

Transient Voltage Suppression Diodes SA Series

Axial Type

500 Watt Specifications

Features | Absolute Maximum Ratings | Mechanical Dimensions | Standard Mounting Pad Layout | Electrical Characteristics

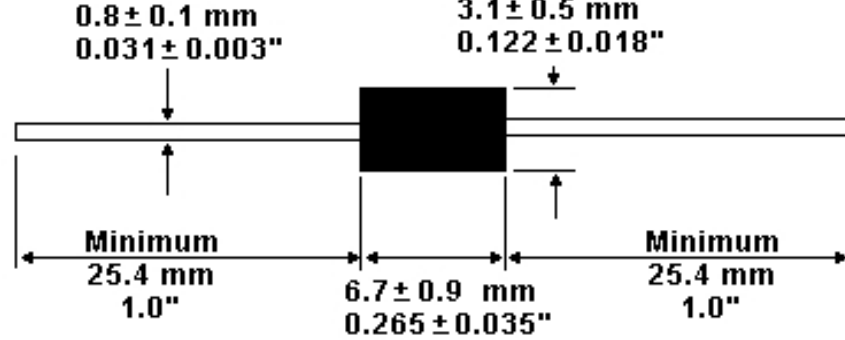
Features

- ? RONS Compliance Standard
- ? 500 watt peak pulse power dissipation
- ? Available in voltages from 5.0V to 170V
- ? Unidirectional and Bidirectional
- ? Glass passivated junction
- ? Low clamping factor
- ? Available in bulk or tape and reel (Reel quantity = 4,000 pieces)
- ? Each device 100% surge tested
- ? Tape and Reel to EIA Standard RS-296-E

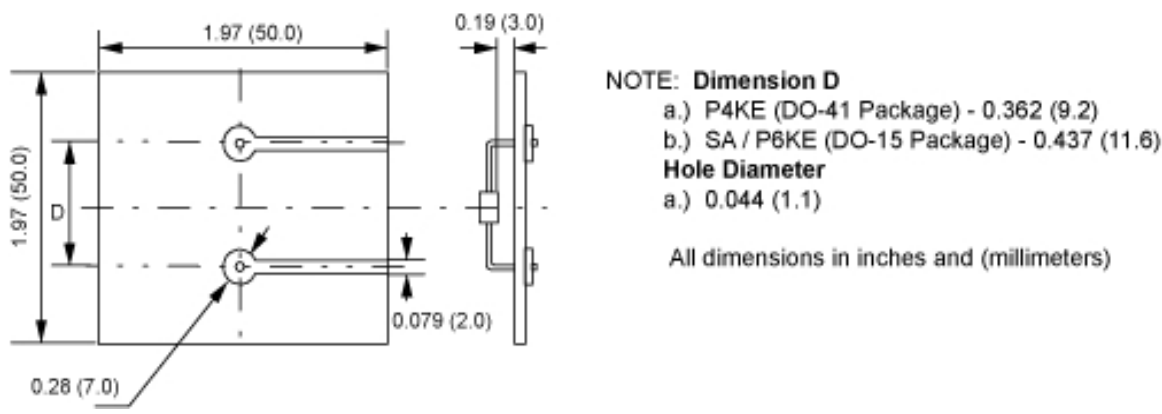
Associate Maximum Ratings

Parameter	value
Peak pulse power dissipation (P _{ppm}) at 25°C	500W
Steady state power dissipation at lead temperature = 75°C (Lead length 3/8" min.)	1W
Operating and storage temperatures	-55°C to + 175°C

