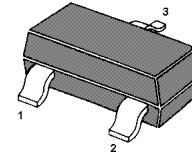
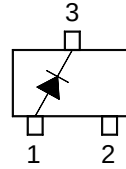


SOT-23 Plastic-Encapsulate Diodes

BAS116 SWITCHING DIODE

FEATURES

- Low leakage current applications
- Medium speed switching times



SOT-23 Plastic Package

MARKING: JV

Maximum Ratings @Ta=25°C

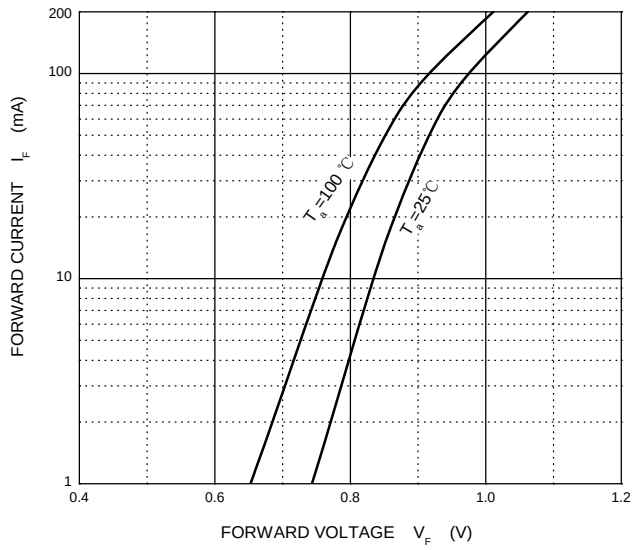
Parameter	Symbol	Limit	Unit
Peak Repetitive Peak Reverse Voltage	V_{RRM}	75	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
Forward Continuous Current	I_{FM}	200	mA
Non-Repetitive Peak Forward Surge Current @ t=8.3ms	I_{FSM}	2.0	A
Power Dissipation	P_D	225	mW
Junction Temperature	T_J	150	°C
Storage Temperature	T_{STG}	-55~+150	°C

Electrical Characteristics @Ta=25°C

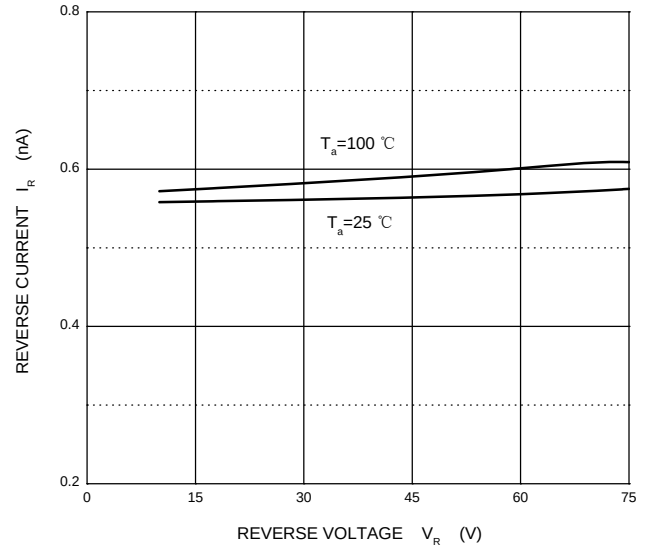
Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse breakdown voltage	$V_{(BR)}$	75			V	$I_R=100\mu A$
Forward voltage	V_{F1}			0.9	V	$I_F=1mA$
	V_{F2}			1	V	$I_F=10mA$
	V_{F3}			1.1	V	$I_F=50mA$
	V_{F4}			1.25	V	$I_F=150mA$
Reverse current	I_R			5	nA	$V_R=75V$
Diode capacitance	C_{tot}		2		pF	$V_R=0V,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

