

High Speed Diode SOT-23



RoHS
Compliant



Features:

- Fast switching speed
- For general purpose switching applications
- High conductance
- Marking: A6

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Type Number	Symbol	Value	Units
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	75	
RMS Reverse Voltage	$V_{R(RMS)}$	53	
Forward Continuous Current	I_{FM}	300	mA
Average Rectifier Output Current	I_O	150	
Peak Forward Surge Current at $t = 1\mu s$ at $t = 1s$	I_{FSM}	2 1	A
Power Dissipation	P_d	225	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	556	°C/W
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150	°C

Notes: 1. Reverse Recovery Test Conditions: $I_F = I_R = 10mA$, $I_{rr} = 0.1 \times I_R$, $R_L = 100\Omega$

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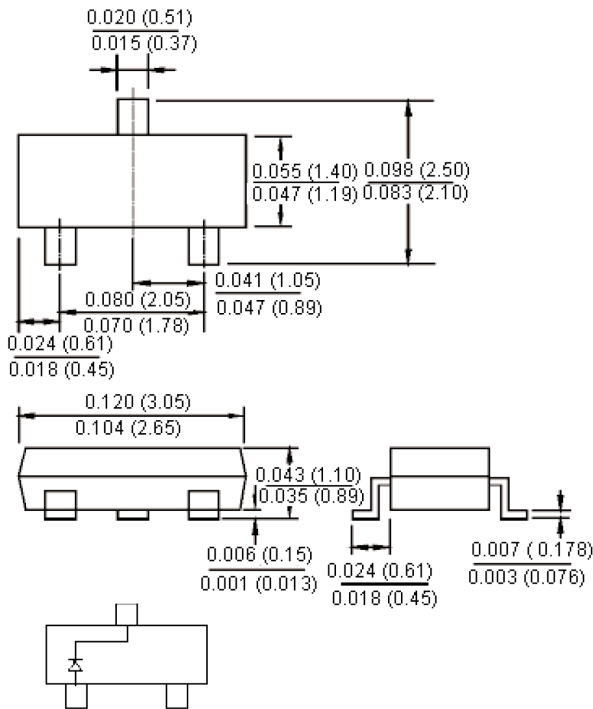


Electrical Characteristics

Type Number	Symbol	Min.	Max.	Units
Reverse Breakdown Voltage $I_R = 100\mu\text{A}$	$V_{R(BR)}$	75	-	V
Forward Voltage $I_F = 1\text{mA}$ $I_F = 10\text{mA}$ $I_F = 50\text{mA}$ $I_F = 150\text{mA}$	V_F	-	0.715 0.855 1 1.25	
Peak Reverse Current $V_R = 75\text{V}$	I_R	-	1	μA
Junction Capacitance $V_R = 0, f = 1\text{MHz}$	C_j	-	2	pF
Reverse Recovery Time (Note 1)	t_{rr}	-	6	nS

Notes: 1. Reverse Recovery Test Conditions: $I_F = I_R = 10\text{mA}$, $I_{rr} = 0.1 \times I_R$, $R_L = 100\Omega$

SOT-23



Dimensions : Inches (Millimetres)

Part Number Table

Description	Part Number
Diode, High Speed, SOT-23	BAS16

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