

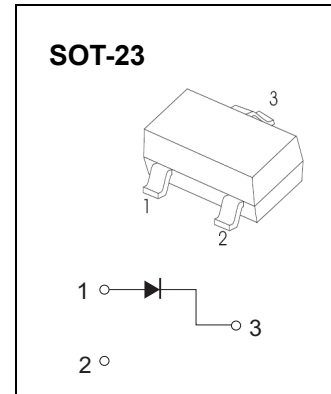


## SOT-23 Plastic-Encapsulate Diodes

**BAS16** SWITCHING DIODE

**FEATURES**

- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance



Marking: A6

Maximum Ratings @Ta=25°C

Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	$V_{RM}$	100	V
Peak Repetitive Peak Reverse Voltage	$V_{RRM}$	75	V
Working Peak Reverse Voltage	$V_{RWM}$		
DC Blocking Voltage	$V_R$		
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Forward Continuous Current	$I_{FM}$	300	mA
Average Rectified Output Current	$I_O$	150	mA
Peak Forward Surge Current @t=1.0µs	$I_{FSM}$	2.0	A
@t =1.0s		1.0	
Power Dissipation	$P_D$	225	mW
Thermal Resistance Junction to Ambient	$R_{θJA}$	556	°C/W
Junction Temperature	$T_j$	150	°C
Storage Temperature	$T_{STG}$	-55~+150	°C

**ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)**

Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R=100\mu A$	75		V
Reverse voltage leakage current	$I_R$	$V_R=75V$		1	µA
Forward voltage	$V_F$	$I_F=1mA$ $I_F=10mA$ $I_F=50mA$ $I_F=150mA$		0.715 0.855 1 1.25	V
Diode capacitance	$C_D$	$V_R=0, f=1MHz$		2	pF
Reveres recovery time	$t_{rr}$	$I_F=I_R=10mA, I_{rr}=0.1 \times I_R,$ $R_L=100\Omega$		6	ns

# Typical Characteristics

# BAS16

