

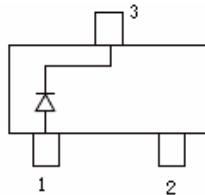


## SOT-23 Plastic-Encapsulate Diodes

## BAS116 SWITCHING DIODES

## FEATURES

- Low leakage current applications
- Medium speed switching times



SOT-23

Maximum Ratings @ $T_A=25^\circ\text{C}$ 

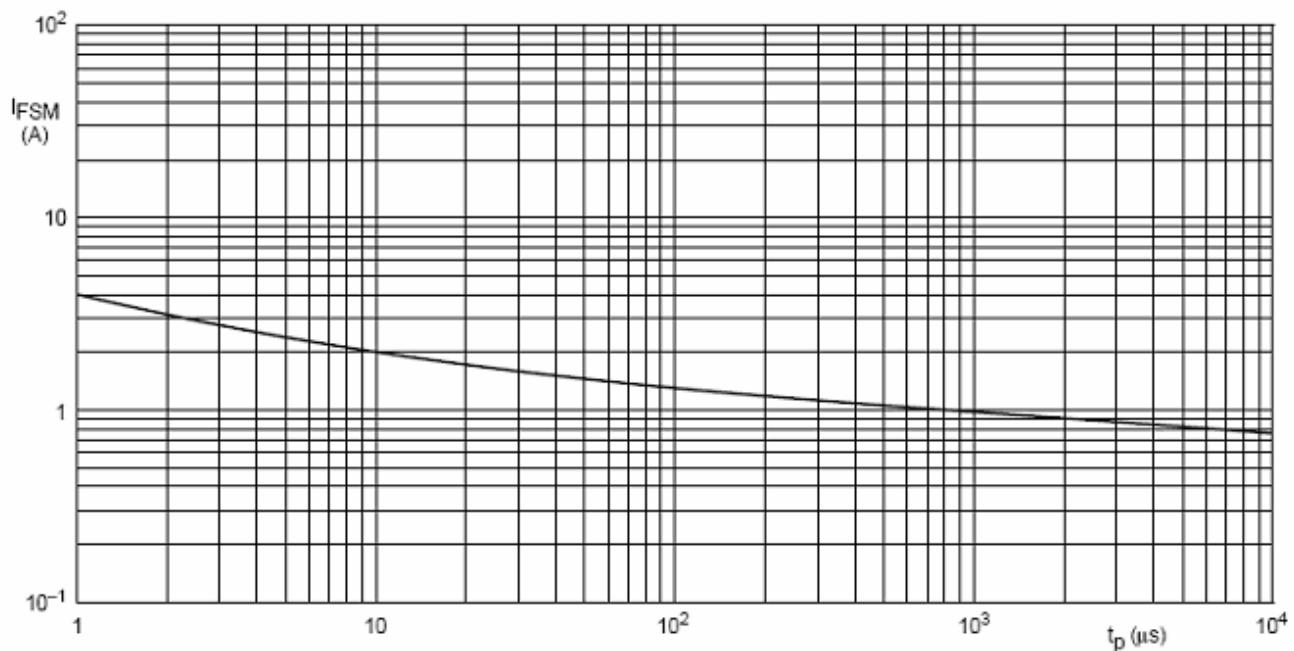
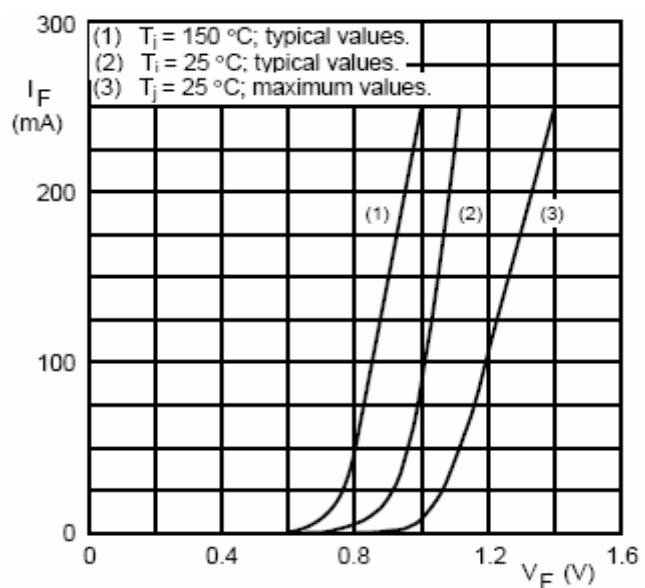
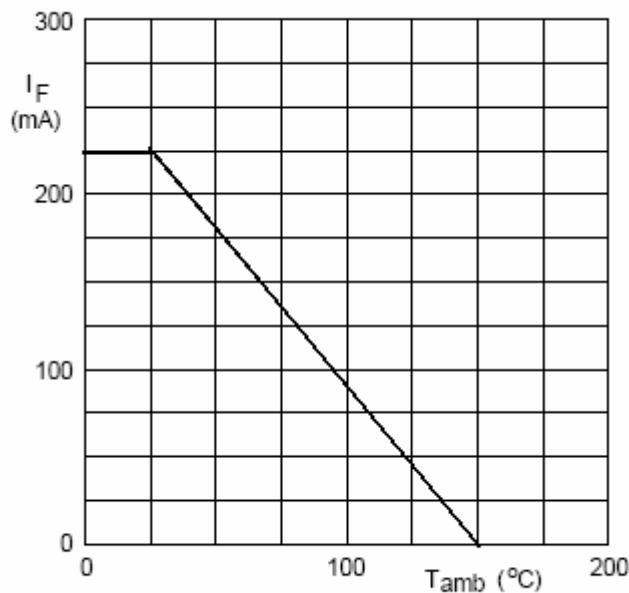
Parameter	Symbol	Limits			Unit
Peak Repetitive Peak reverse voltage	$V_{RRM}$				
Working Peak Reverse Voltage	$V_{RWM}$	75			V
DC Blocking Voltage	$V_R$				
Forward Continuous Current	$I_{FM}$	200			mA
Power Dissipation	$P_D$	225			mW
Junction temperature	$T_J$	150			$^\circ\text{C}$
Storage temperature	$T_{STG}$	-55-150			$^\circ\text{C}$

Electrical Characteristics @ $T_A=25^\circ\text{C}$ 

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Breakdown Voltage	$V_{(BR)R}$	75			V	$I_R=100\mu\text{A}$
Forward voltage	$V_{F1}$			0.9	V	$I_F=1\text{mA}$
	$V_{F2}$			1	V	$I_F=10\text{mA}$
	$V_{F3}$			1.1	V	$I_F=50\text{mA}$
	$V_{F4}$			1.25	V	$I_F=150\text{mA}$
Reverse current	$I_R$			5	nA	$V_R=75\text{V}$
Diode Capacitance	$C_{tot}$		2		pF	$V_R=0\text{V}, f=1\text{MHz}$
Reverse Recovery Time	$t_{rr}$			3	$\mu\text{s}$	$I_F=I_R=10\text{mA}, I_{rr}=0.1 \times I_R,$ $R_L=100\Omega$

## Typical Characteristics

BAS116



Based on square wave currents;  $T_j = 25\text{ }^{\circ}\text{C}$  prior to surge.

Maximum permissible non-repetitive peak forward current as a function of pulse duration.

