

EVVOSEMI[®]

THINK CHANGE DO



ESD



TVS



MOS



LDO



Diode



Sensor



DC-DC

Product Specification

▶ Domestic	Part Number	EVBAS21/X-S1
▶ Overseas	Part Number	BAS21/X
▶ Equivalent	Part Number	BAS21/X

"S1" means SOT-23

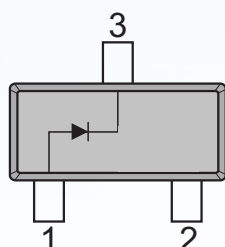
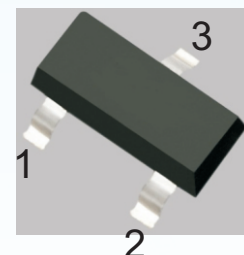
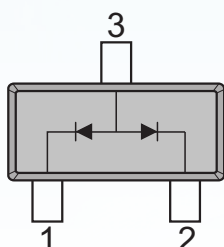
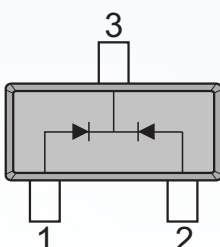
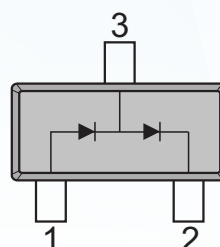
EV is the abbreviation of name EVVO

Switching Diodes

FEATURES

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

SOT-23


BAS21

BAS21A

BAS21C

BAS21S

Maximum Ratings @Ta=25°C

Parameter	Symbol	Value	Unit
Repetitive peak reverse voltage	V_{RRM}	250	V
Working peak reverse voltage	V_{RWM}		
DC blocking voltage	V_R		
Forward continuous current	I_{FM}	400	mA
Average rectified output current	I_O	200	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	I_{FSM}	2.5	A
Repetitive peak forward surge current	I_{FRM}	625	mA
Power dissipation	P_D	225	mW
Thermal resistance junction to ambient	R_{thJA}	555	°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}	$I_R=100\mu A$	250		V
Reverse voltage leakage current	I_R	$V_R=200V$		0.1	μA
Forward voltage	V_F	$I_F=100mA$ $I_F=200mA$		1000 1250	mV
Diode capacitance	C_D	$V_R=0V, f=1MHz$		5	pF
Reveres recovery time	t_{rr}	$I_F=I_R=30mA,$ $I_{rr}=0.1 \times I_R, R_L=100\Omega$		50	ns

