

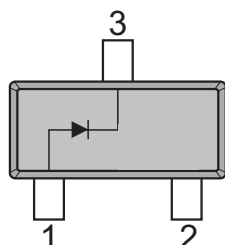
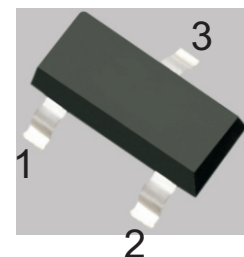


Switching Diodes

FEATURES

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

SOT-23



BAS16

Maximum Ratings @Ta=25°C

Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
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=1.0us @t=1.0s	I_{FSM}	2.0 1.0	A
Power dissipation	P_D	225	mW
Thermal resistance junction to ambient	R_{thJA}	556	°C/W
Junction temperature	T_J	150	°C
Storage temperature range	T_{STG}	-55 ~ +150	°C

Electrical Characteristics@Ta=25°C

Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	V_{BR}	$I_R=100\mu A$	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	$V_R=0V, f=1MHz$		2	pF
Reveres recovery time	t_{rr}	$I_F=I_R=10mA,$ $I_{rr}=0.1 \times I_R, R_L=100\Omega$		6	ns



Fig.1 Power Derating Curve

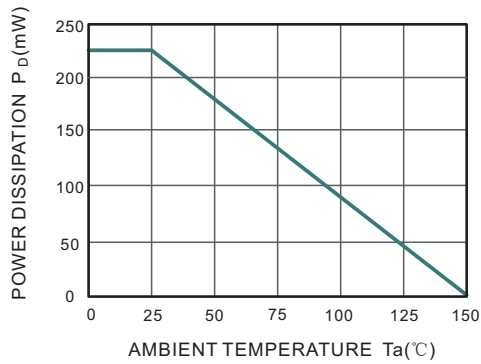


Fig.2 Reverse Characteristics

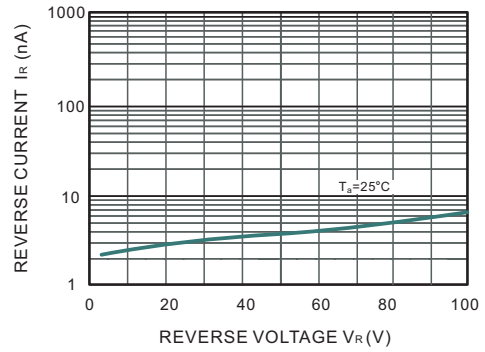


Fig.3 Forward Characteristics

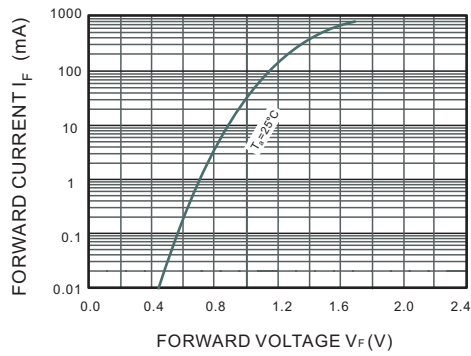
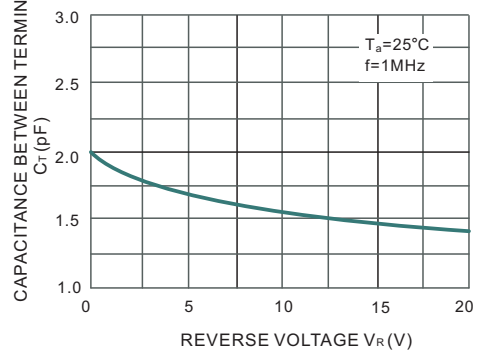
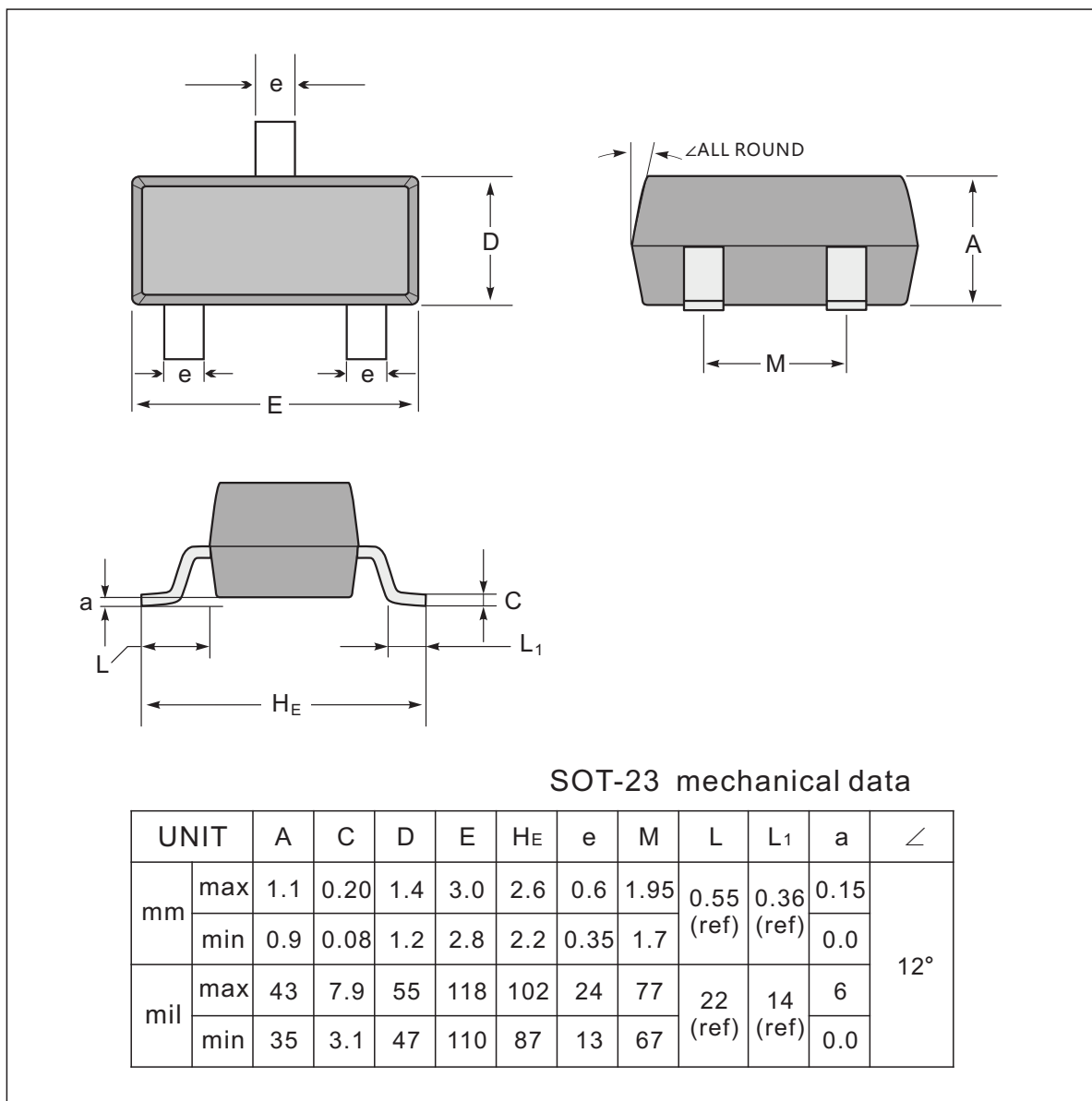


Fig.4 Capacitance Characteristics

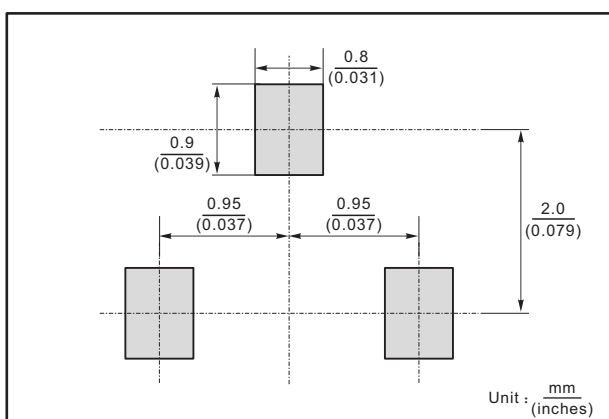




SOT-23 Package Outline Dimensions



The recommended mounting pad size



Marking

Type number	Marking code
BAS16	A6