7.22         8           SA6.5A         7.22         7           SA7.0         7.78         9           SA7.0A         7.78         8           SA7.5         8.33         1           SA7.5A         8.33         9           SA8.0         8.89         1           SA8.0A         8.89         9           SA8.5         9.44         1           SA9.0         10.0         1           SA9.0A         10.0         1           SA10         11.1         1           SA11         12.2         1           SA12         13.3         1           SA12         13.3         1           SA12A         13.3         1           SA13         14.4         1           SA13         14.4         1           SA14         15.6	7.07	10	5.0	600	54.3	9.2	5.0
SA6.0A         6.67         7           SA6.5         7.22         8           SA6.5A         7.22         7           SA7.0         7.78         9           SA7.0A         7.78         8           SA7.5         8.33         1           SA7.5A         8.33         9           SA8.0         8.89         1           SA8.0A         8.89         9           SA8.5         9.44         1           SA9.0         10.0         1           SA9.0A         10.0         1           SA10         11.1         1           SA11         12.2         1           SA11         12.2         1           SA12         13.3         1           SA12A         13.3         1           SA13         14.4         1           SA13         14.4         1           SA14         15.6	3.15	10	6.0	600	43.9	11.4	5.0
SA6.5A         7.22         7           SA7.0         7.78         9           SA7.0A         7.78         8           SA7.5         8.33         1           SA7.5A         8.33         9           SA8.0         8.89         1           SA8.0A         8.89         9           SA8.5         9.44         1           SA9.0         10.0         1           SA10         11.1         1           SA10         11.1         1           SA10         11.1         1           SA11         12.2         1           SA12         13.3         1           SA14         12.2         1           SA13         14.4         1           SA13         14.4         1           SA14         15.6         1           SA15         16.7         2           SA15A         16.7         2           SA15A         16.7         2           SA16A         17.8         2           SA17A         18.9         2           SA18A         20.0         2           SA20A         22.2	7.37	10	6.0	600	48.5	10.3	5.0
SA6.5A         7.22         7           SA7.0         7.78         9           SA7.0A         7.78         8           SA7.5         8.33         1           SA7.5A         8.33         9           SA8.0         8.89         1           SA8.0A         8.89         9           SA8.5         9.44         1           SA9.0         10.0         1           SA10         11.1         1           SA10         11.1         1           SA10A         11.1         1           SA11         12.2         1           SA12         13.3         1           SA14         12.2         1           SA13         14.4         1           SA13         14.4         1           SA14         15.6         1           SA15         16.7         2           SA16A         17.8         2           SA15A         16.7         2           SA15A         16.7         1           SA16A         17.8         1           SA16A         17.8         1           SA17A         18.9	3.82	10	6.5	400	40.7	12.3	5.0
SA7.0         7.78         9           SA7.0A         7.78         8           SA7.5         8.33         1           SA7.5A         8.33         9           SA8.0         8.89         1           SA8.0A         8.89         9           SA8.5         9.44         1           SA9.0         10.0         1           SA10         11.1         1           SA10         11.1         1           SA10A         11.1         1           SA11         12.2         1           SA12         13.3         1           SA14         12.2         1           SA13         14.4         1           SA13         14.4         1           SA14         15.6         1           SA15         16.7         2           SA15A         16.7         2           SA15A         16.7         2           SA16A         17.8         2           SA16A         17.8         1           SA17A         18.9         2           SA18A         20.0         2           SA20         22.2	7.98	10	6.5	400	44.7	11.2	5.0
