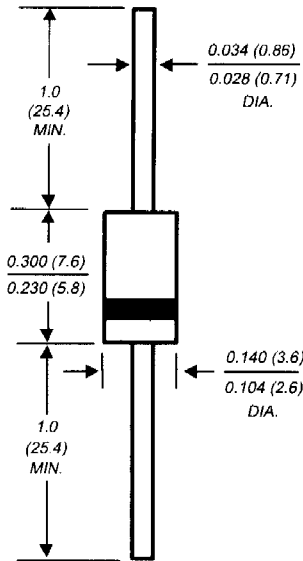


SAB5.0 THRU SAB28 SERIES

UNIDIRECTIONAL TRANSIENT VOLTAGE SUPPRESSOR
Stand-off Voltage - 5.0 to 28 Volts Peak Pulse Power - 500 Watts

DO-204AC



Dimensions in inches
 and
 (millimeters)

FEATURES

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ Glass passivated junction
- ◆ 500W peak pulse power surge capability with a 10/1000 μ s waveform, repetition rate (duty cycle): 0.01%
- ◆ Excellent clamping capability
- ◆ Low incremental surge resistance
- ◆ Fast response time: typically less than 1.0ps from 0 Volts to $V_{(BR)}$ min.
- ◆ Ideal for data and bus line applications
- ◆ High temperature soldering guaranteed: 265°C/10 seconds, 0.375" (9.5mm) lead length, 5lbs. (2.3 kg) tension

MECHANICAL DATA

Case: JEDEC DO-204AC molded plastic body over a passivated junction

Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes positive end (cathode)

Mounting Position: Any

Weight: 0.015 ounce, 0.4 gram

MAXIMUM RATINGS AND CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOL	VALUE	UNITS
Peak pulse power dissipation with a 10/1000 μ s waveform (NOTE 1, FIG. 1)	PPPM	Minimum 500	Watts
Steady state power dissipation, $T_L = 75^\circ\text{C}$ at lead lengths 0.375" (9.5mm)	PM(AV)	1.0	Watts
Peak pulse current at $T_A = 25^\circ\text{C}$ with a 10/1000 μ s waveform (NOTE 1, FIG. 3)	IPPM	SEE TABLE 1	Amps
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load for uni-directional only (JEDEC Method) (NOTE 2)	IFSM	70.0	Amps
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +175	$^\circ\text{C}$



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ELECTRICAL CHARACTERISTICS at (TA=25°C UNLESS OTHERWISE NOTED)

PART NUMBER	STAND-OFF VOLTAGE V _{WM} (VOLTS)	MAXIMUM REVERSE LEAKAGE CURRENT I _d at V _{WM} (μA)	MINIMUM BREAKDOWN VOLTAGE V _(BR) at 1.0mA (Volts) (NOTE 1)	MAXIMUM CLAMPING VOLTAGE (FIG. 2) V _c at 1A (Volts)	TYPICAL CLAMPING VOLTAGE V _c		MAXIMUM CLAMPING VOLTAGE at IPPM (Volts)	MAXIMUM PEAK PULSE CURRENT IPP _M (NOTE 2) (AMPS)
					at 5.0A	at 10.0A		
SAB5.0	5.0	30.0	6.0	7.4	-	7.9	9.3	53.7
SAB10	10.0	3.0	11.1	13.2	-	14.4	16.5	30.3
SAB12	12.0	3.0	13.8	16.5	-	18.5	21.0	23.8
SAB15	15.0	3.0	16.7	19.7	-	22.2	25.2	19.8
SA818	18.0	3.0	20.4	23.8	26.0	-	30.5	16.3
SAB24	24.0	3.0	28.4	32.4	37.0	-	42.0	11.9
SAB28	28.0	3.0	30.0	35.0	41.0	-	46.5	10.7

NOTE:

(1) V_(BR) measured at pulse width of 300μs. sq. wave or equivalent

RATINGS AND CHARACTERISTIC CURVES SAB5.0 THRU SAB28 SERIES

