EVVOSEMI®
THINK CHANGE DO

ESD TVS MOS LDO Diode Sensor DC-DC

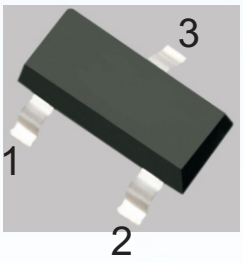
Product Specification

Domestic Part Number	EVBAV23X-S1
Overseas Part Number	BAV23X
Equivalent Part Number	BAV23X

"S1" means SOT-23

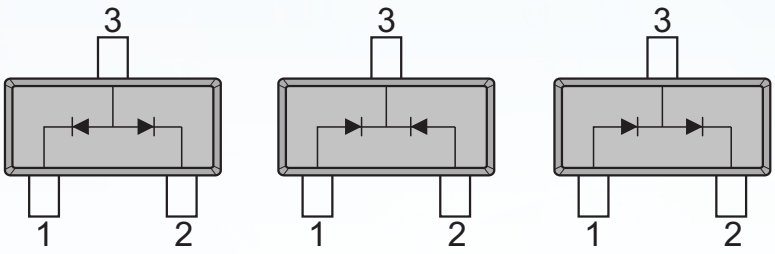
Switching Diodes

SOT-23



FEATURES

- Fast Switching Speed
- Surface mount package ideally Suited for Automatic Insertio
- High Conductance



BAV23A **BAV23C** **BAV23S**

Maximum Ratings @Ta=25℃

Parameter	Symbol	Value	Unit
Repetitive peak reverse voltage	V_{RRM}	250	V
Average rectified output current	I_O	200	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	I_{FSM}	1.0	A
Power dissipation	P_D	350	mW
Thermal resistance junction to ambient	R_{thJA}	357	℃/W
Junction temperature	T_J	150	℃
Storage temperature range	T_{STG}	-55 ~ +150	℃

Electrical Characteristics@Ta=25℃

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	V_{BR}	I_R=100μA	250			V
Reverse voltage leakage current	I_R	V_R=200V			0.1	uA
Forward voltage	V_F	I_F=100mA I_F=200mA			1.0 1.25	V
Diode capacitance	C_D	V_R=0V, f=1MHz		5		pF
Reveres recovery time	t_{rr}	I_F=I_R=30mA,V_R=6V Irr=3mA,$R_{L=100Ω}$			50	ns