SA7.0A         7.78         8           SA7.5         8.33         1           SA7.5A         8.33         9           SA8.0         8.89         1           SA8.0A         8.89         9           SA8.5         9.44         1           SA9.0         10.0         1           SA9.0A         10.0         1           SA10         11.1         1           SA10A         11.1         1           SA11         12.2         1           SA12         13.3         1           SA14         12.2         1           SA13         14.4         1           SA13A         14.4         1           SA14A         15.6         1           SA15         16.7         2           SA15A         16.7         2           SA15A         16.7         1           SA16A         17.8         2           SA17A         18.9         2           SA18A         20.0         2           SA20         22.2         2           SA20A         22.2         2           SA24A         26.7	9.51	10	7.0	150	37.6	13.3	6.0
SA7.5         8.33         1           SA7.5A         8.33         9           SA8.0         8.89         1           SA8.0A         8.89         9           SA8.5         9.44         1           SA8.5A         9.44         1           SA9.0         10.0         1           SA10         11.1         1           SA10A         11.1         1           SA11         12.2         1           SA11A         12.2         1           SA12A         13.3         1           SA12A         13.3         1           SA12A         13.3         1           SA12A         13.3         1           SA14A         15.6         1           SA13A         14.4         1           SA14A         15.6         1           SA15         16.7         2           SA15A         16.7         1           SA15A         16.7         1           SA16A         17.8         1           SA17A         18.9         2           SA18A         20.0         2           SA20         22.2	3.60	10	7.0	150	41.7	12.0	6.0
SA7.5A       8.33       9         SA8.0       8.89       9         SA8.0A       8.89       9         SA8.5       9.44       1         SA8.5A       9.44       1         SA9.0       10.0       1         SA10       11.1       1         SA10A       11.1       1         SA11A       12.2       1         SA11A       12.2       1         SA12A       13.3       1         SA12A       13.3       1         SA13A       14.4       1         SA14A       15.6       1         SA15A       16.7       2         SA15A       16.7       2         SA15A       16.7       1         SA16A       17.8       2         SA17A       18.9       2         SA18A       20.0       2         SA20       22.2       2         SA20A       22.2       2         SA24       26.7       3         SA26A       28.9       3	10.2	1.0	7.5	50	35.0	14.3	7.0
SA8.0       8.89       1         SA8.0A       8.89       9         SA8.5       9.44       1         SA8.5A       9.44       1         SA9.0       10.0       1         SA9.0A       10.0       1         SA10       11.1       1         SA10A       11.1       1         SA11A       12.2       1         SA11A       12.2       1         SA12A       13.3       1         SA12A       13.3       1         SA12A       13.3       1         SA12A       13.3       1         SA14A       15.6       1         SA13A       14.4       1         SA14A       15.6       1         SA15       16.7       2         SA15A       16.7       1         SA16A       17.8       2         SA16A       17.8       1         SA17A       18.9       2         SA20       22.2       2         SA20       22.2       2         SA20A       22.2       2         SA20A       22.2       2         SA24A	9.21	1.0	7.5	50	38.8	12.9	7.0
SA8.0A       8.89       9         SA8.5       9.44       1         SA9.0       10.0       1         SA9.0A       10.0       1         SA10       11.1       1         SA10A       11.1       1         SA11       12.2       1         SA12       13.3       1         SA12       13.3       1         SA12A       13.3       1         SA12A       13.3       1         SA13       14.4       1         SA14A       15.6       1         SA15       16.7       2         SA15A       16.7       2         SA15A       16.7       1         SA16A       17.8       2         SA17A       18.9       2         SA18A       20.0       2         SA20       22.2       2         SA20       22.2       2         SA24       26.7       3         SA24A       26.7       2         SA26       28.9       3         SA26A       28.9       3	10.9	1.0	8.0	25	33.3	15.0	7.0
