

EVVOSEMI[®]

THINK CHANGE DO



ESD



TVS



MOS



LDO



Diode



Sensor



DC-DC

Product Specification

▶ Domestic	Part Number	EVBAS16-S1
▶ Overseas	Part Number	BAS16
▶ Equivalent	Part Number	BAS16

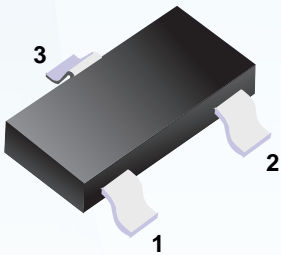
"S1" means SOT-23

EV is the abbreviation of name EVVO

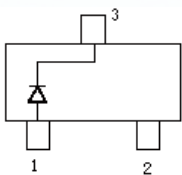
■ Switching Diodes

■ Features

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



■ Simplified outline(SOT-23)



■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Non-Repetitive Peak Reverse Voltage	VRM	100	V
Peak Repetitive Reverse Voltage	VRRM	75	V
Working Peak Reverse Voltage	VRWM		
DC Blocking Voltage	VR		
RMS Reverse Voltage	VR(RMS)	53	V
Average Rectified Output Current	IO	200	mA
Forward Continuous Current	IFM	300	mA
Non-Repetitive Peak Forward Surge Current @ t = 1.0 μ s @ t = 1.0s	IFSM	2.0	A
		1.0	
Power Dissipation	Pd	250	mW
Thermal Resistance Junction to Ambient Air	R θ JA	357	℃/W
Operating and Storage Temperature Range	T,TSTG	-55 to +150	℃

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse Breakdown Voltage	V(BR)R	IR=100 μ A	75			V
Forward Voltage	VF	IF = 1.0mA			0.715	V
		IF = 10mA			0.855	
		IF = 50mA			1.0	
		IF = 150mA			1.25	
Leakage Current	IR	VR = 75V			1.0	μ A
		VR = 20V			25	nA
Junction Capacitance	Cj	VR = 0, f = 1.0MHz			2	pF
Reverse Recovery Time	trr	IF = IR = 10mA,Irr = 0.1 X IR, RL = 100 Ω			4	ns

■ Marking

Marking	A6
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■ Typical Characteristics

