

BAS116

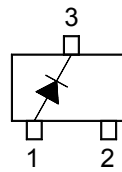
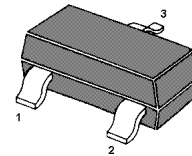
LOW LEAKAGE SWITCHING DIODE

Features

- Plastic SMD package
- Low leakage current
- High switching speed

Application

- Low leakage current applications in surface mounted circuits.



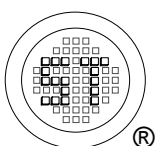
Marking Code: **JV**
SOT-23 Plastic Package

Absolute Maximum Ratings ($T_a = 25\text{ }^{\circ}\text{C}$)

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	I_{FSM}	4	A
$t = 1\text{ }\mu\text{s}$		1	
$t = 1\text{ ms}$		0.5	
$t = 1\text{ s}$			
Power Dissipation	P_{tot}	250	mW
Junction Temperature	T_j	150	$^{\circ}\text{C}$
Storage Temperature Range	T_S	- 65 to + 150	$^{\circ}\text{C}$

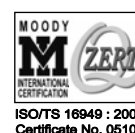
Characteristics at $T_a = 25\text{ }^{\circ}\text{C}$

Parameter	Symbol	Max.	Unit
Forward Voltage	V_F	0.9 1 1.1 1.25	V
at $I_F = 1\text{ mA}$			
at $I_F = 10\text{ mA}$			
at $I_F = 50\text{ mA}$			
at $I_F = 150\text{ mA}$	V_F		
Reverse Current	I_R	5	nA
at $V_R = 75\text{ V}$		80	
at $V_R = 75\text{ V}, T_J = 150\text{ }^{\circ}\text{C}$			
Diode Capacitance	C_d	2	pF
at $f = 1\text{ MHz}$			
Reverse Recovery Time	t_{rr}	3	μs
at $I_F = I_R = 10\text{ mA}, R_L = 100\text{ }\Omega, i_{rr} = 0.1\text{ }I_R$			



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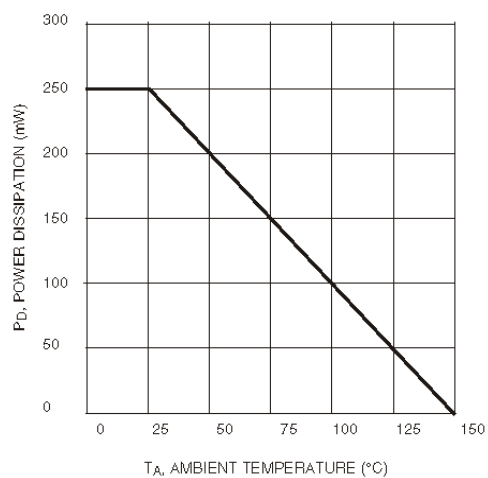


Fig. 1 Power Derating Curve

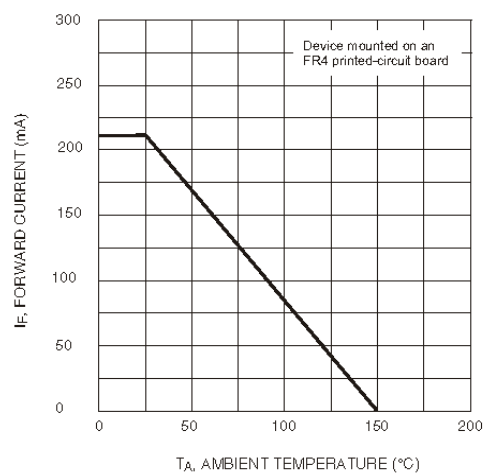


Fig. 2 Current Derating Curve

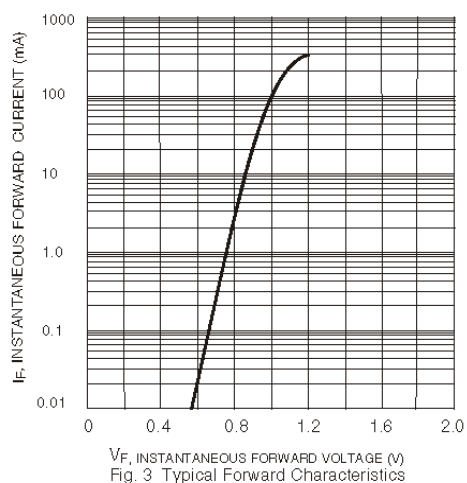


Fig. 3 Typical Forward Characteristics

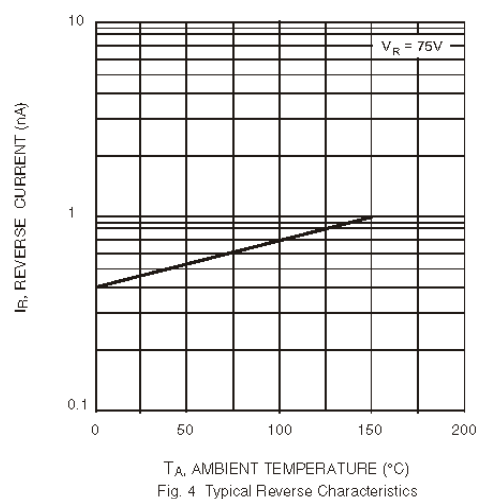
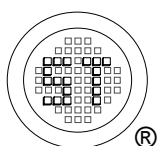


Fig. 4 Typical Reverse Characteristics



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