SA8.5       9.44       1         SA8.5A       9.44       1         SA9.0       10.0       1         SA9.0A       10.0       1         SA10       11.1       1         SA10A       11.1       1         SA11A       12.2       1         SA12       13.3       1         SA12A       13.3       1         SA12A       13.3       1         SA13A       14.4       1         SA13A       14.4       1         SA14A       15.6       1         SA15       16.7       2         SA15A       16.7       1         SA16A       17.8       2         SA16A       17.8       1         SA17A       18.9       2         SA18A       20.0       2         SA20       22.2       2         SA20A       22.2       2         SA24       26.7       3         SA24A       26.7       2         SA26       28.9       3         SA26A       28.9       3	9.83	1.0	8.0	25	36.8	13.6	7.0
SA8.5A       9.44       1         SA9.0       10.0       1         SA9.0A       10.0       1         SA10       11.1       1         SA10A       11.1       1         SA11       12.2       1         SA11A       12.2       1         SA12       13.3       1         SA12A       13.3       1         SA12A       13.3       1         SA12A       13.3       1         SA12A       13.3       1         SA13       14.4       1         SA13A       14.4       1         SA14A       15.6       1         SA15       16.7       2         SA15A       16.7       2         SA16A       17.8       2         SA16A       17.8       1         SA17A       18.9       2         SA218A       20.0       2         SA20       22.2       2         SA20A       22.2       2         SA20A       22.2       2         SA24A       26.7       3         SA24A       26.7       2         SA26A	11.5	1.0	8.5	10	31.4	15.9	8.0
SA9.0       10.0       1         SA9.0A       10.0       1         SA10       11.1       1         SA10A       11.1       1         SA11       12.2       1         SA12       13.3       1         SA12A       13.3       1         SA13A       14.4       1         SA13A       14.4       1         SA14A       15.6       1         SA15       16.7       2         SA15A       16.7       1         SA16A       17.8       2         SA16A       17.8       1         SA17A       18.9       2         SA18A       20.0       2         SA20       22.2       2         SA20A       22.2       2         SA24A       26.7       3         SA24A       26.7       2         SA26       28.9       3         SA26A       28.9       3	10.4	1.0	8.5	10	34.7	14.4	8.0
SA9.0A         10.0         1           SA10         11.1         1           SA10A         11.1         1           SA11A         12.2         1           SA11A         12.2         1           SA12A         13.3         1           SA12A         13.3         1           SA13A         14.4         1           SA13A         14.4         1           SA14A         15.6         1           SA14A         15.6         1           SA15         16.7         2           SA15A         16.7         1           SA16A         17.8         2           SA16A         17.8         1           SA17A         18.9         2           SA18A         20.0         2           SA20         22.2         2           SA20A         22.2         2           SA22         24.4         2           SA24A         26.7         3           SA26         28.9         3           SA26A         28.9         3	12.2	1.0	9.0	5.0	29.6	16.9	9.0
SA10         11.1         1           SA10A         11.1         1           SA11         12.2         1           SA11A         12.2         1           SA12         13.3         1           SA12A         13.3         1           SA13A         14.4         1           SA13A         14.4         1           SA14A         15.6         1           SA14A         15.6         1           SA15         16.7         2           SA15A         16.7         1           SA16         17.8         2           SA16A         17.8         1           SA17         18.9         2           SA18A         20.0         2           SA20         22.2         2           SA20         22.2         2           SA20A         22.2         2           SA22         24.4         2           SA24         26.7         3           SA24A         26.7         2           SA26         28.9         3           SA26A         28.9         3	11.1	1.0	9.0	5.0	32.5	15.4	9.0
