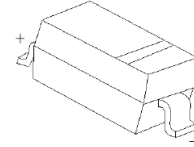




## SOD-323 Plastic-Encapsulate Diodes

### BAS316 SWITCHING DIODE

SOD-323



#### FEATURES

- Very Small Plastic Package
- High Switching Speed

#### APPLICATIONS

- High-Speed Switching in e.g. Surface Mounted Circuits

MARKING: A6\*

#### MAXIMUM RATINGS ( $T_a=25^\circ\text{C}$ unless otherwise noted )

Symbol	Parameter	Value	Unit
$V_{RRM}$	Peak Repetitive Reverse Voltage	85	V
$V_R$	DC Blocking Voltage	75	
$I_O$	Continuous Forward Current	250	mA
$P_D$	Power Dissipation	250	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	500	$^\circ\text{C}/\text{W}$
$T_j$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature	-55~+150	$^\circ\text{C}$

#### ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	$I_R=100\mu\text{A}$	100			V
Reverse current	$I_R$	$V_R=25\text{V}$			30	nA
		$V_R=75\text{V}$			1	$\mu\text{A}$
Forward voltage	$V_F$	$I_F=1\text{mA}$			0.715	V
		$I_F=10\text{mA}$			0.855	
		$I_F=50\text{mA}$			1	
		$I_F=150\text{mA}$			1.25	
Total capacitance	$C_{tot}$	$V_R=0\text{V}, f=1\text{MHz}$			1.5	pF
Reverse recovery time	$t_{rr}$	$I_F=I_R=10\text{mA}, I_{rr}=0.1 \times I_R$			4	ns

# Typical Characteristics

# BAS316

