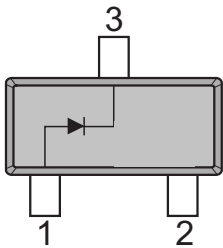


Switching Diodes	
<p><u>SOT-23</u></p> 	<p>Features</p> <ul style="list-style-type: none"> • Fast Switching Speed • For General Purpose Switching Applications • High Conductance

Maximum Ratings @Ta=25°C

Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V _{RM}	100	V
Repetitive peak reverse voltage Working peak reverse voltage DC blocking voltage	V _{RRM} V _{RWM} V _R	75	V
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 =100μA	75		V
Reverse voltage leakage current	I _R	V _R =75V		1	uA
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×I _R , R _L =100Ω		6	ns

Fig.1 Power Derating Curve

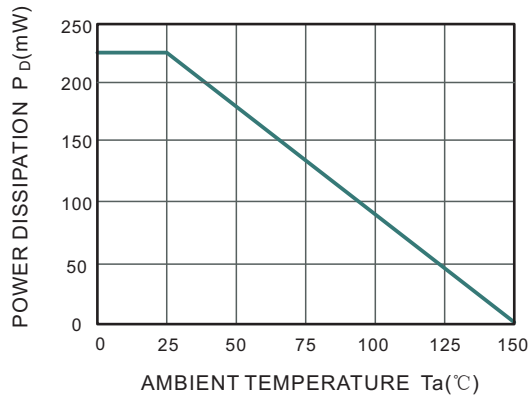


Fig.2 Reverse Characteristics

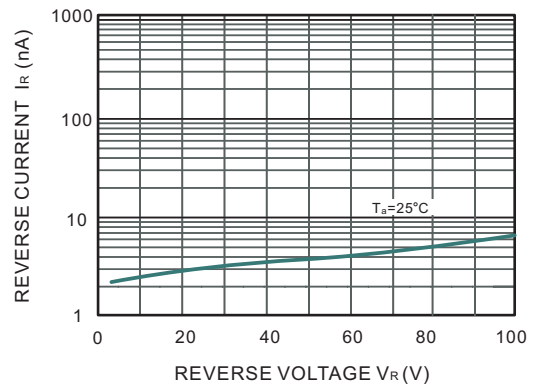


Fig.3 Forward Characteristics

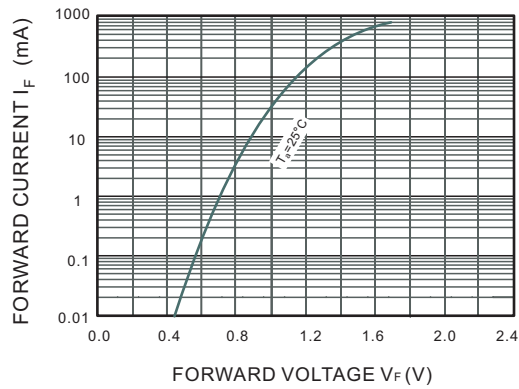
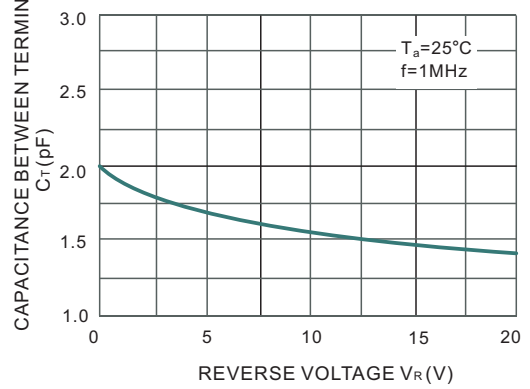
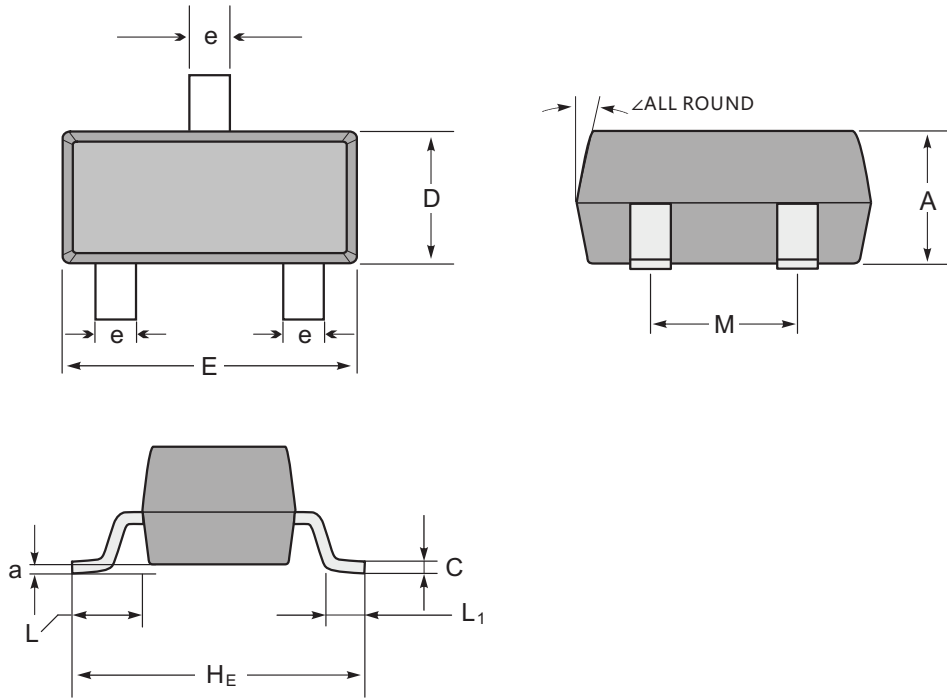


Fig.4 Capacitance Characteristics



SOT-23 Package Outline Dimensions

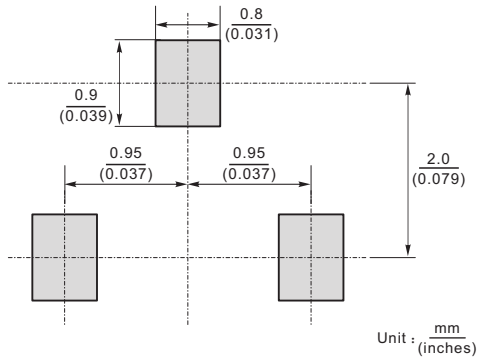


SOT-23 mechanical data

UNIT		A	C	D	E	HE	e	M	L	L1	a	∠
mm	max	1.1	0.20	1.4	3.0	2.6	0.6	1.95	0.55 (ref)	0.36 (ref)	0.15	12°
	min	0.9	0.08	1.2	2.8	2.2	0.35	1.7			0.0	
mil	max	43	7.9	55	118	102	24	77	22 (ref)	14 (ref)	6	
	min	35	3.1	47	110	87	13	67			0.0	

The recommended mounting pad size

Marking



Type number	Marking code
BAS16	A6