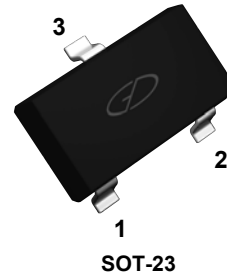
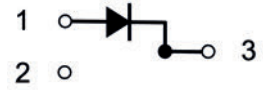


Features

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



SOT-23



Schematic Diagram



Absolute Maximum Ratings (T_A=25°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	°C
Non-Repetitive Peak Forward Surge Current (@ t=8.3ms)	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	°C/W

Electrical Characteristics (T_A=25°C unless otherwise noted)

Parameter	Symbol	Test Conditions	Min	Max	Units
Forward Voltage	V _F	I _F =100mA	-	1	V
		I _F =200mA	-	1.25	
Reverse Breakdown Voltage	V _R	I _R =100uA	120	-	V
Reverse Voltage Leakage Current	I _R	V _R =100V	-	100	nA
Diodes Capacitance	C _D	V _R =0V, f=1.0MHz	-	5	pF
Reverse Recovery Time	T _{rr}	I _F =30mA, I _R =30mA, I _{rr} =3mA, R _L =100Ω	-	50	nS

Typical Characteristic Curves

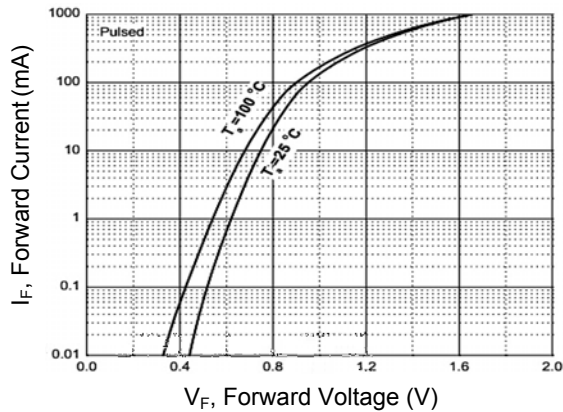


Figure 1. Forward Characteristics

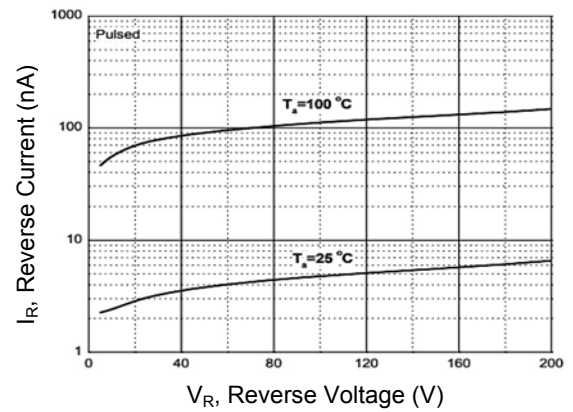


Figure 2. Reverse Characteristics

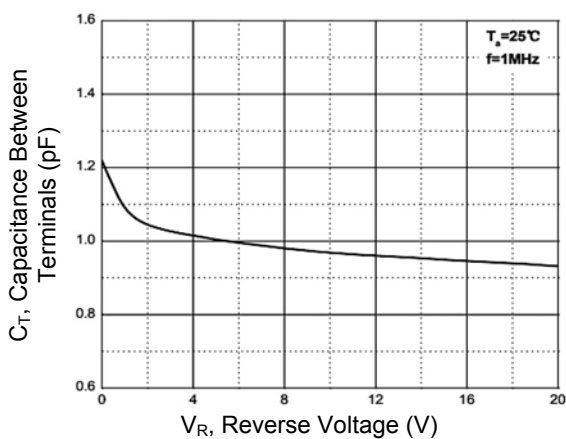


Figure 3. Capacitance Characteristics

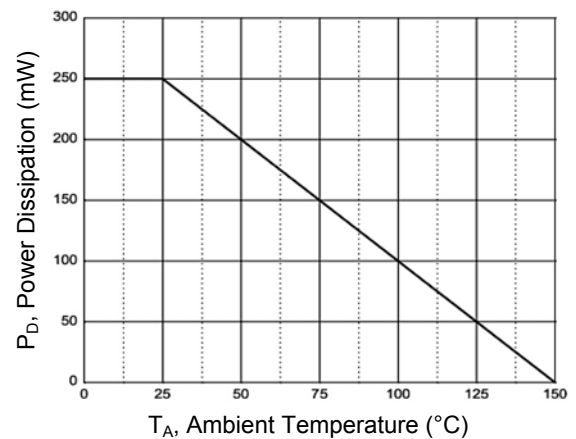
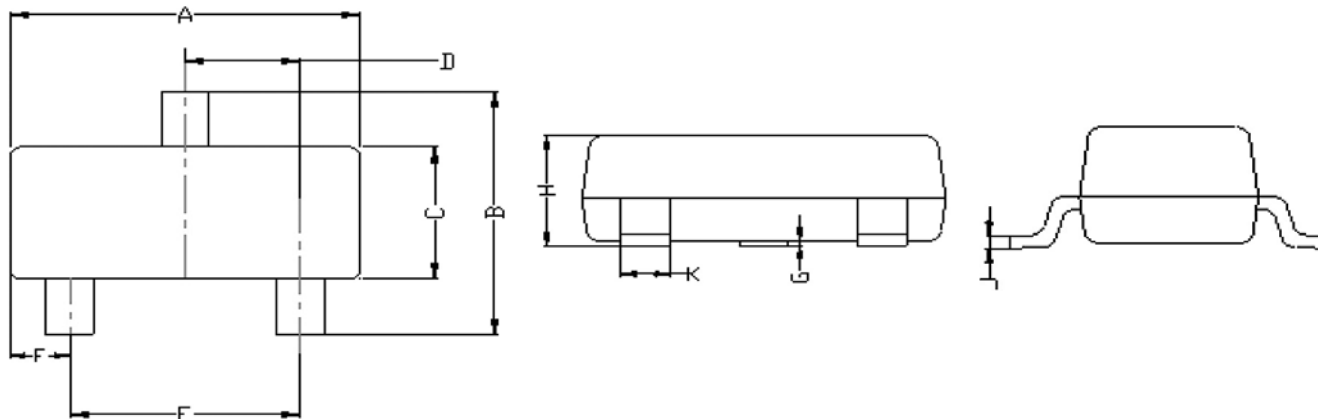


Figure 4. Power Derating Curve

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