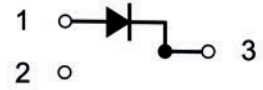
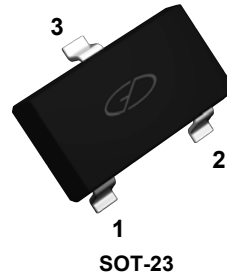


Features

- Fast switching speed
- For general purpose switching applications
- High conductance
- Low current leakage
- Small outline surface mount package
- RoHS compliant / green EMC



Schematic Diagram



Absolute Maximum Ratings ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Units
Working Peak Reverse Voltage	V_{RWM}	100	V
Repetitive Peak Reverse Voltage	V_{RRM}	120	V
Average Rectified Current	I_O	200	mA
Power Dissipation	P_{tot}	250	mW
Junction Temperature	T_J	150	$^{\circ}\text{C}$
Non-Repetitive Peak Forward Surge Current (@ $t=8.3\text{ms}$)	I_{FSM}	2.5	A
Forward DC Current	I_F	200	mA
Repetitive Peak Forward Current	I_{FRM}	625	mA
Thermal Resistance	R_{thJA}	500	$^{\circ}\text{C/W}$

Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Test Conditions	Min	Max	Units
Forward Voltage	V_F	$I_F=100\text{mA}$	-	1	V
		$I_F=200\text{mA}$	-	1.25	
Reverse Breakdown Voltage	V_R	$I_R=100\mu\text{A}$	120	-	V
Reverse Voltage Leakage Current	I_R	$V_R=100\text{V}$	-	100	nA
Diodes Capacitance	C_D	$V_R=0\text{V}$, $f=1.0\text{MHz}$	-	5	pF
Reverse Recovery Time	T_{rr}	$I_F=30\text{mA}$, $I_R=30\text{mA}$, $I_{rr}=3\text{mA}$, $R_L=100\Omega$	-	50	nS