Mechanical Dimensions



Standard Mounting Pad Layout



Electrical Characteristics

Part Number*	Rated Standoff Voltage	Breakdown Voltage			Maximum Stand By Current @VWM+ Id	10/1000µ s Maximum Clamping Voltage @1PPM# VC Max	10/1000µ s Rated Peak Impulse Current I PPM#
		VBR (Volts)		@IT			
	VWM (Volts)	Min	Max	(mA)	(µ A)	(Volts)	(Amperes)
SA5.0	5.0	6.40	7.30	10	600	9.6	52.0
SA5.0A	5.0	6.40	7.00	10	600	9.2	54.3
SA6.0	6.0	6.67	8.15	10	600	11.4	43.9
SA6.0A	6.0	6.67	7.37	10	600	10.3	48.5
SA6.5	6.5	7.22	8.82	10	400	12.3	40.7
SA6.5A	6.5	7.22	7.98	10	400	11.2	44.7
SA7.0	7.0	7.78	9.51	10	150	13.3	37.8
SA7.0A	7.0	7.78	8.60	10	150	12.0	41.7
SA7.5	7.5	8.33	10.2	1	50	14.3	35.0
SA7.5A	7.5	8.33	9.21	1	50	12.9	38.8
SA8.0	8.0	8.89	10.9	1	25	15.0	33.3
SA8.0A	8.0	8.89	9.83	1	25	13.6	36.7
SA8.5	8.5	9.44	11.5	1	10	15.9	31.4
SA8.5A	8.5	9.44	10.4	1	10	14.4	34.7
SA9.0	9.0	10.0	12.2	1	5	16.9	29.5
SA9.0A	9.0	10.0	11.1	1	5	15.4	32.5
SA10	10	11.1	13.6	1	3	18.8	26.6
SA10A	10	11.1	12.3	1	3	17.0	29.4
SA11	11	12.2	14.9	1	3	20.1	24.9
SA11A	11	12.2	13.5	1	3	18.2	27.4
SA12	12	13.3	16.3	1	3	22.0	22.7
SA12A	12	13.3	14.7	1	3	19.9	25.1
SA13	13	14.4	17.6	1	3	23.8	21.0
SA13A	13	14.4	15.9	1	3	21.5	23.2
SA14	14	15.6	19.1	1	3	25.8	19.4
SA14A	14	15.6	17.2	1	3	23.2	21.5
SA15	15	16.7	20.4	1	3	26.9	18.8
SA15A	15	16.7	18.5	1	3	24.4	20.6
SA16	16	17.8	21.8	1	3	28.8	17.6
SA16A	16	17.8	19.7	1	3	26.0	19.2
SA17	17	18.9	23.1	1	3	30.5	16.4
SA17A	17	18.9	20.9	1	3	27.6	18.1
SA18	18	20.0	24.4	1	3	32.2	15.5
SA18A	18	20.0	22.1	1	3	29.2	17.2
SA20	20	22.2	27.1	1	3	35.8	13.9
SA20A	20	22.2	24.5	1	3	32.4	15.4
SA22	22	24.4	29.8	1	3	39.4	12.7
SA22A	22	24.4	26.9	1	3	35.5	14.1
SA24	24	26.7	32.6	1	3	43.0	11.6
SA24A	24	26.7	29.5	1	3	38.9	12.8
SA26	26	28.9	35.3	1	3	46.6	10.7
SA26A	26	28.9	31.9	1	3	42.1	11.9
SA28	28	31.1	38.0	1	3	50.0	9.9
SA28A	28	31.1	34.4	1	3	45.4	11.0
SA30	30	33.3	40.7	1	3	53.5	9.3
SA30A	30	33.3	36.8	1	3	48.4	10.3
SA33	33	36.7	44.9	1	3	59.0	8.5
SA33A	33	36.7	40.6	1	3	53.3	9.4
SA36	36	40.0	48.9	1	3	64.3	7.8
SA36A	36	40.0	44.2	1	3	58.1	8.6
SA40	40	44.4	54.3	1	3	71.4	7.0
SA40A	40	44.4	49.1	1	3	64.5	7.8
SA43	43	47.8	58.4	1	3	76.7	6.5
SA43A	43	47.8	52.8	1	3	69.4	7.2
SA45	45	50.0	61.1	1	3	80.3	6.2
SA45A	45	50.0	55.3	1	3	72.7	6.9
SA48	48	53.3	65.1	1	3	85.5	5.8
SA48A	48</						

* = Add "-C" or "-CA" suffix for bidirectional device types. (SA5.0A is not available in Bi-Directional)

+ = For Bidirectional Types Having VWM $\leq 10V$, their B limit is doubled.

= See General Information for Impulse Current Waveform.

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