

### High-reliability discrete products and engineering services since 1977

# SAC5.0-SAC50

### TRANSIENT VOLTAGE SUPPRESSORS 500 WATTS DO-41

#### FEATURES

- Available as "HR" (high reliability) screened per MIL-PRF-19500, JANTX level. Add "HR" suffix to base part number.
- Available Non-RoHS (standard) or RoHS compliant (add PBF suffix).

#### MAXIMUM RATINGS

Parameters	Symbol	Value	Unit
Peak pulse power dissipation @ 25°C 10/1000μs with repetition rate of 0.01% or less	P <sub>pp</sub>	500	W
Steady state power dissipation at $T_L = 75^{\circ}C$ Lead length = 3/8"	P <sub>D</sub>	2.5	W
$t_{clamping}$ (0 Volts to V <sub>(BR)</sub> min)	t <sub>c</sub>	< 5	ns
Operating and storage temperature range	T <sub>J</sub> , T <sub>stg</sub>	-65 to +150	°C

#### **ELECTRICAL CHARACTERISTICS** (T<sub>A</sub> = 25°C unless otherwise noted)

Part number	Reverse stand-off voltage <sup>(1)</sup>	Minimum breakdown voltage @ I <sub>BR</sub> = 1.0mA	Maximum standby current	Maximum clamping voltage @ I <sub>P</sub> = 5.0A	Maximum peak pulse current <sup>(2)</sup>	Maximum capacitance @ 0 Volts	Working inverse blocking voltage	Inverse blocking leakage current @ V <sub>WIB</sub>	Peak inverse blocking voltage
	V <sub>WM</sub>	V <sub>(BR)</sub>	I <sub>D</sub> @ V <sub>WM</sub>	Vc	I <sub>PP</sub>		V <sub>WIB</sub>	I <sub>IB</sub>	V <sub>PIB</sub>
	Volts	Volts	μA	Volts	Amps	pF	Volts	μΑ	Volts
SAC5.0	5.0	7.60	300	10.0	44	30	75	10	100
SAC6.0	6.0	7.90	300	11.2	41	30	75	10	100
SAC7.0	7.0	8.33	300	12.6	38	30	75	10	100
SAC8.0	8.0	8.89	100	13.4	36	30	75	10	100
SAC8.5	8.5	9.44	50	14.0	34	30	75	10	100
SAC10	10	11.10	5.0	16.3	29	30	75	10	100
SAC12	12	13.30	5.0	19.0	25	30	75	10	100
SAC15	15	16.70	5.0	23.6	20	30	75	10	100
SAC18	18	20.00	5.0	28.8	15	30	75	10	100
SAC22	22	24.40	5.0	35.4	14	30	75	10	100
SAC26	26	28.90	5.0	42.3	11.1	30	75	10	100
SAC30	30	33.3	5.0	48.6	10.1	30	75	10	100
SAC36	36	40.00	5.0	60.0	8.6	30	75	10	100
SAC45	45	50.00	5.0	77.0	6.8	30	150	10	200
SAC50	50	55.50	5.0	88.0	5.8	30	150	10	200

Note 1: A transient voltage suppressor is normally selected according to voltage (V<sub>WM</sub>) which should be equal to or greater than the dc or continuous peak operating voltage level.

Note 2: Test in TVS avalanche direction. Do not pulse in "forward' direction.



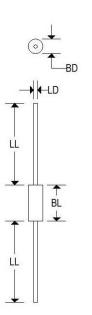
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MECHANICAL CHARACTERISTICS

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Case	DO-41
Marking	Alpha-numeric
Polarity	Cathode band



	DO-41				
	Inches		Millim	Millimeters	
	Min	Max	Min	Max	
BD		0.107	-	2.720	
BL		0.205	÷.	5.207	
LD	0.028	0.034	0.711	0.864	
LL	1.000	188	25.400		



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T<sub>L</sub> - Lead Temperature - \*C FIGURE 2

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> I - Time - msec FIGURE 3

