



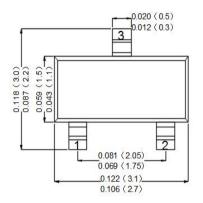
Features

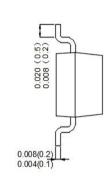
- Small package
- · Low forward voltage
- Fast reverse recovery time
- · Small total capacitance

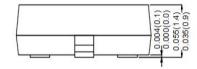
Mechanical Data

- Case:Molded Plastic,SOT-23
- Epoxy:UL 94V-0 rate flame retardant
- Terminals:Plated Leads Solderable perMIL-STD-750,Method-2026.
- Marking: A4
- Mounting Position : Any.
- Equivalent Circuit:









Dimensions in inches and (millimeters)

SOT-23

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

Parameter	Symbol	Value	Unit
Reverse Voltage	V _R	70	V
Forward Current	I _F	200	mA
Maximum Peak Forward Current	I _{FM}	300	mA
Non-Repetitive Peak Forward Surge Current at t = 1 at t = 1	-	1 2	А
Power Dissipation	P _{tot}	300	mW
Thermal Resistance Junction to Ambient Air	$R_{ heta JA}$	R _{eJA} 417	
Junction and Storage Temperature Range	T_{j},T_{stg}	- 55 to + 15	°C

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

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at I _F = 1 mA at I _F = 100 mA	V _F	0.55 0.85	0.7 1.1	V
Reverse Current at V _R = 50 V	I _R	-	0.1	μΑ
Reverse Breakdown Voltage at I _R = 100 µA	$V_{(BR)R}$	70	-	V
Total Capacitance at $V_R = 0$	C _T	-	2.5	pF
Reverse Recovery Time at $I_F = I_R = 10 \text{ mA}$	t _{rr}	-	4	ns

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Rating And Characteristic Curves

Figure 1. Forward Voltage

100

T_A = 85°C

T_A = -40°C

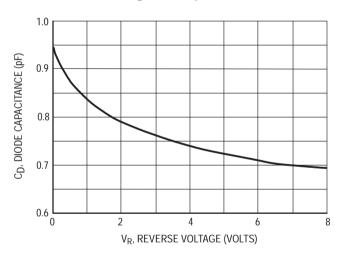
T_A = -40°C

T_A = 25°C

V_E, FORWARD VOLTAGE (VOLTS)

Figure 2. Leakage Current 10 $T_A = \overline{150^{\circ}C}$ IR, REVERSE CURRENT (μA) $T_A = 125^{\circ}C$ 1.0 T_A = 85°C 0.1 $T_A = 55^{\circ}C$ 0.01 T_A = 25°C 0.001 10 20 30 40 50 V_R, REVERSE VOLTAGE (VOLTS)

Figure 3. Capacitance



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