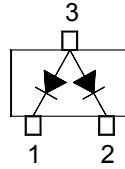


Features

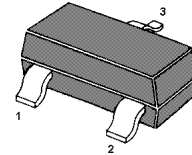
- Small package
- Low forward voltage
- Fast reverse recovery time
- Small total capacitance

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)	I_F	215 125	mA
		Single Diode Loaded Double Diode Loaded	
Repetitive Peak Forward Current	I_{FRM}	450	mA
Non-repetitive Peak Forward Surge Current	I_{FSM}	0.5 1 4	A
		at $t = 1\text{ s}$ at $t = 1\text{ ms}$ at $t = 1\text{ }\mu\text{s}$	
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	V_F	715	mV
at $I_F = 1\text{ mA}$	V_F	855	mV
at $I_F = 10\text{ mA}$	V_F	1	V
at $I_F = 50\text{ mA}$	V_F	1.25	V
Reverse Current	I_R	30	nA
at $V_R = 25\text{ V}$	I_R	1	μA
at $V_R = 75\text{ V}$	I_R	30	μA
at $V_R = 25\text{ V}, T_j = 150\text{ }^\circ\text{C}$	I_R	50	μA
at $V_R = 75\text{ V}, T_j = 150\text{ }^\circ\text{C}$	I_R		
Diode Capacitance	C_d	2	pF
at $V_R = 0, f = 1\text{ MHz}$			
Reverse Recovery Time	t_{rr}	4	ns
at $I_F = I_R = 10\text{ mA}, R_L = 100\text{ }\Omega$			

Typical Characteristics

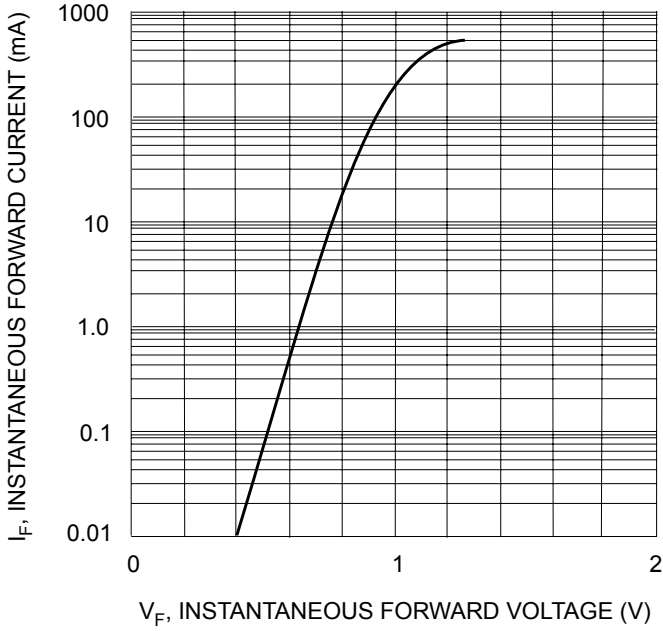


Fig. 1 Forward Characteristics

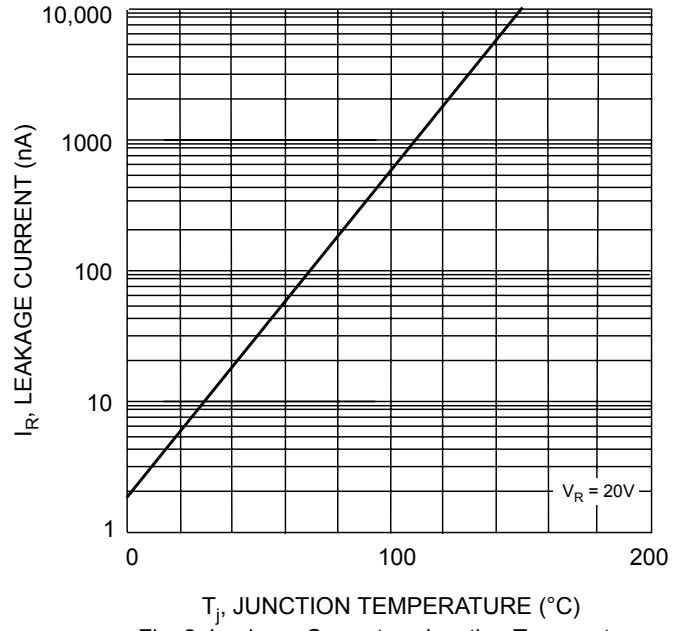


Fig. 2 Leakage Current vs Junction Temperature

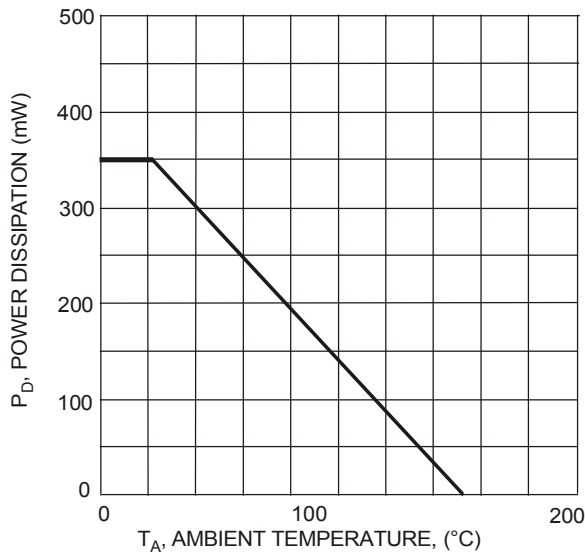


Fig. 3 Power Derating Curve, Total Package

PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT-23

