

# Transient Voltage Suppressors 500W DO-214AA

SACB Series

MERITEK

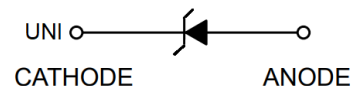
## FEATURE

- 500W Peak Pulse Power (10/1000 $\mu$ s), Repetitive Rate: 0.01%
- 5.0V to 50V Stand-Off Voltage
- Excellent Clamping Capability, Low Leakage
- Glass Passivated Junction
- Very Fast Response Time
- Low Capacitance
- UL Flammability Classification Rating: 94V-0



## MECHANICAL DATA

- Case: DO-214AA (SMB), Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Color Band Denotes Cathode End



## MAXIMUM RATINGS



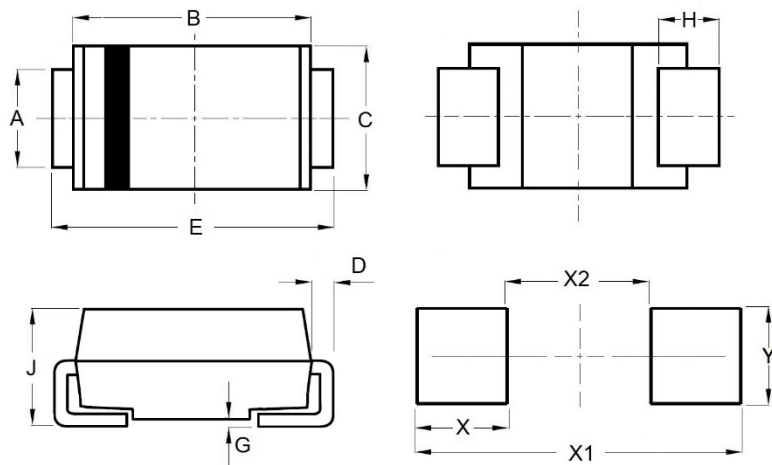
Parameter	Symbol	Value	Unit
Peak Power Dissipation on 10/1000 $\mu$ s Waveform	$P_{PP}$	500	W
Peak Pulse Current on 10/1000 $\mu$ s Waveform	$I_{PP}$	See Next Table	A
Power Dissipation on Infinite Heat Sink at $T_L = 75^\circ\text{C}$	$P_D$	3.0	W
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150	$^\circ\text{C}$

Note:

1.  $T_A = 25^\circ\text{C}$  ambient temperature unless otherwise specified.
2. Non-repetitive current pulse, and derated above  $T_A = 25^\circ\text{C}$ .

## DIMENSIONS

DO-214AA(SMB)	Min (mm)	Max (mm)
A	1.96	2.20
B	4.35	4.85
C	3.30	3.75
D	0.15	0.30
E	5.10	5.50
G	-	0.20
H	0.75	1.51
J	2.13	2.44
X		2.29
X1		6.34
X2		1.76
Y		2.72