SA10A         11.1         1           SA11         12.2         1           SA11A         12.2         1           SA12         13.3         1           SA12A         13.3         1           SA13A         14.4         1           SA13A         14.4         1           SA14A         15.6         1           SA14A         15.6         1           SA15         16.7         2           SA15A         16.7         1           SA15A         16.7         1           SA16A         17.8         2           SA16A         17.8         1           SA17A         18.9         2           SA18A         20.0         2           SA20         22.2         2           SA20A         22.2         2           SA20A         22.2         2           SA22A         24.4         2           SA24A         26.7         3           SA26A         28.9         3           SA26A         28.9         3	13.6	1.0	10.0	1.0	26.6	18.8	10.0
SA11     12.2     1       SA11A     12.2     1       SA12     13.3     1       SA12A     13.3     1       SA13     14.4     1       SA14A     15.6     1       SA15A     16.7     2       SA15A     16.7     1       SA16A     17.8     2       SA16A     17.8     1       SA17     18.9     2       SA18A     20.0     2       SA20     22.2     2       SA20A     22.2     2       SA22     24.4     2       SA24A     26.7     3       SA26A     28.9     3	12.3	1.0	10.0	1.0	29.4	17.0	10.0
SA11A     12.2     1       SA12     13.3     1       SA12A     13.3     1       SA13     14.4     1       SA14A     15.6     1       SA15A     16.7     2       SA15A     16.7     1       SA15A     16.7     1       SA16A     17.8     2       SA16A     17.8     1       SA17     18.9     2       SA18     20.0     2       SA20     22.2     2       SA20A     22.2     2       SA22     24.4     2       SA24     26.7     3       SA24A     26.7     2       SA26     28.9     3       SA26A     28.9     3	14.9	1.0	11.0	1.0	24.9	20.1	11.0
SA12     13.3     1       SA12A     13.3     1       SA13     14.4     1       SA13A     14.4     1       SA14     15.6     1       SA15     16.7     2       SA15A     16.7     1       SA16     17.8     2       SA16A     17.8     1       SA17     18.9     2       SA17A     18.9     2       SA18     20.0     2       SA20     22.2     2       SA20A     22.2     2       SA22A     24.4     2       SA24     26.7     3       SA24A     26.7     2       SA26     28.9     3       SA26A     28.9     3	13.5	1.0	11.0	1.0	27.5	18.2	11.0
SA12A       13.3       1         SA13       14.4       1         SA13A       14.4       1         SA14       15.6       1         SA14A       15.6       1         SA15       16.7       2         SA15A       16.7       1         SA16A       17.8       2         SA16A       17.8       1         SA17       18.9       2         SA18A       20.0       2         SA18A       20.0       2         SA20       22.2       2         SA20A       22.2       2         SA22A       24.4       2         SA24A       26.7       3         SA24A       26.7       2         SA26       28.9       3         SA26A       28.9       3	16.3	1.0	12.0	1.0	22.7	22.0	12.0
SA13     14.4     1       SA13A     14.4     1       SA14     15.6     1       SA15     16.7     2       SA15A     16.7     1       SA16A     17.8     2       SA16A     17.8     1       SA17     18.9     2       SA17A     18.9     2       SA18     20.0     2       SA20     22.2     2       SA20A     22.2     2       SA22A     24.4     2       SA24     26.7     3       SA26     28.9     3       SA26A     28.9     3	14.7	1.0	12.0	1.0	25.1	19.9	12.0
SA13A     14.4     1       SA14     15.6     1       SA15     16.7     2       SA15A     16.7     1       SA16     17.8     2       SA16A     17.8     1       SA17     18.9     2       SA17A     18.9     2       SA18     20.0     2       SA20     22.2     2       SA20A     22.2     2       SA22     24.4     2       SA24     26.7     3       SA26     28.9     3       SA26A     28.9     3	17.6	1.0	13.0	1.0	21.0	23.8	13.0
SA14     15.6     1       SA15     16.7     2       SA15A     16.7     1       SA16     17.8     2       SA16A     17.8     1       SA17     18.9     2       SA17A     18.9     2       SA18A     20.0     2       SA20     22.2     2       SA20A     22.2     2       SA22A     24.4     2       SA24A     26.7     3       SA26A     28.9     3       SA26A     28.9     3	15.9	1.0	13.0	1.0	23.3	21.5	13.0
