

# EVVOSEMI<sup>®</sup>

THINK CHANGE DO



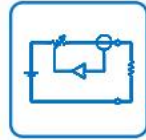
ESD



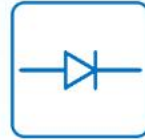
TVS



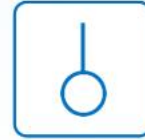
MOS



LDO



Diode



Sensor



DC-DC

## Product Specification

▶ Domestic	Part Number	EVBAV99-S1
▶ Overseas	Part Number	BAV99
▶ Equivalent	Part Number	BAV99

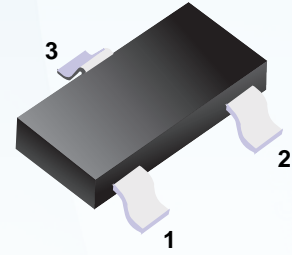
"S1" means SOT-23

EV is the abbreviation of name EVVO

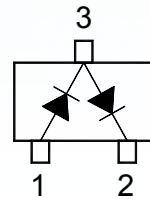
■ Switching Diodes

■ Features

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



■ Simplified outline(SOT-23)



■ Marking

Marking	A7
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■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	100	V
Continuous Reverse Voltage	V <sub>R</sub>	75	
Forward Current (Double Diode Loaded)	I <sub>F</sub>	125	mA
Forward Current (Single Diode Loaded)		215	
Repetitive Peak Forward Current	I <sub>FRM</sub>	450	
Non-repetitive Peak Forward Surge Current	I <sub>FSM</sub>	t=1s 0.5	A
		t=1ms 1	
		t=1us 1.5	
Power Dissipation	P <sub>d</sub>	350	mW
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature range	T <sub>stg</sub>	-65 to 150	

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	V <sub>R</sub>	I <sub>R</sub> = 100 uA	100			V
Forward voltage	V <sub>F</sub>	I <sub>F</sub> = 1 mA			0.715	
		I <sub>F</sub> = 10 mA			0.855	
		I <sub>F</sub> = 50 mA			1	
		I <sub>F</sub> = 150 mA			1.25	
Reverse voltage leakage current	I <sub>R</sub>	V <sub>R</sub> = 25 V			30	nA
		V <sub>R</sub> = 75 V			1	uA
		V <sub>R</sub> = 25 V , T <sub>J</sub> =150°C			30	
		V <sub>R</sub> = 75 V , T <sub>J</sub> =150°C			50	
Junction capacitance	C <sub>j</sub>	V <sub>R</sub> = 0 V, f= 1 MHz			1.5	pF
Reverse recovery time	t <sub>rr</sub>	I <sub>F</sub> =I <sub>R</sub> =10mA, I <sub>R</sub> =1mA, R <sub>L</sub> =100Ω			4	ns

