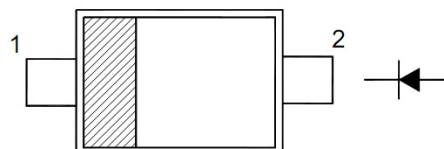


Kingtronics®**BAV19W, BAV20W,
BAV21W**
Silicon Epitaxial Planar Diode**High Voltage Switching Diode****FEATURES**

- Fast switching speed
- Surface mount package ideally suited for automatic insertion

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View

Marking Code:

BAV19W: A8

BAV20W: T2

BAV21W: T3

Simplified outline SOD-123 and symbol

Absolute Maximum Ratings (Ta = 25°C)

PARAMETER		SYMBOL	VALUE	UNIT
Repetitive Peak Reverse Voltage	BAV19W BAV20W BAV21W	V_{RRM}	120 200 250	V
Reverse Voltage	BAV19W BAV20W BAV21W	V_R	100 150 200	V
Average Rectified Forward Current		$I_F (AV)$	200	mA
Forward Continuous Current		I_{FM}	400	mA
Repetitive Peak Forward Current		I_{FRM}	625	mW
Non-repetitive Peak Forward Surge Current	at t = 1 ms at t = 1 s	I_{FSM}	2.5 0.5	A
Power Dissipation		P_d	250	mW
Operating and Storage Temperature Range		T_j, T_{stg}	- 65 to + 150	°C

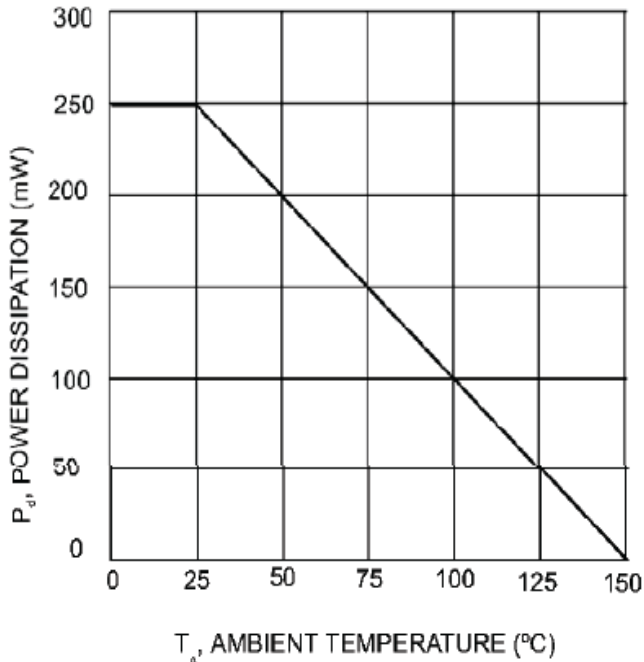
Characteristics at Ta = 25°C

PARAMETER		SYMBOL	Min.	Max.	UNIT
Forward Voltage at $I_F = 100$ mA at $I_F = 200$ mA		V_F	- -	1 1.25	V
Reverse Breakdown Voltage at $I_R = 100$ μ A	BAV19W BAV20W BAV21W	$V_{(BR)R}$	120 200 250	- - -	V
Reverse Current at $V_R = 100$ V at $V_R = 150$ V at $V_R = 200$ V	BAV19W BAV20W BAV21W	I_R	- - -	100 100 100	nA
Total Capacitance at $V_R = 0$ V, f = 1 MHz		C_T	-	5	pF
Reverse Recovery Time at $I_F = I_R = 30$ mA, $I_{rr} = 0.1I_R$, $R_L = 100$ Ω		t_{rr}	-	50	ns

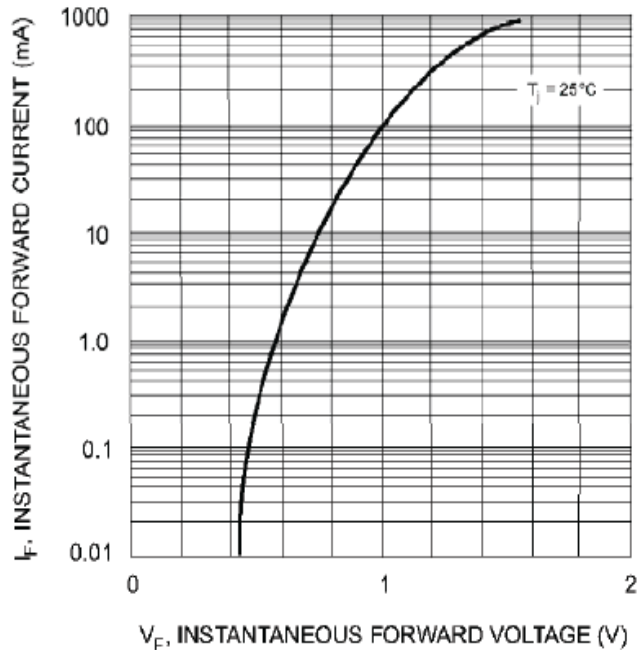
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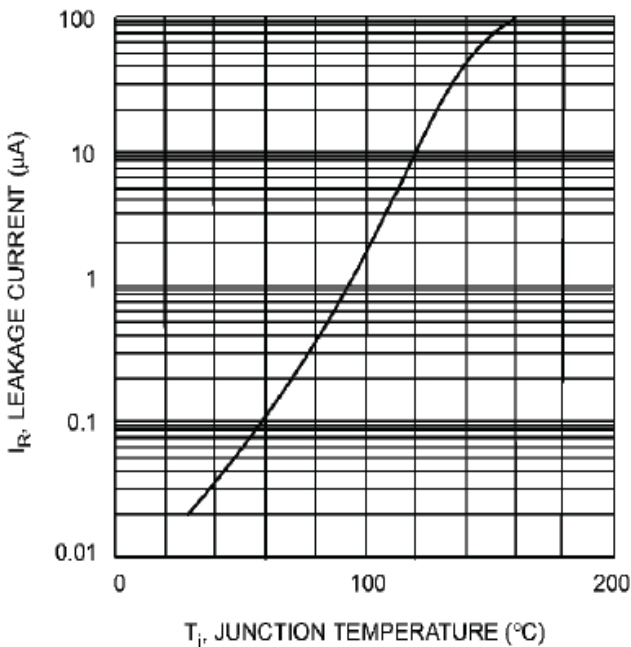
BAV19W, BAV20W, BAV21W Silicon Epitaxial Planar Diode