Fig.1 Power Derating Curve

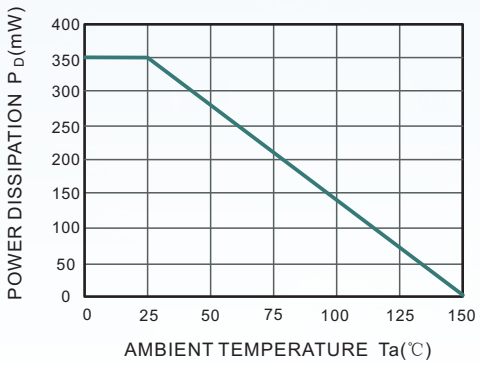


Fig.2 Reverse Characteristics

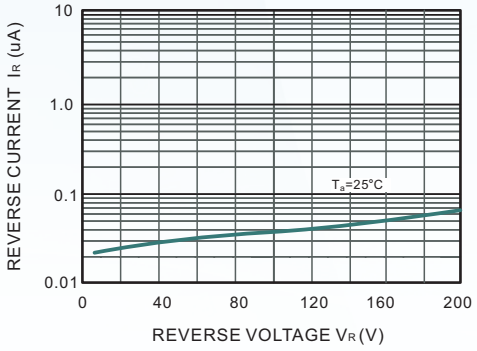


Fig.3 Forward Characteristics

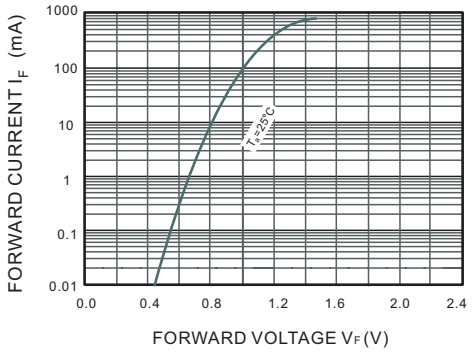
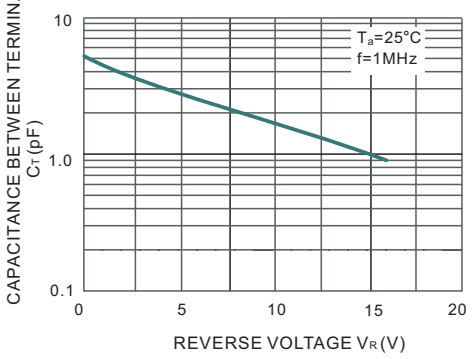
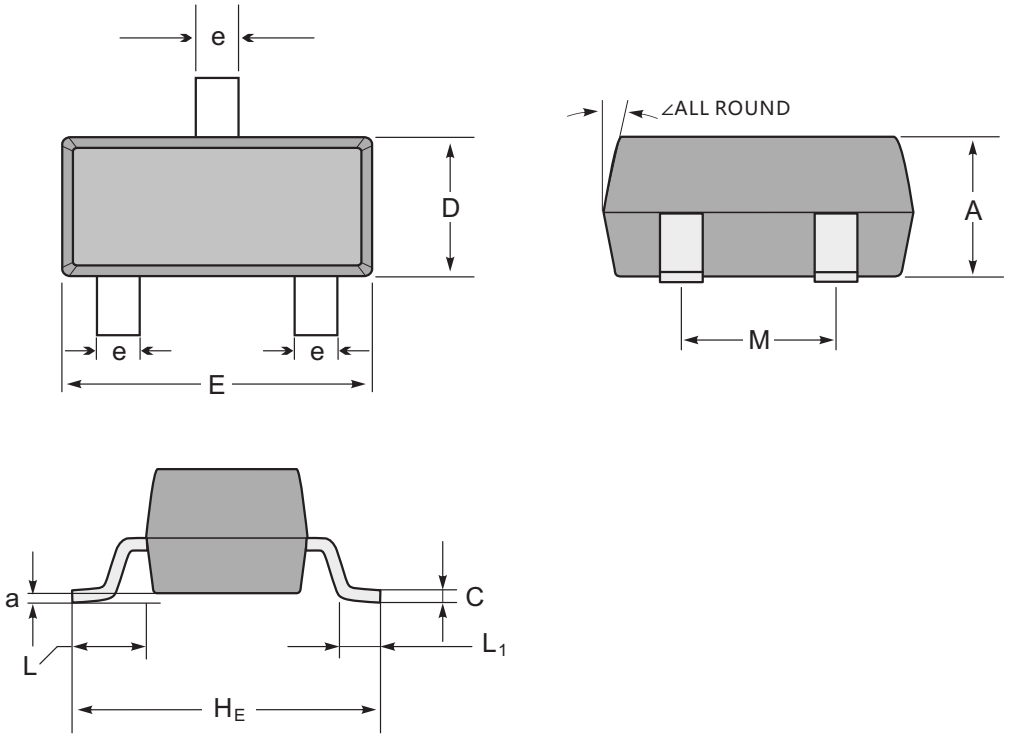


Fig.4 Capacitance Characteristics



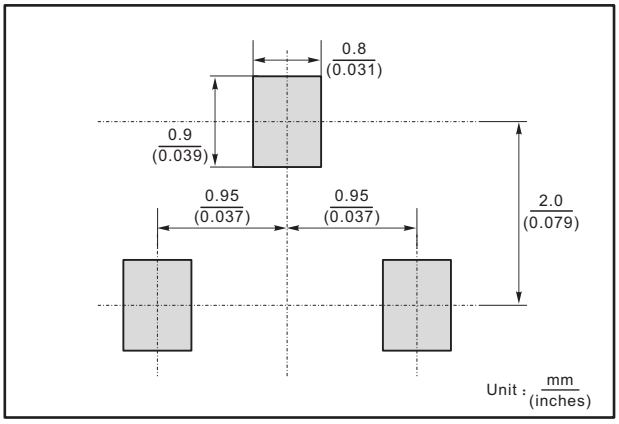
SOT-23 Package Outline Dimensions



SOT-23 mechanical data

UNIT		A	C	D	E	H_E	e	M	L	L_1	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
BAV23A	KT7
BAV23C	KT6
BAV23S	KL31

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