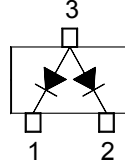


### Features

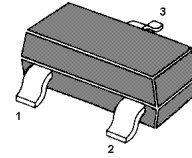
- Small package
- Low forward voltage
- Fast reverse recovery time
- Small total capacitance

### Applications

- Ultra high speed switching application



Marking Code: **A1**



SOT-23 Plastic Package

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

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$	85	V
Continuous Reverse Voltage	$V_R$	75	V
Forward Current (DC)	Single Diode Loaded Double Diode Loaded	215 125	mA
Repetitive Peak Forward Current	$I_{FRM}$	450	mA
Non-repetitive Peak Forward Surge Current	at $t = 1\text{ s}$ at $t = 1\text{ ms}$ at $t = 1\text{ }\mu\text{s}$	0.5 1 4	A
Power Dissipation	$P_{tot}$	350	mW
Thermal Resistance from Junction to Ambient Air	$R_{\theta JA}$	357	$^\circ\text{C/W}$
Operating Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	- 65 to + 150	$^\circ\text{C}$

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

Parameter	Symbol	Max.	Unit
Forward Voltage			
at $I_F = 1\text{ mA}$	$V_F$	715	mV
at $I_F = 10\text{ mA}$	$V_F$	855	mV
at $I_F = 50\text{ mA}$	$V_F$	1	V
at $I_F = 150\text{ mA}$	$V_F$	1.25	V
Reverse Current			
at $V_R = 25\text{ V}$	$I_R$	30	nA
at $V_R = 75\text{ V}$	$I_R$	1	$\mu\text{A}$
at $V_R = 25\text{ V}, T_j = 150\text{ }^\circ\text{C}$	$I_R$	30	$\mu\text{A}$
at $V_R = 75\text{ V}, T_j = 150\text{ }^\circ\text{C}$	$I_R$	50	$\mu\text{A}$
Diode Capacitance	$C_d$	2	pF
Reverse Recovery Time			
at $I_F = I_R = 10\text{ mA}, R_L = 100\text{ }\Omega$	$t_{rr}$	4	ns

Typical Characteristics

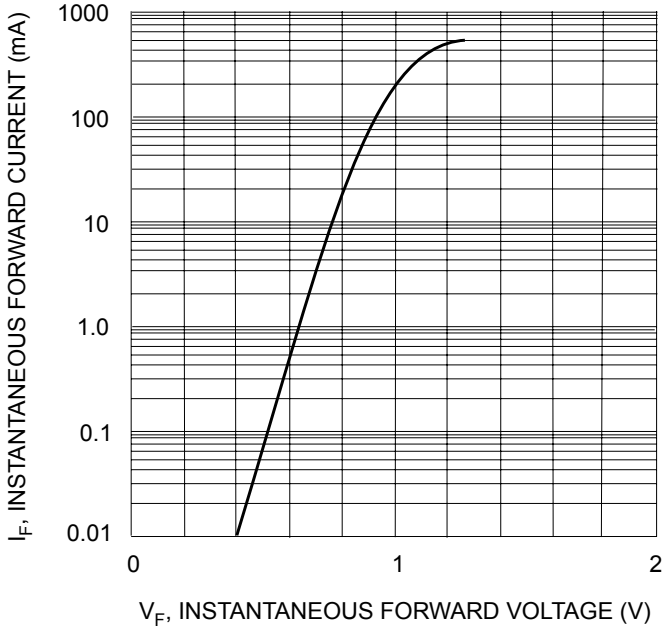


Fig. 1 Forward Characteristics

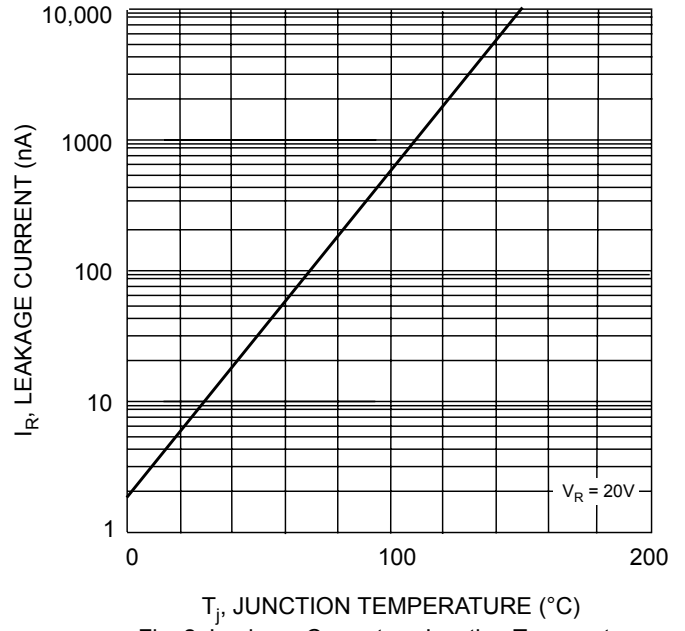


Fig. 2 Leakage Current vs Junction Temperature

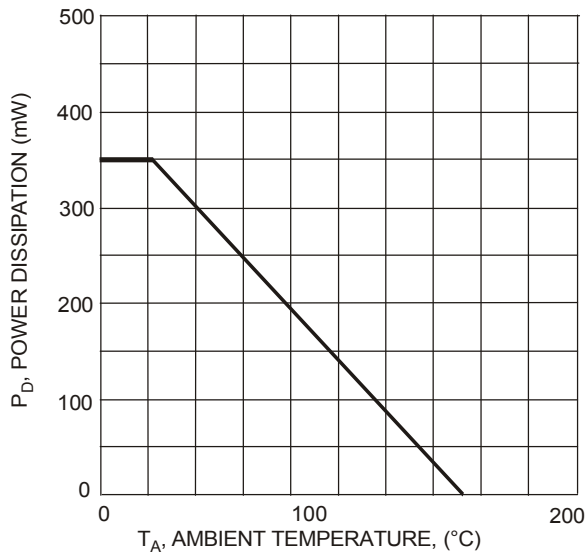


Fig. 3 Power Derating Curve, Total Package

**PACKAGE OUTLINE**

Plastic surface mounted package; 3 leads

SOT-23

