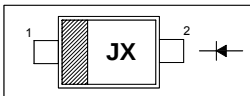
BAV19W, BAV20W, BAV21W

Silicon Epitaxial Planar Diodes

High Voltage Switching Diode

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Marking Code: **JX**
Simplified outline SOD-123 and symbol

Features

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

Absolute Maximum Ratings (T_a = 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	mA
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 T_a = 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 µA	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 , 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

BAV19W, BAV20W, BAV21W

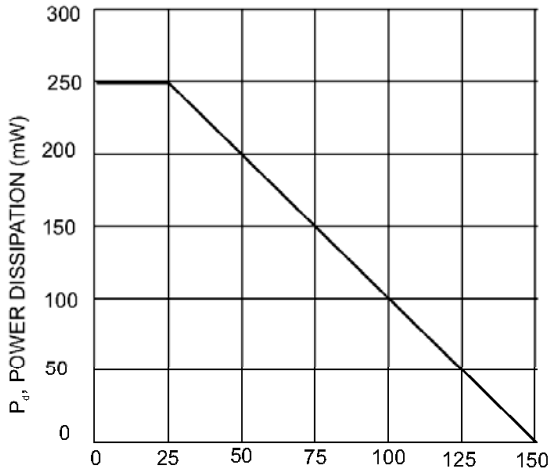


Fig. 1 Power Derating Curve

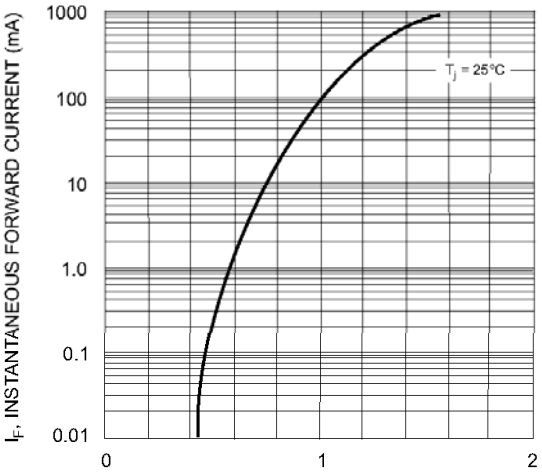


Fig. 2 Typical Forward Characteristics

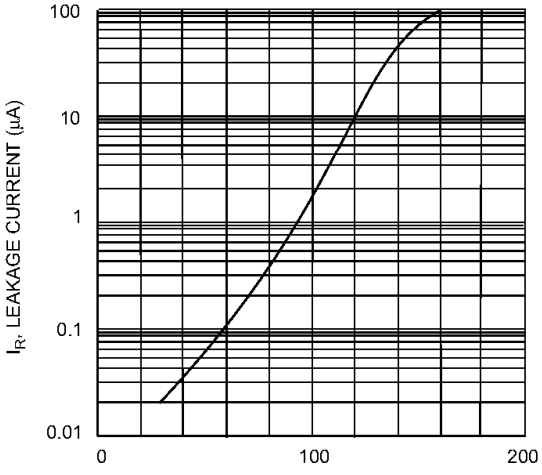
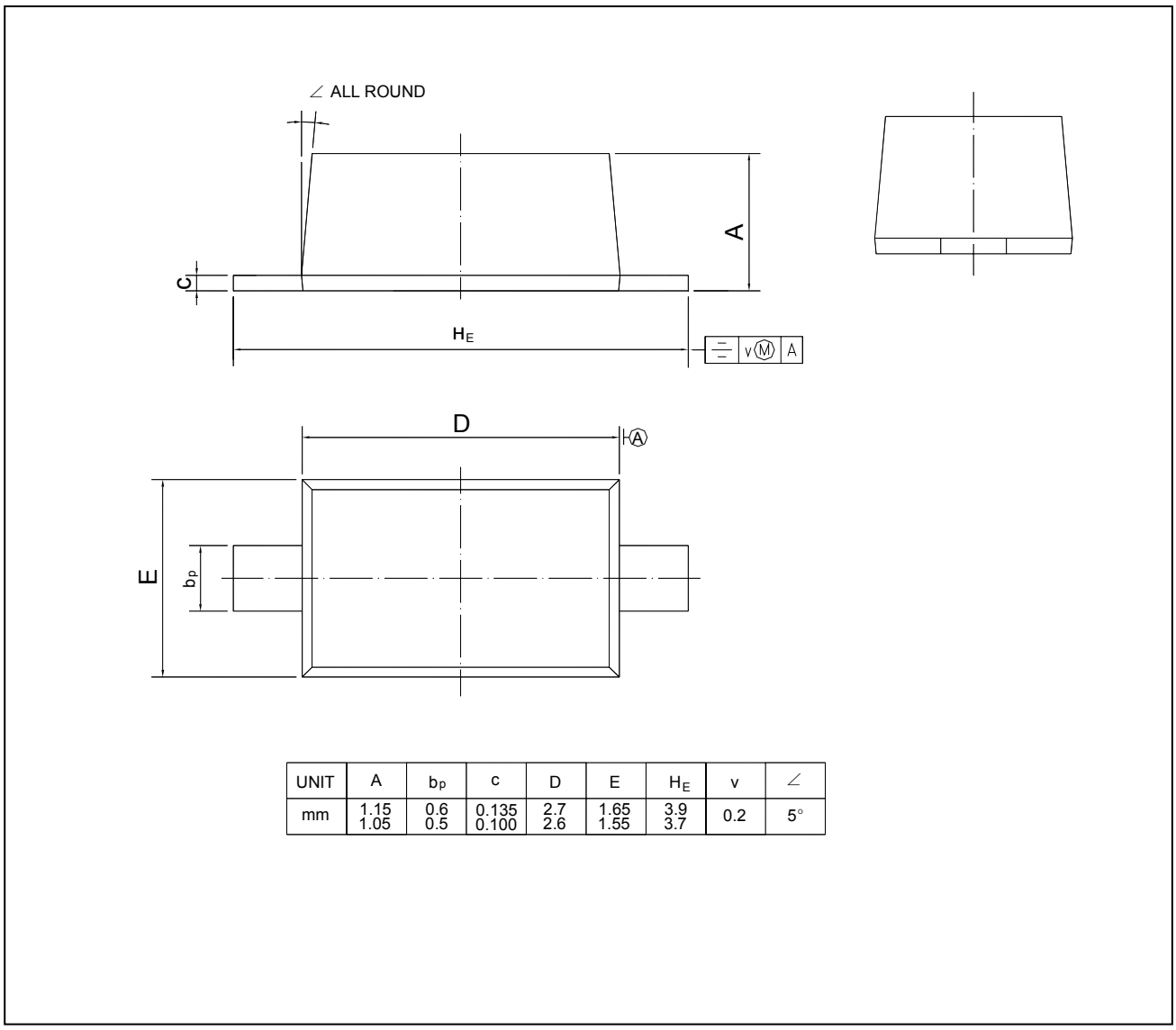


Fig. 3 Leakage Current vs Junction Temperature

BAV19W, BAV20W, BAV21W

PACKAGE OUTLINE

Plastic surface mounted package; 2 leads **SOD-123**



UNIT	A	b_p	c	D	E	H_E	v	∠
mm	1.15 1.05	0.6 0.5	0.135 0.100	2.7 2.6	1.65 1.55	3.9 3.7	0.2	5°