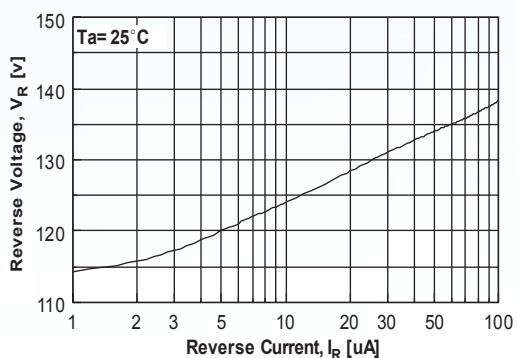


Figure 1. Reverse Voltage vs Reverse Current
BV - 1.0 to 100 uA

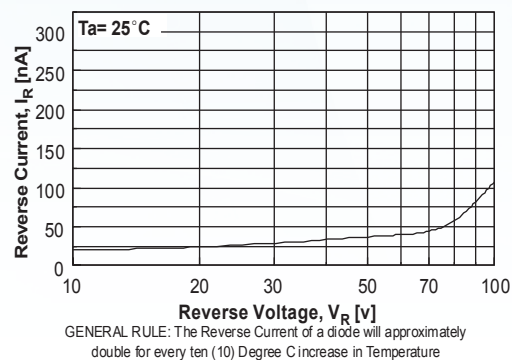


Figure 2. Reverse Current vs Reverse Voltage
IR - 10 to 100 V

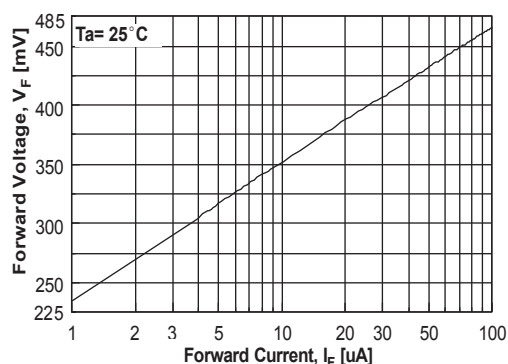


Figure 3. Forward Voltage vs Forward Current
VF - 1.0 to 100 uA

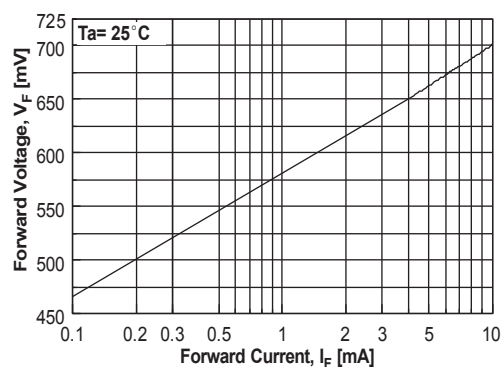


Figure 4. Forward Voltage vs Forward Current
VF - 0.1 to 10 mA

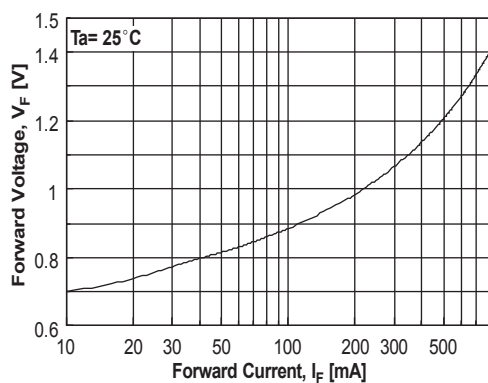


Figure 5. Forward Voltage vs Forward Current
VF - 10 - 800 mA

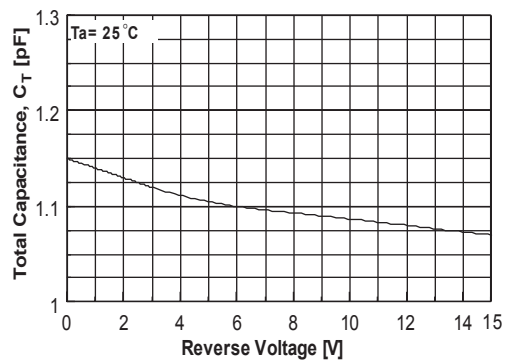


Figure 6. Total Capacitance

■ Typical Characteristics

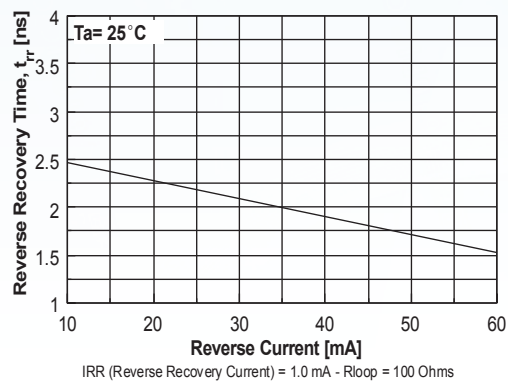


Figure 7. Reverse Recovery Time
vs Reverse Current
TRR - IR 10 mA vs 60 mA

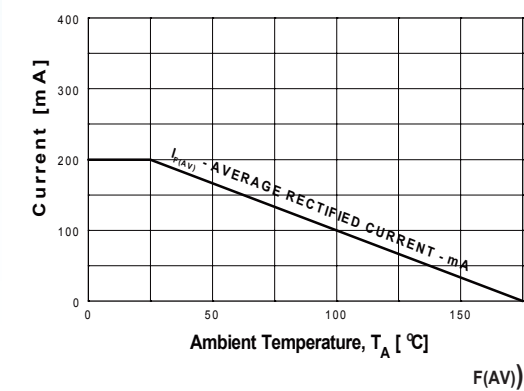


Figure 8. Average Rectified Current (I_A)
versus Ambient Temperature (T)