T_A , AMBIENT TEMPERATURE (°C)
Fig. 1 Power Derating Curve



V_F , INSTANTANEOUS FORWARD VOLTAGE (V)
Fig. 2 Typical Forward Characteristics



T_j , JUNCTION TEMPERATURE (°C)
Fig. 3 Leakage Current vs. Junction Temperature

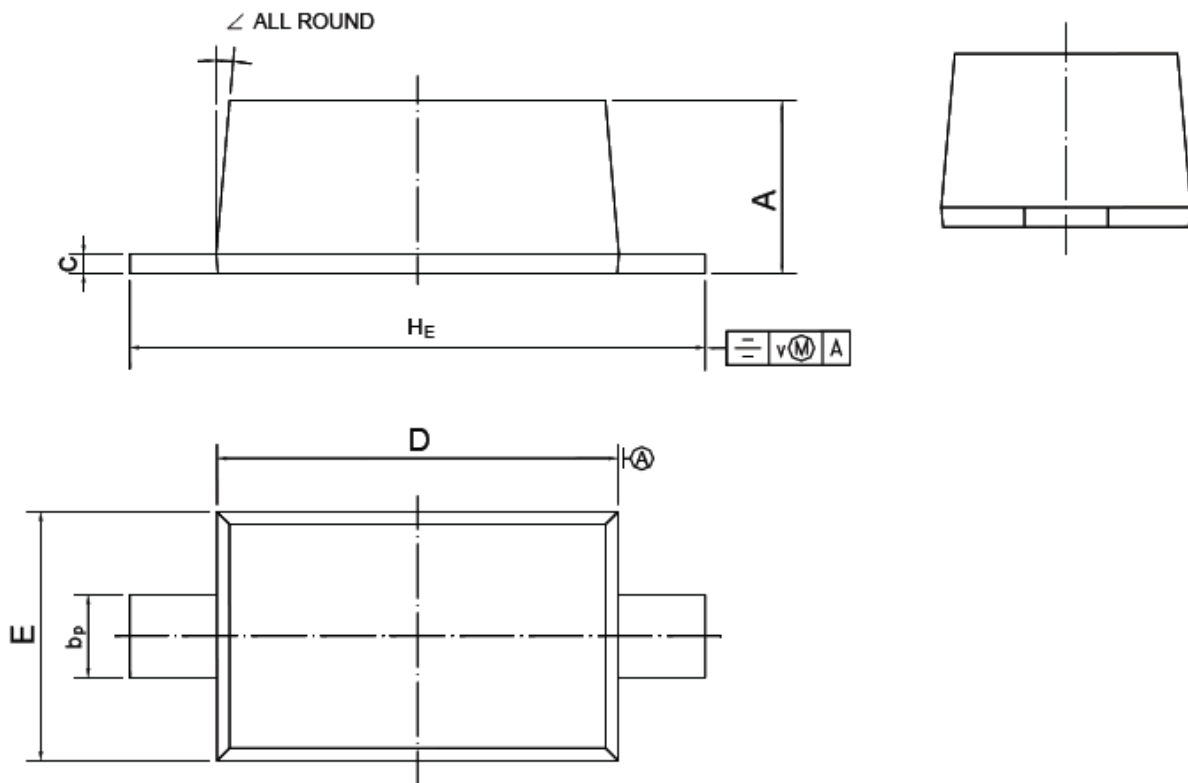
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BAV19W, BAV20W, BAV21W Silicon Epitaxial Planar Diode

SOD-123 PACKAGE OUTLINE

Plastic surface mounted package; 2 leads



UNIT	A	b_p	c	D	E	H_E	v	\angle
mm	1.15 1.05	0.6 0.5	0.135 0.100	2.7 2.6	1.65 1.55	3.85 3.55	0.2	5°

Note: Specification are subject to change without notice. For more detail and update, please visit our website.

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