SA14A     15.6     1       SA15     16.7     2       SA15A     16.7     1       SA16     17.8     2       SA16A     17.8     1       SA17     18.9     2       SA17A     18.9     2       SA18     20.0     2       SA20     22.2     2       SA20A     26.7     3       SA24A     26.7     2       SA24A     26.7     2       SA26     28.9     3       SA26A     28.9     3	19.1	1.0	14.0	1.0	19.4	25.8	14.0
SA15     16.7     2       SA15A     16.7     1       SA16     17.8     2       SA16A     17.8     1       SA17     18.9     2       SA17A     18.9     2       SA18     20.0     2       SA20     22.2     2       SA20A     22.2     2       SA21A     26.7     3       SA24A     26.7     2       SA26     28.9     3       SA26A     28.9     3	17.2	1.0	14.0	1.0	21.6	23.2	14.0
SA15A     16.7     1       SA16     17.8     2       SA16A     17.8     1       SA17     18.9     2       SA17A     18.9     2       SA18     20.0     2       SA20     22.2     2       SA20A     22.2     2       SA21A     24.4     2       SA22A     24.4     2       SA24A     26.7     3       SA26A     28.9     3       SA26A     28.9     3	20.4	1.0	15.0	1.0	18.6	26.9	16.0
SA16     17.8       SA16A     17.8       SA17     18.9       SA17A     18.9       SA18     20.0       SA18A     20.0       SA20     22.2       SA20A     22.2       SA22     24.4       SA24     26.7       SA24A     26.7       SA26     28.9       SA26A     28.9       3	18.5	1.0	15.0	1.0	20.5	24.4	16.0
SA16A     17.8     1       SA17     18.9     2       SA17A     18.9     2       SA18     20.0     2       SA18A     20.0     2       SA20     22.2     2       SA20A     22.2     2       SA22A     24.4     2       SA24A     26.7     3       SA24A     26.7     2       SA26     28.9     3       SA26A     28.9     3	21.8	1.0	16.0	1.0	17.4	28.8	19.0
SA17     18.9     2       SA17A     18.9     2       SA18     20.0     2       SA18A     20.0     2       SA20     22.2     2       SA20A     22.2     2       SA22     24.4     2       SA22A     24.4     2       SA24     26.7     3       SA24A     26.7     2       SA26     28.9     3       SA26A     28.9     3	19.7	1.0	16.0	1.0	19.2	26.0	17.0
SA17A     18.9     2       SA18     20.0     2       SA18A     20.0     2       SA20     22.2     2       SA20A     22.2     2       SA22A     24.4     2       SA22A     24.4     2       SA24A     26.7     3       SA24A     26.7     2       SA26     28.9     3       SA26A     28.9     3	23.1	1.0	17.0	1.0	16.4	30.5	20.0
SA18     20.0       SA18A     20.0       SA20     22.2       SA20A     22.2       SA22     24.4       SA22A     24.4       SA24     26.7       SA24A     26.7       SA26     28.9       SA26A     28.9       3	20.9	1.0	17.0	1.0	18.1	27.6	19.0
SA18A     20.0       SA20     22.2       SA20A     22.2       SA20A     22.2       SA22     24.4       SA22A     24.4       SA24     26.7       SA24A     26.7       SA26     28.9       SA26A     28.9       3	24.4	1.0	18.0	1.0	15.5	32.2	21.0
SA20         22.2         2           SA20A         22.2         2           SA22         24.4         2           SA22A         24.4         2           SA24         26.7         3           SA24A         26.7         2           SA26         28.9         3           SA26A         28.9         3	22.1	1.0	18.0	1.0	17.1	29.2	20.0
SA20A     22.2       SA22     24.4       SA22A     24.4       2A24A     2       SA24     26.7       3A24A     26.7       2A26     28.9       3A26A     28.9       3A26A     3A26A							
SA22     24.4     2       SA22A     24.4     2       SA24     26.7     3       SA24A     26.7     2       SA26     28.9     3       SA26A     28.9     3	27.1	1.0	20.0	1.0	14.0 15.4	35.8 32.4	25.0 23.0
SA22A     24.4       SA24     26.7       SA24A     26.7       2 8.26     28.9       3 8.26A     28.9       3 8.26A     3 8.9	29.8	1.0	22.0	1.0	13.1	39.4	28.0
SA24     26.7       SA24A     26.7       2     2       SA26     2       SA26A     2       3     3	26.9	1.0	22.0	1.0	14.1	35.5	25.0
SA24A     26.7     2       SA26     28.9     3       SA26A     28.9     3	32.6	1.0	24.0	1.0	11.6	43.0	31.0
SA26 28.9 3 SA26A 28.9 3	29.5	1.0	24.0	1.0	12.9	38.9	28.0
SA26A 28.9 3	35.3	1.0	26.0	1.0	10.7	46.6	31.0
SAZ0 31.1 3	31.9	1.0	26.0	1.0	11.9	42.1	30.0
CA20A 24.4 2	38.0	1.0	28.0	1.0	10.0	50.1	35.0
	34.4	1.0	28.0	1.0	11.0	45.4	31.0
	10.7 36.8	1.0	30.0 30.0	1.0	9.3	53.5 48.4	39.0 36.0