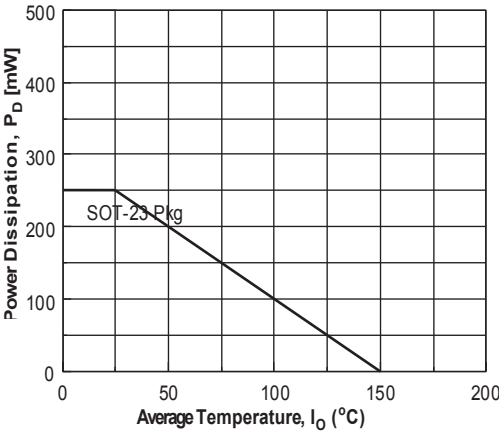
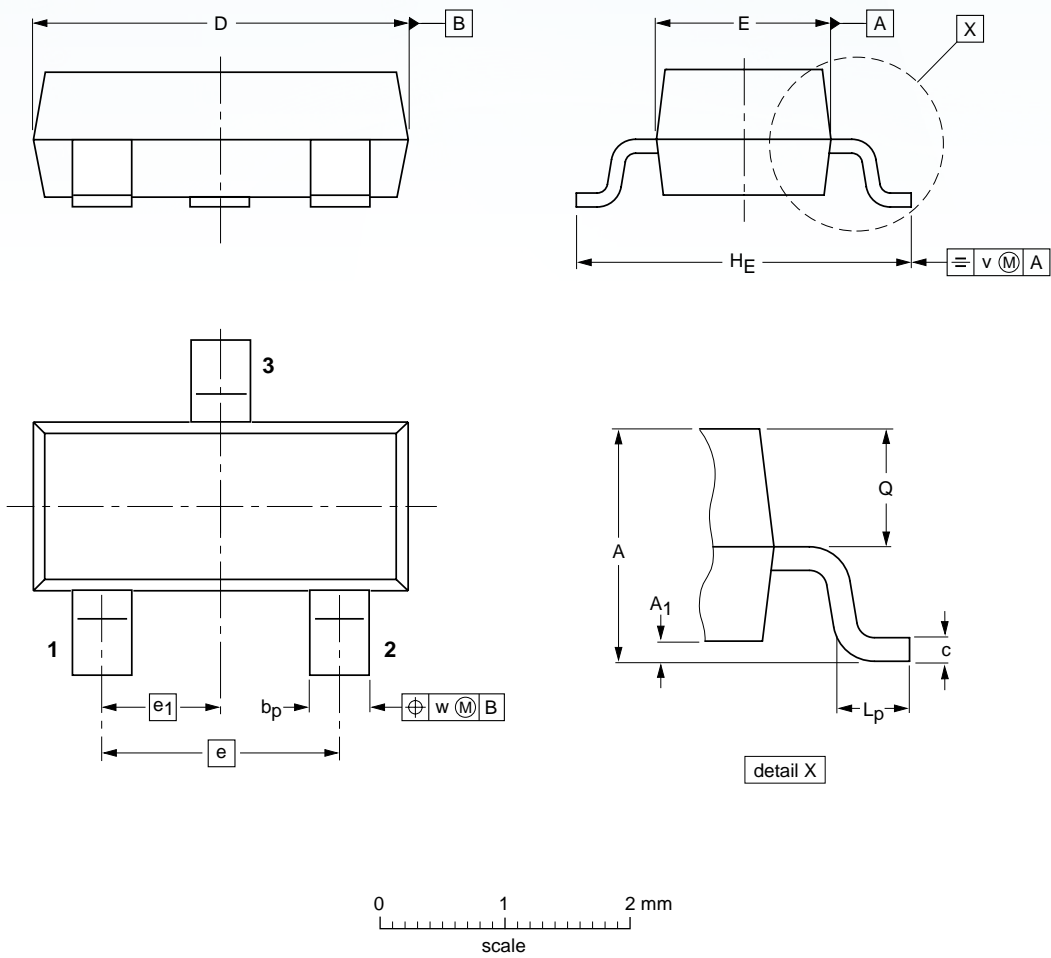


Figure 9. Power Derating Curve

■ SOT-23



DIMENSIONS (mm are the original dimensions)

UNIT	A	A ₁ max.	b _p	c	D	E	e	e ₁	H _E	L _p	Q	v	w
mm	1.1 0.9	0.1	0.48 0.38	0.15 0.09	3.0 2.8	1.4 1.2	1.9	0.95	2.5 2.1	0.45 0.15	0.55 0.45	0.2	0.1

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