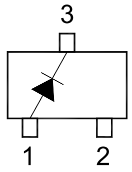
BAS116

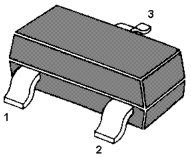
Silicon Epitaxial Planar Diode

Low leakage switching diode

Features

- Plastic SMD package
- Low leakage current





Marking Code: **JV**
SOT-23 Plastic Package

Application

- Low leakage current applications in surface mounted circuits.

Absolute Maximum Ratings (T_a = 25 °C)

Parameter		Symbol	Value	Unit
Repetitive Peak Reverse Voltage		V_{RRM}	85	V
Continuous Reverse Voltage		V_R	75	V
Continuous Forward Current		I_F	215	mA
Repetitive Peak Forward Current		I_{FRM}	500	mA
Non-Repetitive Peak Forward Surge Current	t = 1 µs t = 1 ms t = 1 s	I_{FSM}	4 1 0.5	A
Power Dissipation		P_{tot}	250	mW
Junction Temperature		T_j	150	°C
Storage Temperature Range		T_{stg}	- 65 to + 150	°C

Characteristics at T_a = 25 °C

Parameter	Symbol	Typ.	Max.	Unit
Forward Voltage				
at I_F = 1 mA	V_F	-	0.9	V
at I_F = 10 mA	V_F	-	1	V
at I_F = 50 mA	V_F	-	1.1	V
at I_F = 150 mA	V_F	-	1.25	V
Reverse Current				
at V_R = 75 V	I_R	-	5	nA
at V_R = 75 V, T_j = 150 °C		-	80	
Diode Capacitance at V_R = 0, f = 1 MHz	C_d	2	-	pF
Reverse Recovery Time at I_F = I_R = 10 mA, R_L = 100 Ω, i_{rr} = 0.1 I_R	t_{rr}	-	3	µs

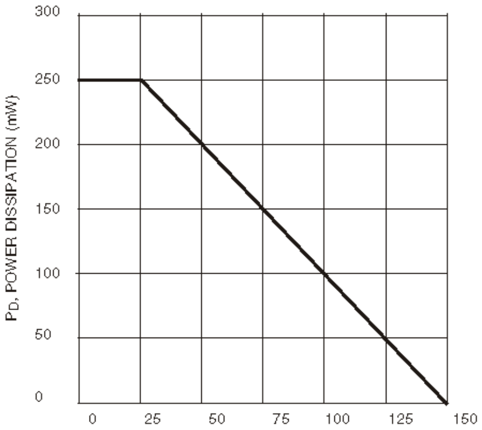


Fig. 1 Power Derating Curve

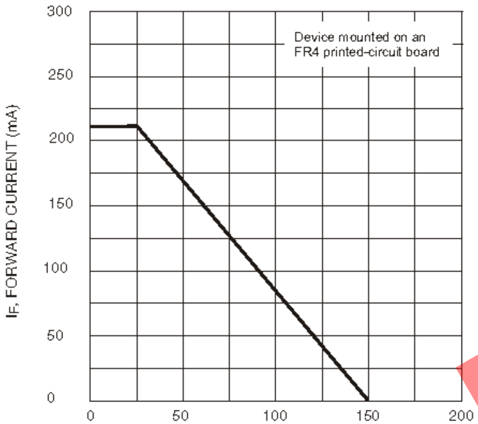


Fig. 2 Current Derating Curve

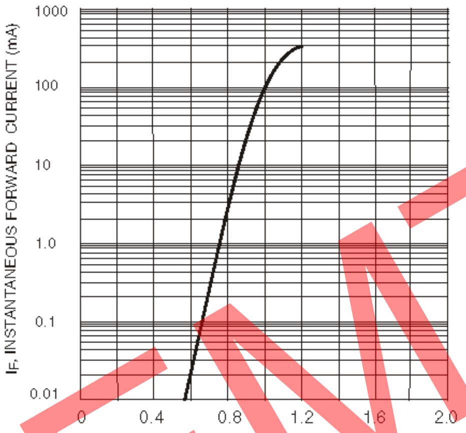


Fig. 3 Typical Forward Characteristics

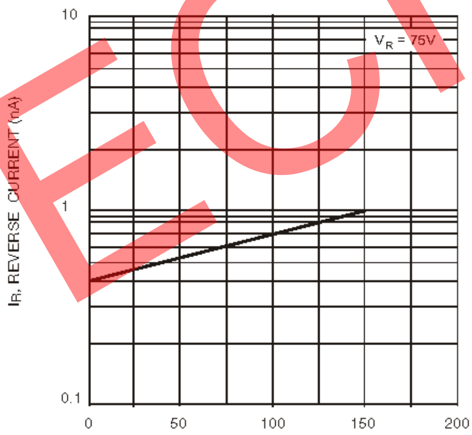


Fig. 4 Typical Reverse Characteristics