Typical Characteristics

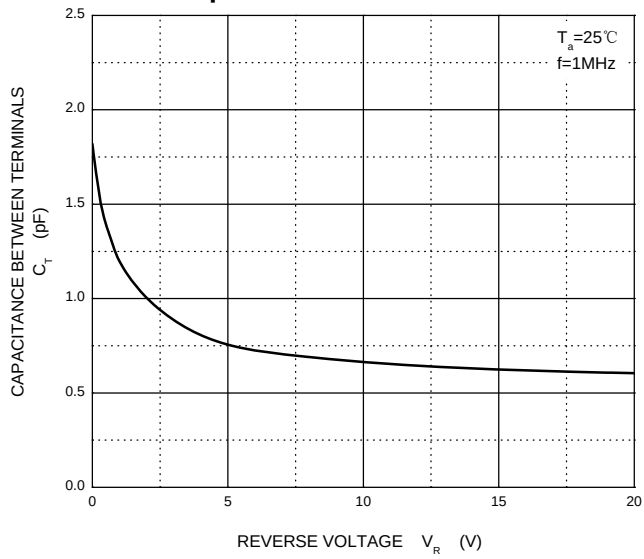
Forward Characteristics



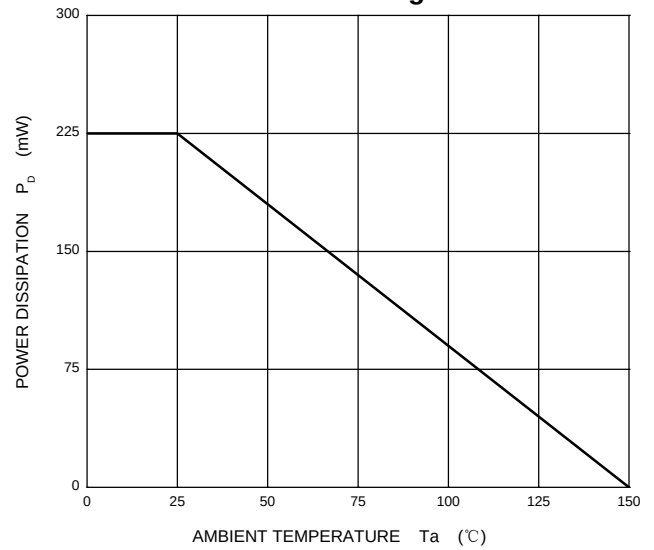
Reverse Characteristics



Capacitance Characteristics



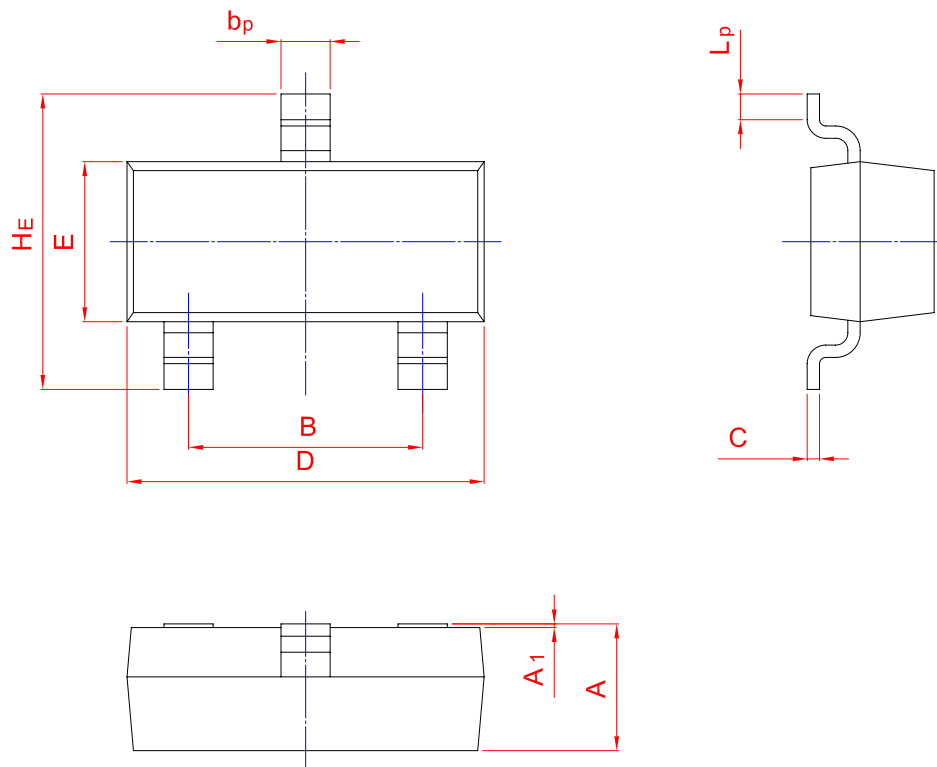
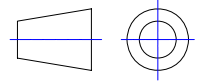
Power Derating Curve



PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT-23



UNIT	A	B	b_p	C	D	E	H_E	A_1	L_p
mm	1.40 0.95	2.04 1.78	0.50 0.35	0.19 0.08	3.10 2.70	1.65 1.20	3.00 2.20	0.100 0.013	0.50 0.20