

# MSKSEMI

SEMICONDUCTOR



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Product data sheet

[www.msksemi.com](http://www.msksemi.com)

**FEATURES**

- For surface mounted applications
- Glass Passivated Chip Junction
- Fast reverse recovery time
- Ideal for automated placement



**PINNING**

PIN	DESCRIPTION
1	Cathode
2	Anode

MARK:T3

Absolute Maximum Ratings at 25 °C

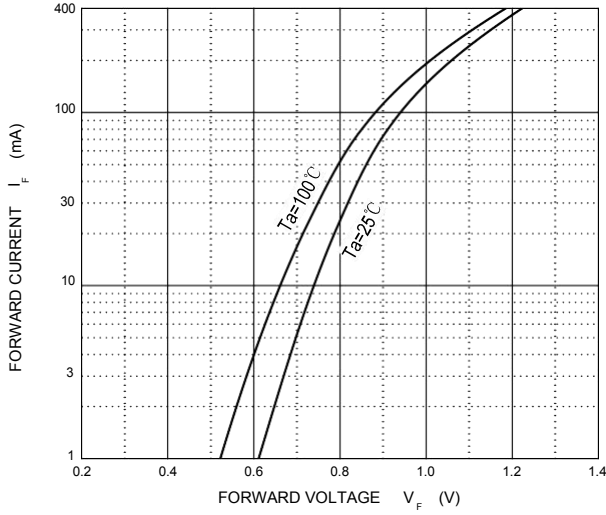
Parameter	Symbols	BAV21W	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	250	V
Maximum RMS voltage	$V_{RMS}$	200	V
Continuous Forward Current	$I_F$	250	mA
Repetitive Peak Forward Current	$I_{FRM}$	625	mA
Non-reptitive Peak Forward Surge Current	$I_{FSM}$	1 3 9	A
		at 1s at 1ms at 1 us	
Total Power Dissipation	$P_{tot}$	500	mW
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +150	°C

Characteristics at  $T_a = 25\text{ °C}$

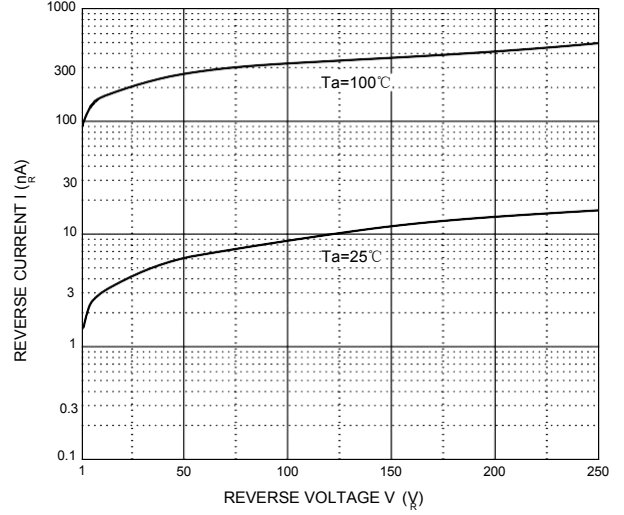
Parameter	Symbols	BAV21W	Units
Reverse Breakdown Voltage at $I_R=100\mu A$	$V_{(BR)R}$	250	V
Maximum Forward Voltage	$V_F$	1.00 1.25	V
		at 100 mA at 200 mA	
Maximum DC Reverse Current	$I_R$	0.1 100	$\mu A$
		$T_a = 25\text{ °C}$ $T_a = 150\text{ °C}$	
Typical Junction Capacitance at $V_R=4V, f=1MHz$	$C_j$	5	pF
Maximum Reverse Recovery Time <sup>(1)</sup>	$t_{rr}$	50	ns

(1) Measured with  $I_F = 0.5\text{ A}$ ,  $I_R = 1\text{ A}$ ,  $I_{rr} = 0.25\text{ A}$