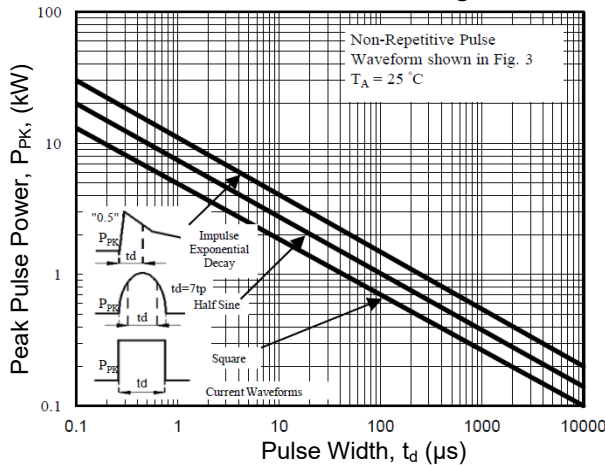
### ELECTRICAL CHARACTERISTICS

Part Number	Working Reverse Voltage	Reverse Breakdown Voltage @ $I_T=1mA$	Max Reverse Leakage Current @ $V_{RWM}$	Max Clamping Voltage @ $I_{PP}$	Reverse Surge Current	Max Junction Capacitance @ 0V	Working Inverse Blocking Voltage	Inverse Blocking Leakage Current @ $V_{WIB}$	Peak Inverse Blocking Voltage
	$V_{RWM}$ (V)	$V_{BR}$ Min(V)	$I_R$ ( $\mu A$ )	$V_C$ (V)	$I_{PP}$ (A) Max	$C_J$ (pF)	$V_{WIB}$ (V)	$I_{IB}$ (mA)	$V_{PIB}$ (V)
SACB5.0	5.0	7.60	300	10.0	44	45	75	1	100
SACB6.0	6.0	7.90	300	11.2	41	45	75	1	100
SACB7.0	7.0	8.33	300	12.6	38	45	75	1	100
SACB8.0	8.0	8.89	100	13.4	36	45	75	1	100
SACB8.5	8.5	9.44	50	14.0	34	45	75	1	100
SACB10	10	11.1	5	16.3	29	45	75	1	100
SACB12	12	13.3	5	19.0	25	45	75	1	100
SACB15	15	16.7	5	23.6	20	45	75	1	100
SACB18	18	20.0	5	28.8	15	45	75	1	100
SACB22	22	24.4	5	35.4	14	45	75	1	100
SACB26	26	28.9	5	42.3	11.1	45	75	1	100
SACB30	30	33.3	5	48.6	10	45	75	1	100
SACB36	36	40.0	5	60.0	8.6	45	75	1	100
SACB45	45	50.0	5	77.0	6.8	45	150	1	200
SACB50	50	55.5	5	88.0	5.8	45	150	1	200

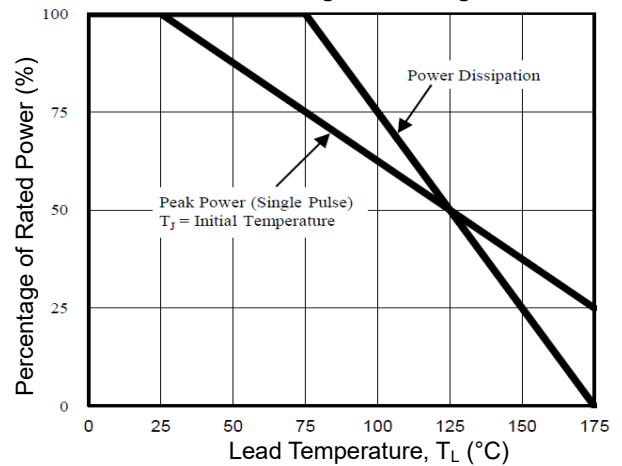
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### CHARACTERISTIC CURVES

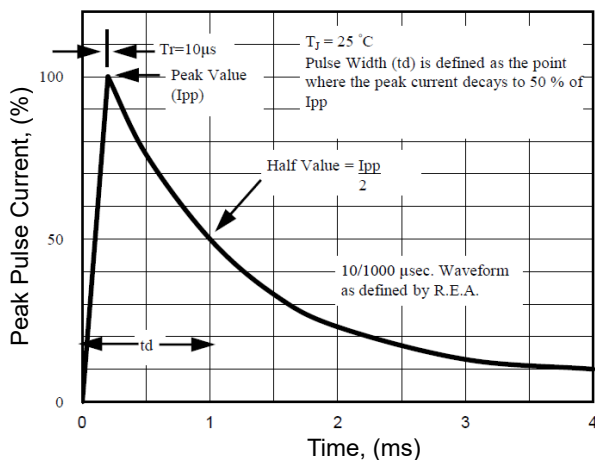
Peak Pulse Power Rating Curve



Power Derating Curve Surge Current



Pulse Waveform



\*Specifications subject to change without notice.