Fig.1 Power Derating Curve

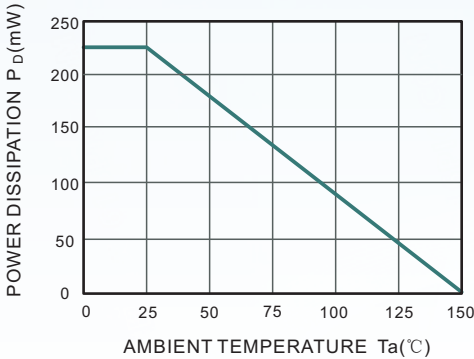


Fig.2 Reverse Characteristics

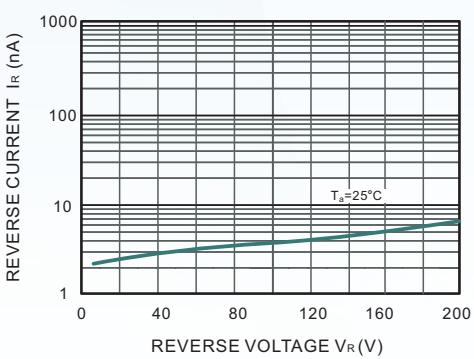


Fig.3 Forward Characteristics

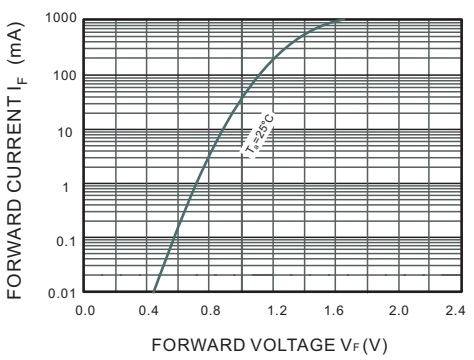
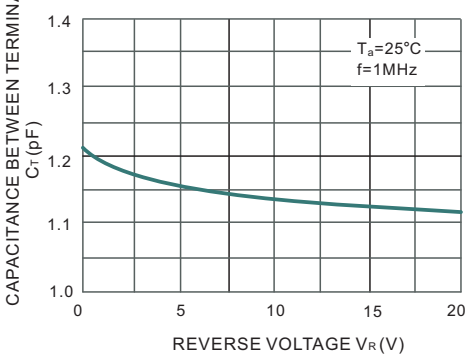
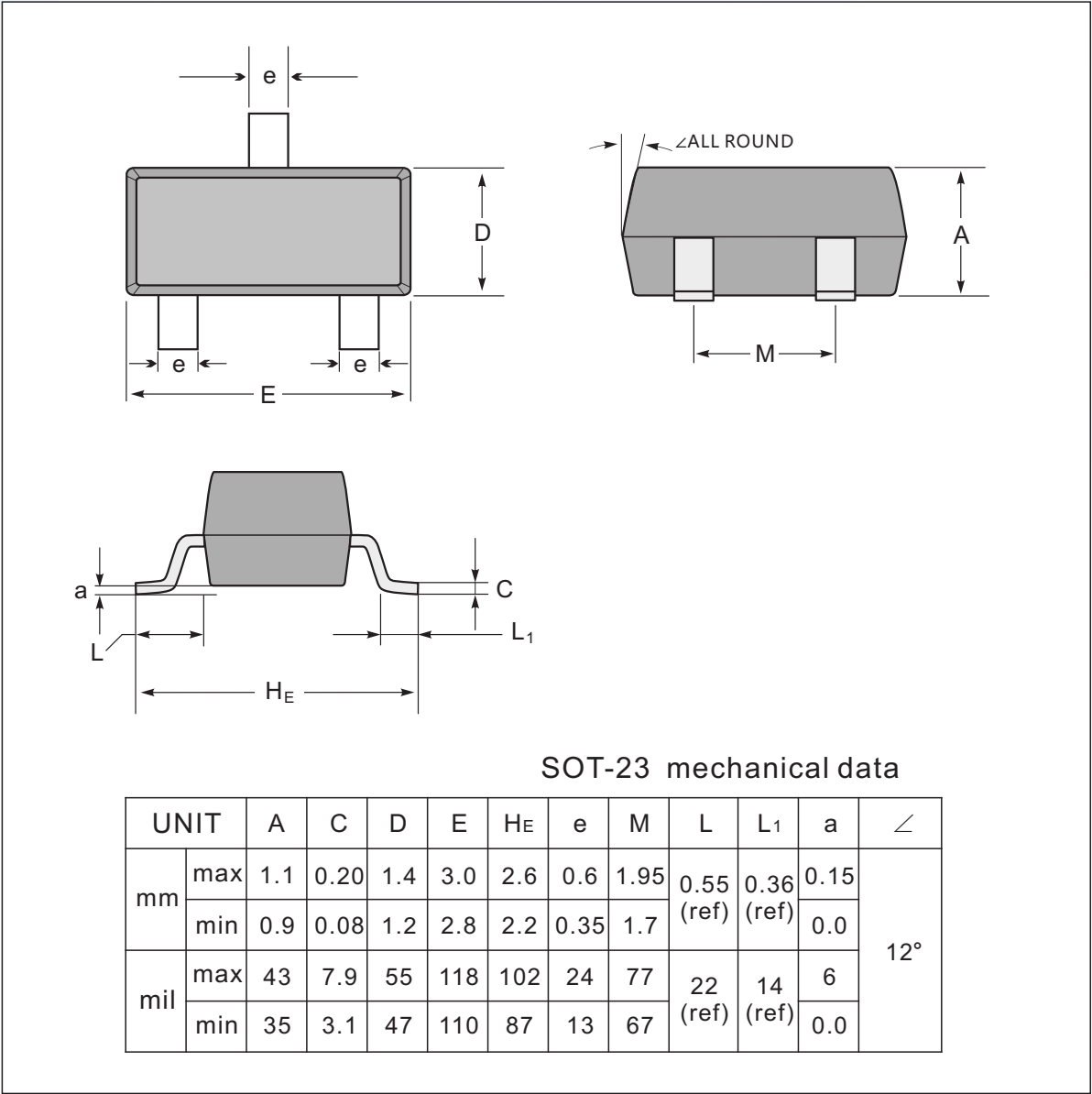


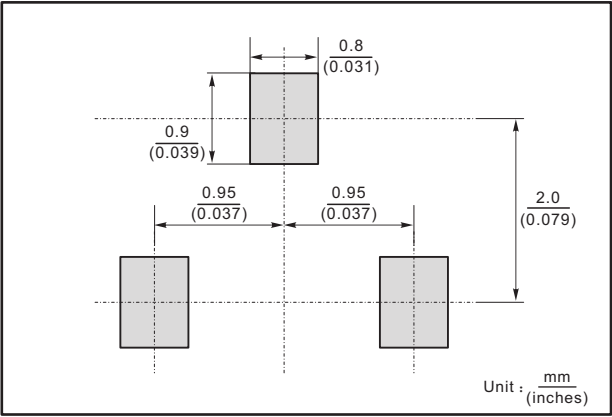
Fig.4 Capacitance Characteristics



SOT-23 Package Outline Dimensions



The recommended mounting pad size



Marking

Type number	Marking code
BAS21	JS
BAS21A	JS2
BAS21C	JS3
BAS21S	JS4

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