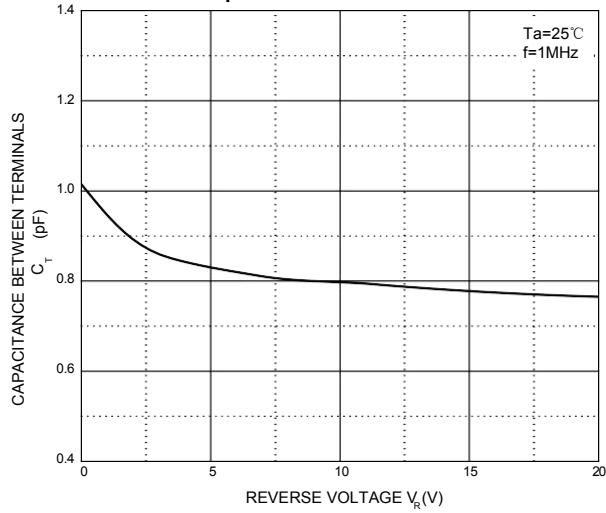
**Forward Characteristics**



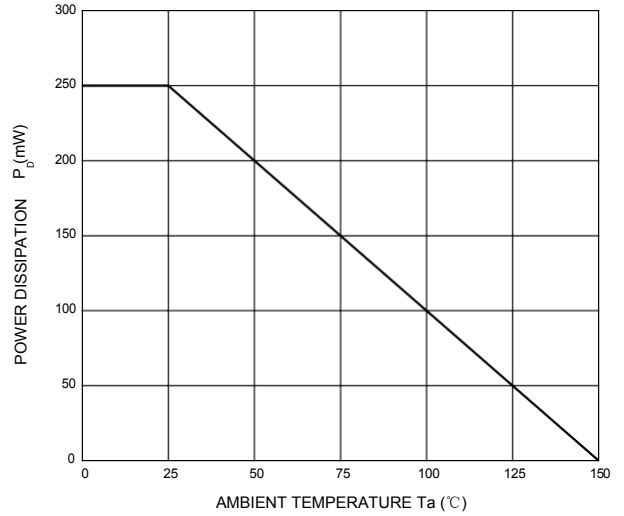
**Reverse Characteristics**



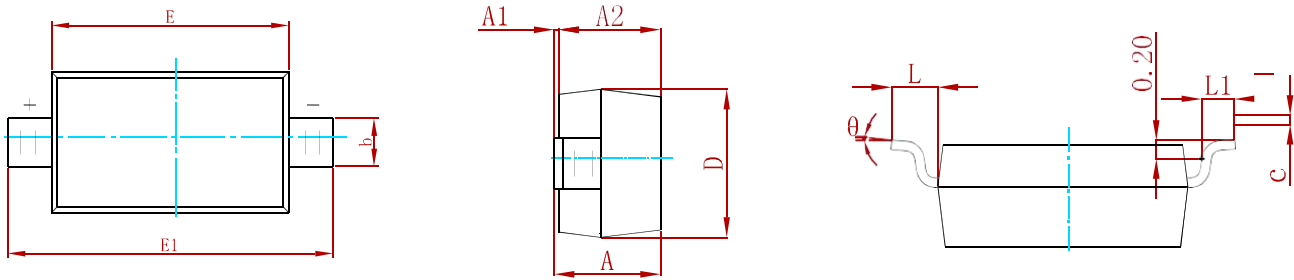
**Capacitance Characteristics**



**Power Derating Curve**

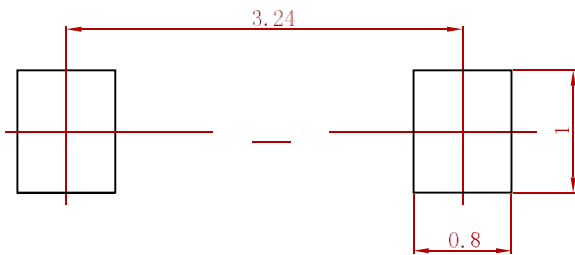


**PACKAGE MECHANICAL DATA**



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.450	0.650	0.018	0.026
c	0.080	0.150	0.003	0.006
D	1.500	1.700	0.059	0.067
E	2.600	2.800	0.102	0.110
E1	3.550	3.850	0.140	0.152
L	0.500 REF		0.020 REF	
L1	0.250	0.450	0.010	0.018
θ	0°	8°	0°	8°

**Suggested Pad Layout**



- Note:**
1. Controlling dimension: in millimeters.
  2. General tolerance: ± 0.05mm.
  3. The pad layout is for reference purposes only.

**REEL SPECIFICATION**

P/N	PKG	QTY
BAV21W-MS	SOD-123	3000

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