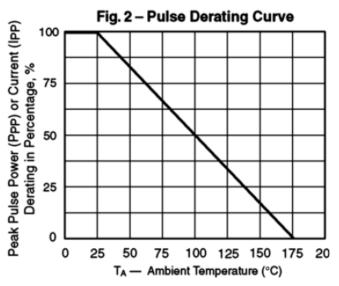
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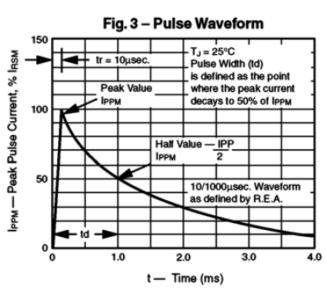
- 1. V(BR) measured after IT applied for 300us. IT=square wave pulse or equivalent
- 2. Surge current waveform per Fig. 3 and derate per Fig. 2
- 3. For bidirectional types with VWM of 10 Volts and less, the ID limit is doubled
- 4. For the bidirectional SA5.0CA, the maximum VBR is 7.25V
- 5. All terms and symbols are consistent with ANSI/IEEE C62.35
- 6. For parts without A, the VBR is +10%

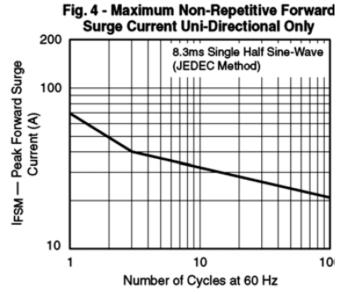


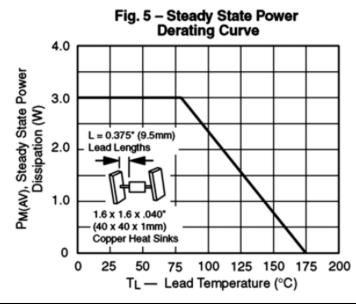
# RATINGS AND CHARACTERISTIC CURVES (TA = 25°C, unless otherwise specified.)

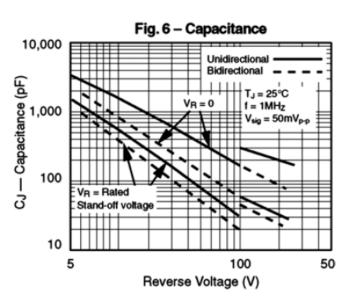












5



## RATINGS AND CHARACTERISTIC CURVES (TA = 25°C, unless otherwise specified.)

Fig. 7 – Incremental Clamping Voltage Curve Unidirectional

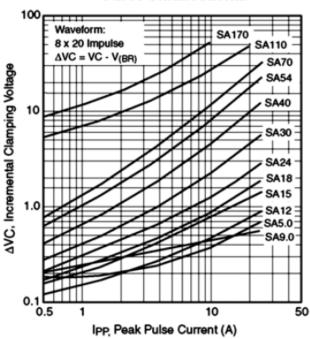


Fig. 9 – Incremental Clamping Voltage Curve Bidirectional

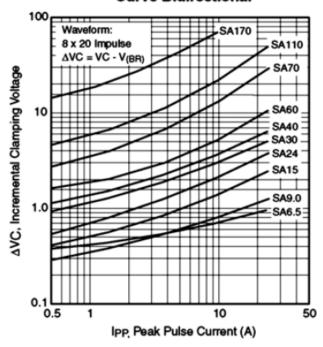


Fig. 8 – Incremental Clamping Voltage Curve Unidirectional

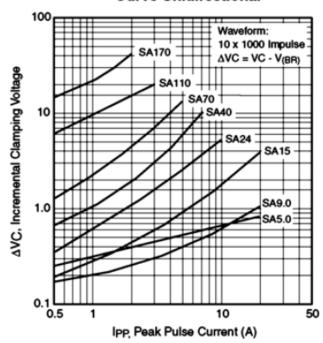
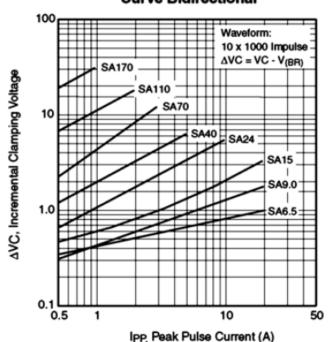


Fig. 10 – Incremental Clamping Voltage Curve Bidirectional





# RATINGS AND CHARACTERISTIC CURVES (TA = $25^{\circ}$ C, unless otherwise specified.)

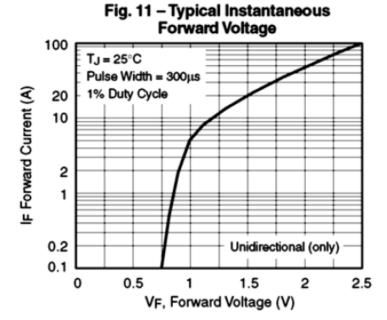
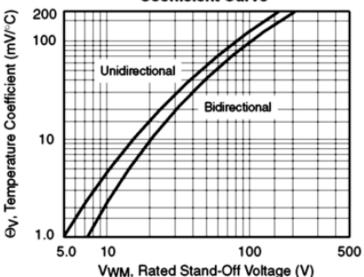


Fig. 12 – Breakdown Voltage Temperature Coefficient Curve





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