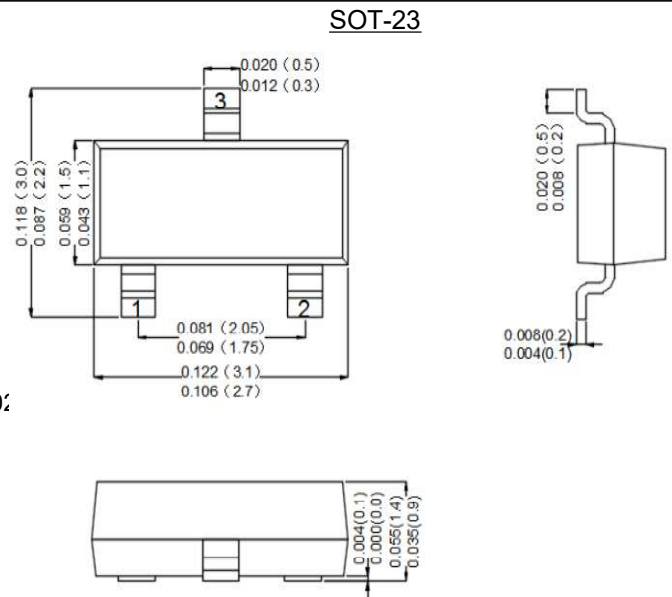
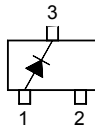


**Features**

- Fast switching speed
- Low forward voltage
- Fast reverse recovery time
- Small total capacitance

Mechanical Data

- Case: Molded Plastic, SOT-23
- Epoxy: UL 94V-0 rate flame retardant
- Terminals: Plated Leads Solderable per MIL-STD-750, Method-202
- Marking: 5D
- Mounting Position : Any.
- Equivalent Circuit:



Dimensions in inches and (millimeters)

Maximum Ratings Maximum Ratings (Rating at 25°C ambient temperature unless otherwise specified.)

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 1 0.5	A
	$t = 1 \mu s$ $t = 1 ms$ $t = 1 s$		
Power Dissipation	P_{tot}	350	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	- 65 to + 150	°C

Electrical Characteristics (Rating at 25°C ambient temperature unless otherwise specified.)

Parameter	Symbol	Min.	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	μA
at $V_R = 25 \text{ V}, T_J = 150 \text{ }^\circ C$	I_R	-	30	μA
at $V_R = 75 \text{ V}, T_J = 150 \text{ }^\circ C$	I_R	-	50	μA
Reverse Breakdown Voltage	$V_{(BR)R}$	75	-	V
at $I_R = 100 \mu A$				
Diode Capacitance	C_d	-	2	pF
at $V_R = 0, f = 1 \text{ MHz}$				
Reverse Recovery Time	t_{rr}	-	4	ns
at $I_F = I_R = 10 \text{ mA}, R_L = 50 \Omega$				



Rating And Characteristic Curves

Fig.1 Power Derating Curve

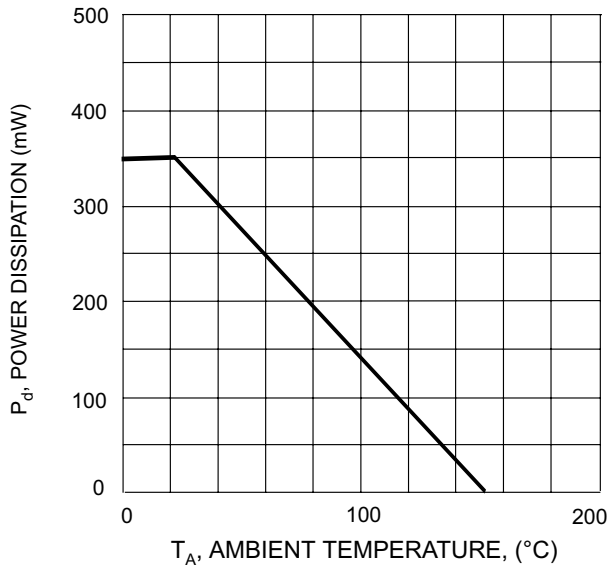


Fig.2 Typical Forward Characteristics

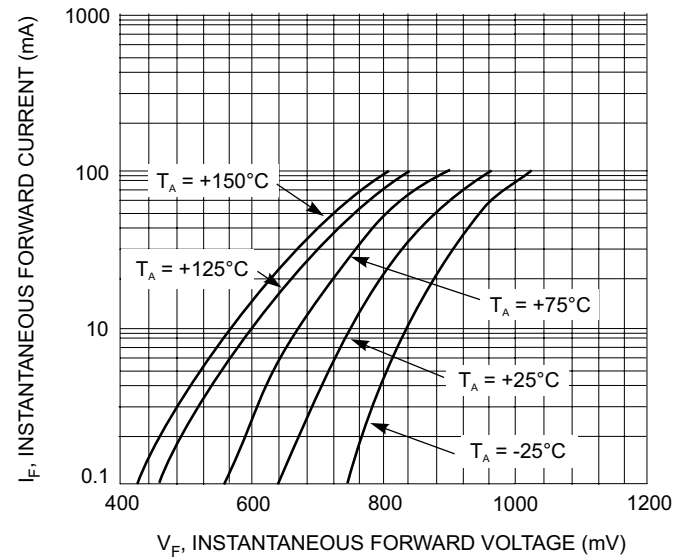
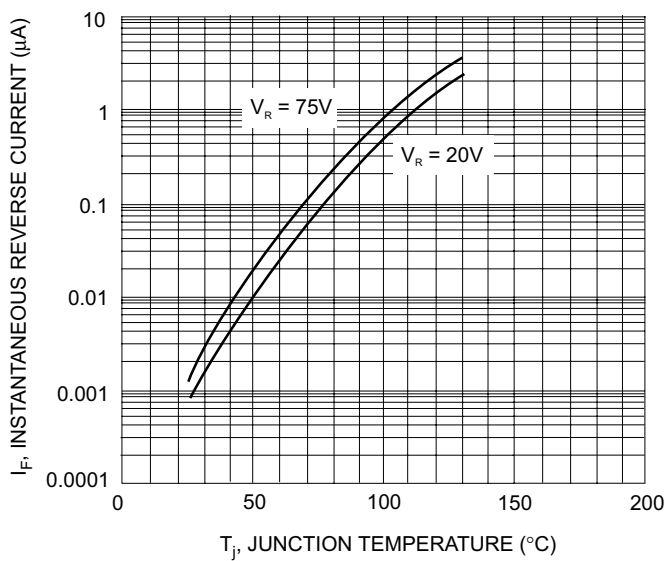


Fig. 3, Typical Reverse Characteristics





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