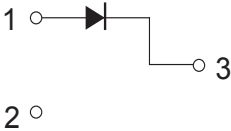
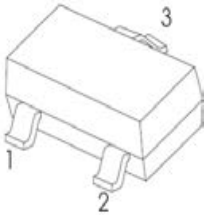


SOT-23 Plastic-Encapsulate Diodes

BAS16

Switching Diodes

SOT-23

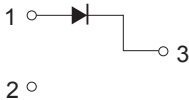
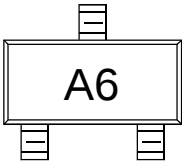


FEATURES

- Fast Switching Speed,High Conductance
- For General Purpose Switching Applications

MARKING

Equivalent Circuit



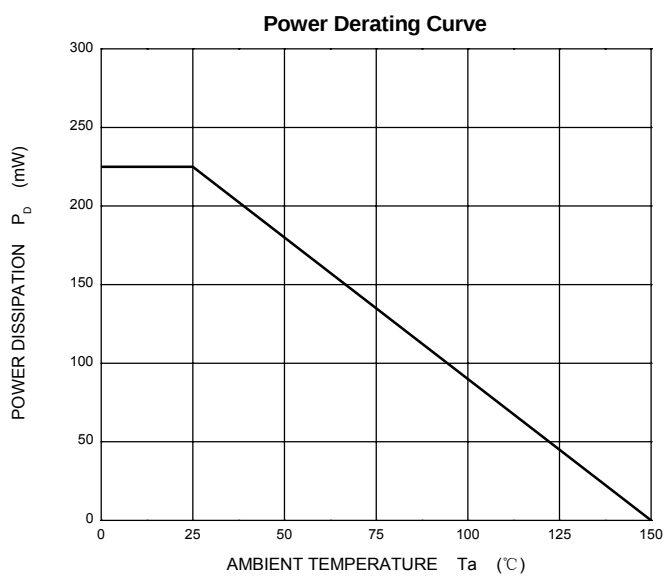
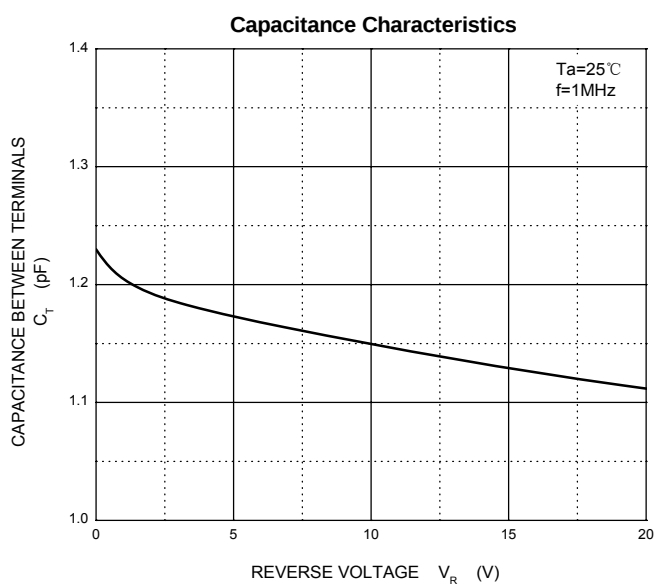
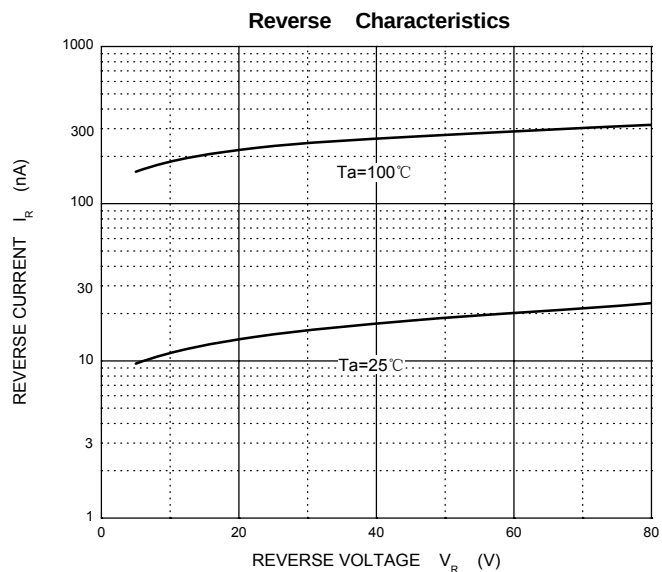
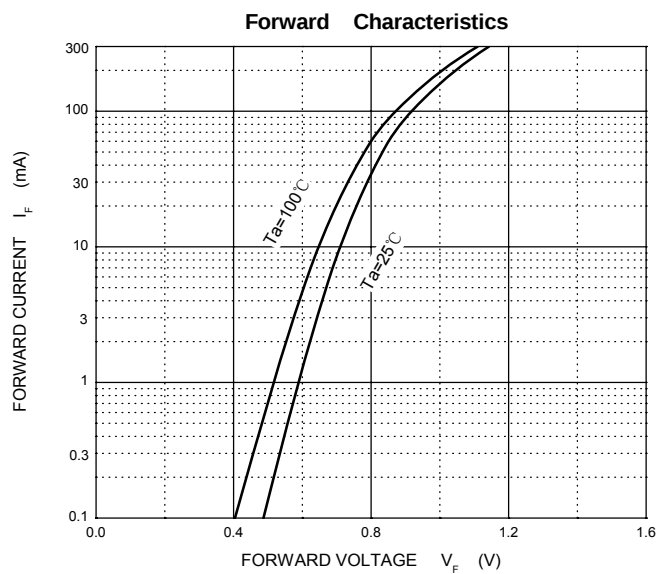
MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	V _{RM}	100	V
Peak Repetitive Peak Reverse Voltage	V _{RRM}	75	V
Working Peak Reverse Voltage	V _{RWM}		
DC Blocking Voltage	V _R		
RMS Reverse Voltage	V _{R(RMS)}	53	V
Forward Continuous Current	I _{FM}	300	mA
Average Rectified Output Current	I _O	150	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	I _{FSM}	2.0	A
Power Dissipation	P _d	225	mW
Thermal Resistance Junction to Ambient	R _{θJA}	556	°C/W
Operation Junction and Storage Temperature Range	T _J ,T _{STG}	-55~+150	°C

ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	V _(BR)	I _R = 100μA	75		V
Reverse voltage leakage current	I _R	V _R =75V		1	μA
Forward voltage	V _F	I _F =1mA I _F =10mA I _F =50mA I _F =150mA		0.715 0.855 1 1.25	V
Diode capacitance	C _D	V _R =0, f=1MHz		2	pF
Reveres recovery time	t _{rr}	I _F =I _R =10mA, I _{rr} =0.1×I _R , R _L =100Ω		6	ns

Typical Characteristics



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	0.950 TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

Suggested Pad Layout (SOT-23)



Note:
1.Controlling dimension:in millimeters.
2.General tolerance:± 0.05mm.
3.The pad layout is for reference purposes only.