Typical Characteristic Curves

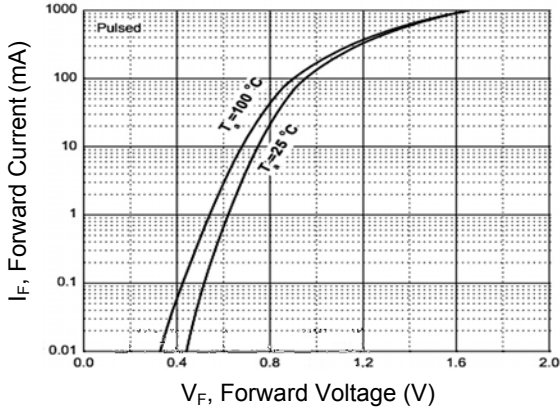


Figure 1. Forward Characteristics

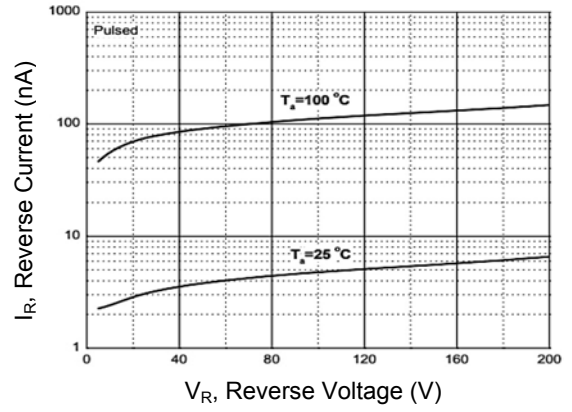


Figure 2. Reverse Characteristics

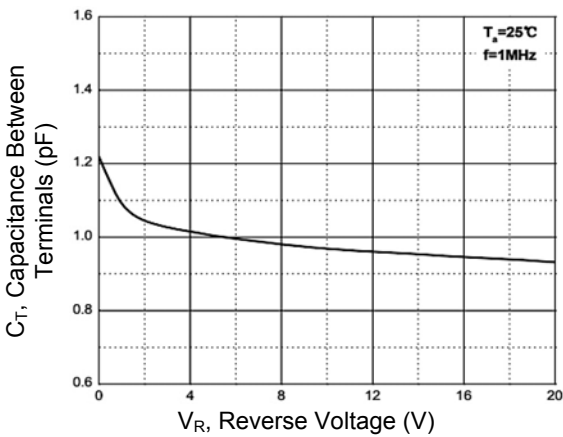


Figure 3. Capacitance Characteristics

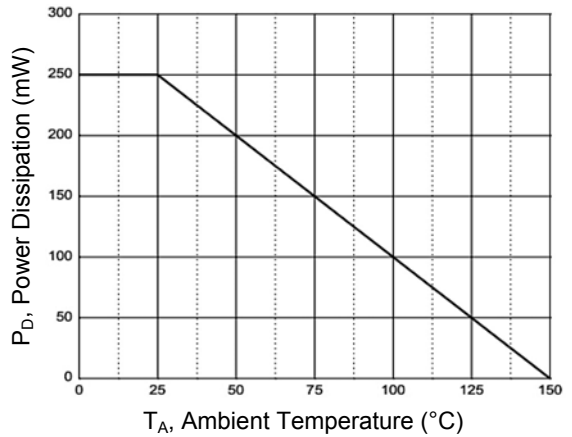
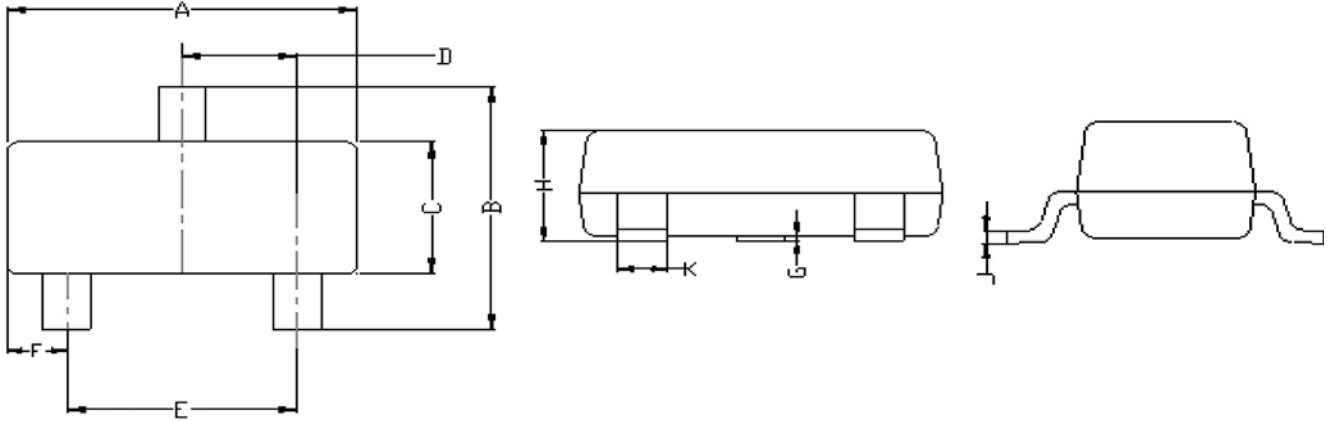


Figure 4. Power Derating Curve

Package Outline Dimensions (SOT-23)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	2.800	3.040	0.110	0.120
B	2.100	2.640	0.083	0.104
C	1.200	1.400	0.047	0.055
D	0.890	1.030	0.035	0.041
E	1.780	2.050	0.070	0.081
F	0.450	0.600	0.018	0.024
G	0.013	0.100	0.001	0.004
H	0.900	1.110	0.035	0.044
J	0.090	0.180	0.004	0.007
K	0.370	0.510	0.015	0.020

Order Information

Device	Package	Marking	Carrier	Quantity
BAS19	SOT-23	JP	Tape & Reel	3,000 Pcs / Reel

For more information, please contact us at: inquiry@goodarksemi.com