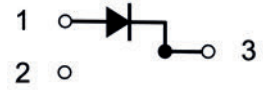
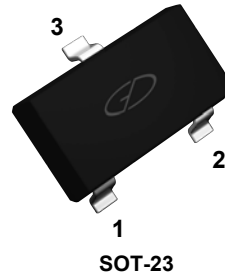


Features

- Fast switching speed
- Power dissipation of 225mW
- High stability and high reliability
- Low reverse leakage
- Lead free/RoHS compliant



Schematic Diagram



Absolute Maximum Ratings (T_A=25°C unless otherwise noted)

Parameters	Symbol	Value	Unit
Reverse Voltage	V _R	75	V
Peak Repetitive Reverse Voltage	V _{RRM}	100	V
Power Dissipation	P _D	225	mW
Average Rectified Current	I _O	150	mA
Peak Forward Surge Current @ T _p =1us (T _A =25 °C)	I _{FSM}	2.0	A
Operating Junction Temperature	T _J	150	°C
Storage Temperature Range	T _s	-55 to +150	°C
Thermal Resistance from Junction to Ambient	R _{θJA}	556	°C/W

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

Parameter	Symbols	Test Condition	Min	Max	Unit
Reverse Voltage	V _{BR}	I _R =100uA	75	-	V
Reverse Leakage Current	I _R	V _R =75V	-	1	uA
Forward Voltage	V _F	I _F =1.0mA	-	0.715	V
		I _F =10mA	-	0.855	
		I _F =50mA	-	1.00	
		I _F =150mA	-	1.25	
Reverse Recovery Time	T _{RR}	I _F =I _R =10mA	-	6	nS
		R _L =100Ω			
		I _{RR} =0.1 X I _R			
Capacitance	C _T	V _R =0V, F=1MHZ	-	2	pF

Typical Characteristic Curves

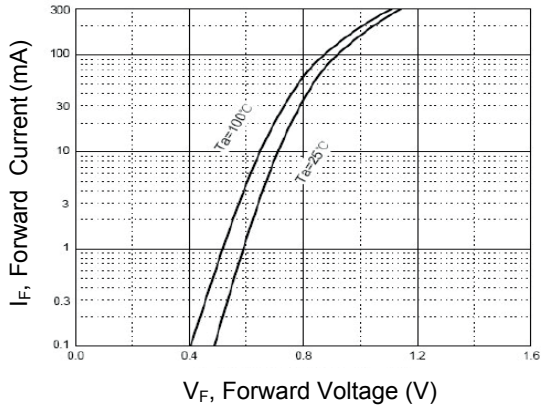


Figure 1. Forward Characteristic

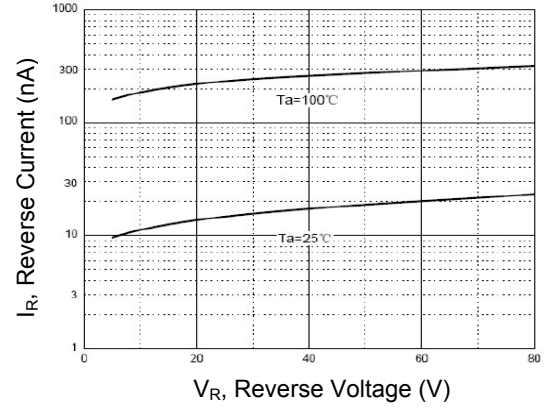


Figure 2. Reverse Characteristic

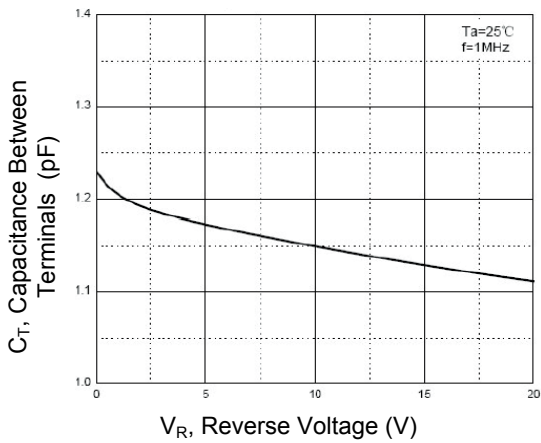


Figure 3. Capacitance Characteristic

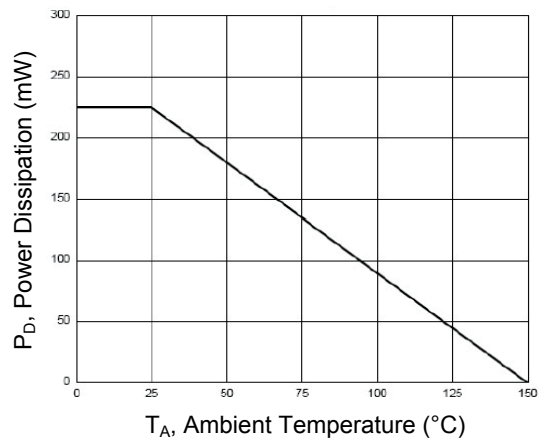
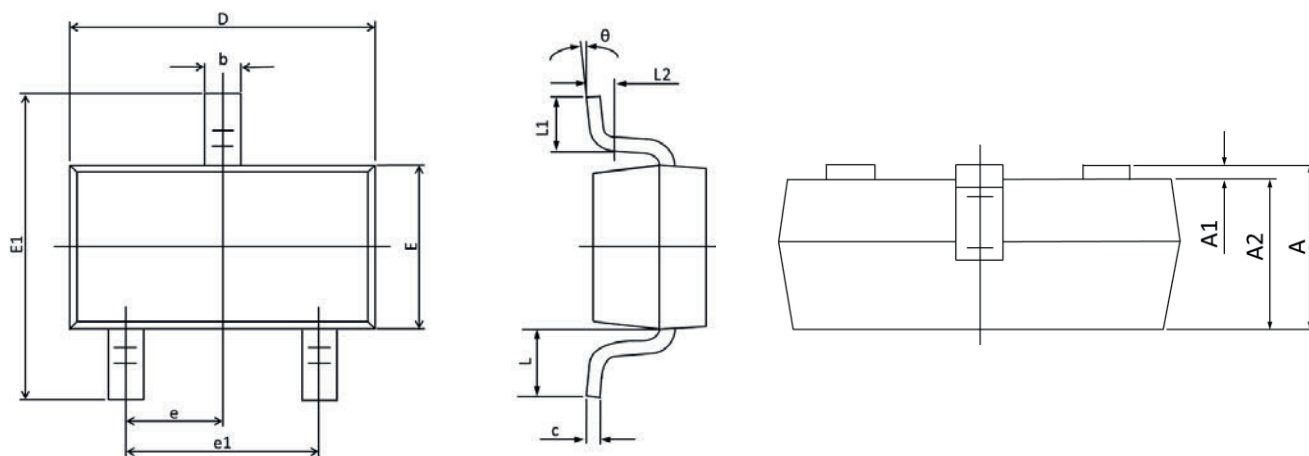


Figure 4. Power Derating Curve

Package Outline Dimensions (SOT-23)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.95 TYP.		0.037 TYP.	
e1	1.800	2.000	0.071	0.079
L	0.55 REF.		0.022 REF.	
L1	0.300	0.500	0.012	0.020
L2	0.25 TYP.		0.01 TYP.	
θ	0°	8°	0°	8°

Order Information

Device	Package	Marking	Carrier	Quantity
BAS16	SOT-23	A6	Tape & Reel	3,000pcs / Reel