

## Silicon Epitaxial Planar Diode

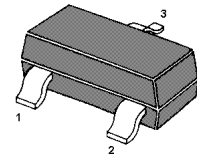
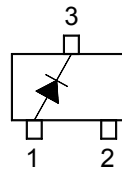
Low leakage switching diode

### Features

- Plastic SMD package
- Low leakage current

### Application

- Low leakage current applications in surface mounted circuits.



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

### Absolute Maximum Ratings ( $T_a = 25\text{ °C}$ )

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

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

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

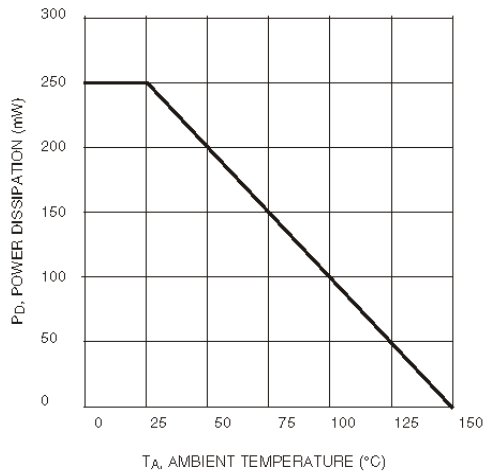


Fig. 1 Power Derating Curve

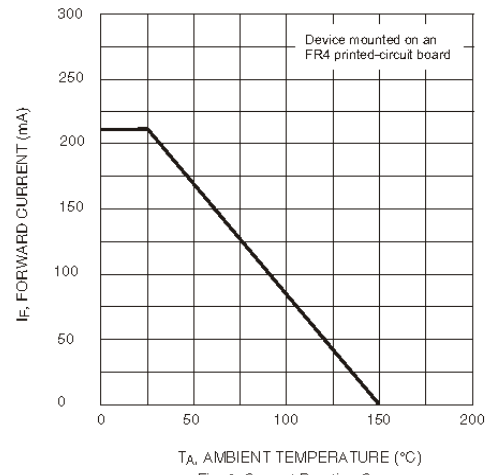


Fig. 2 Current Derating Curve

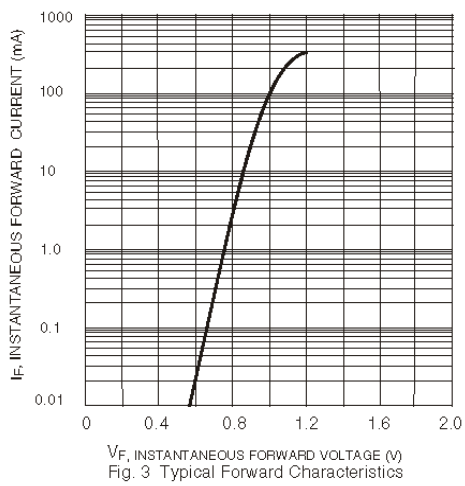


Fig. 3 Typical Forward Characteristics

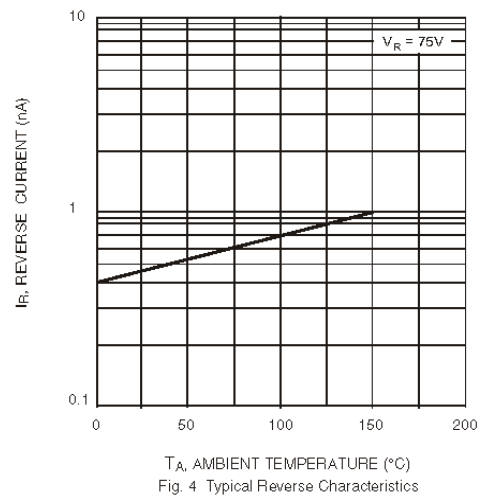


Fig. 4 Typical Reverse Characteristics