■ Typical Characteristics

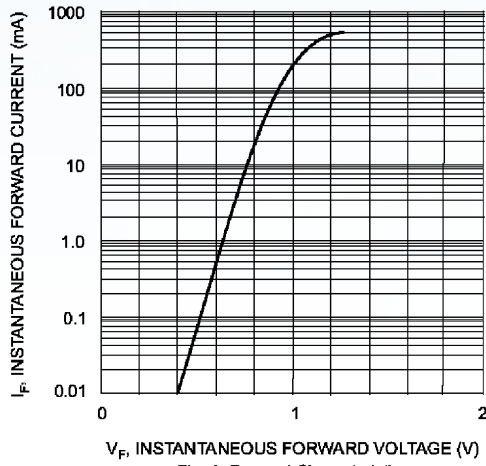


Fig. 1 Forward Characteristics

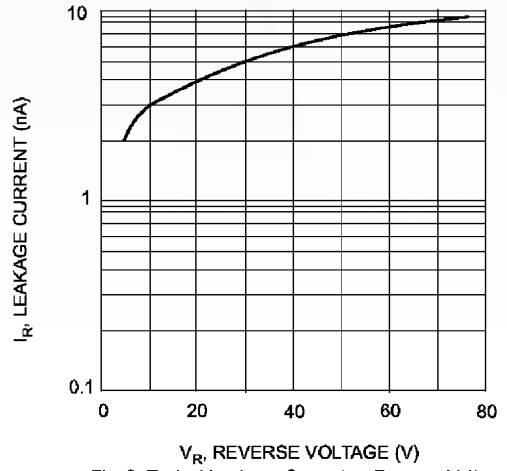


Fig. 2 Typical Leakage Current vs Reverse Voltage

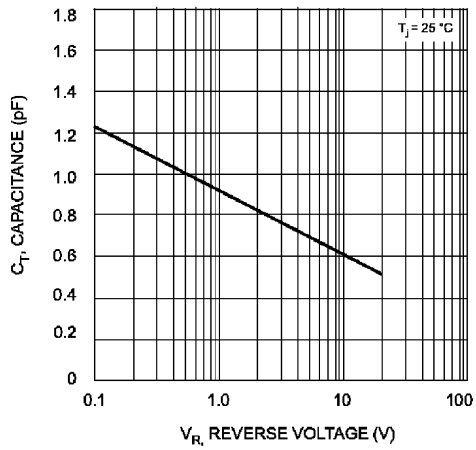
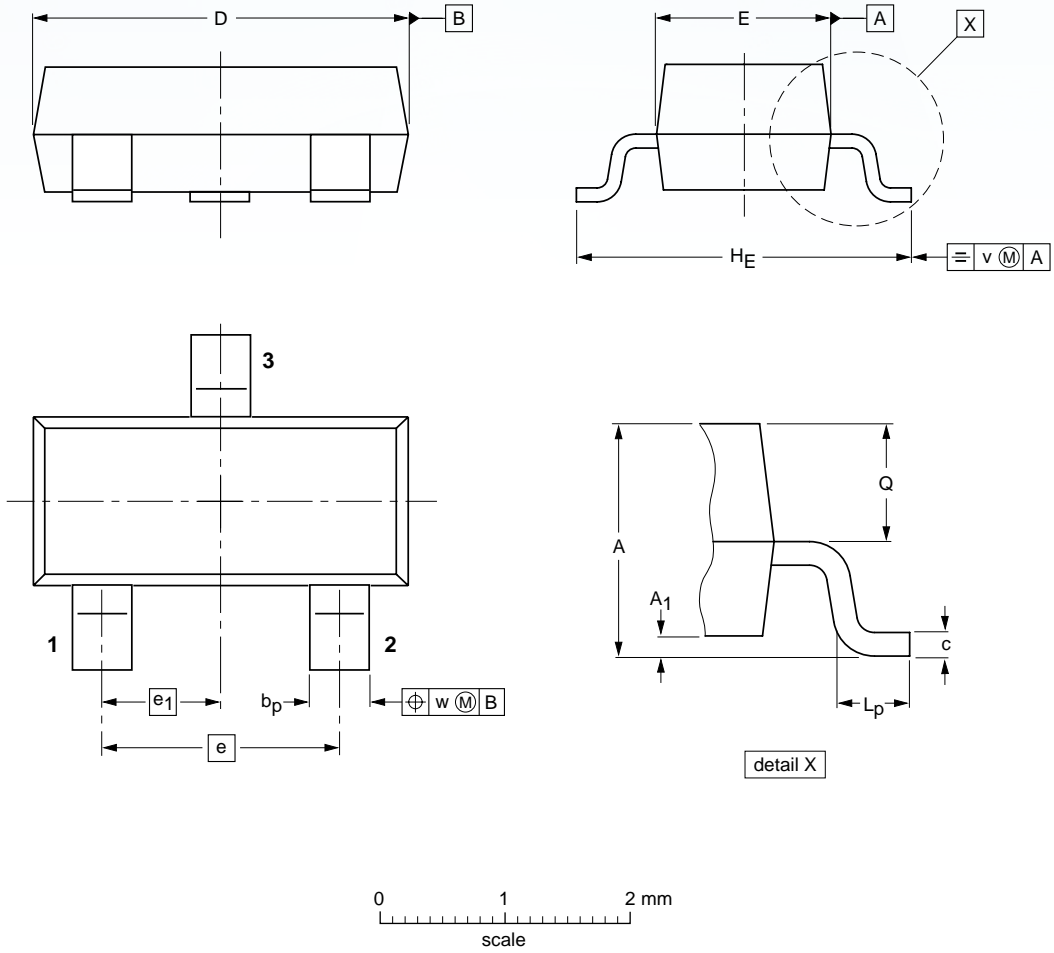


Fig. 3 Typical Total Capacitance vs Reverse Voltage

■ SOT-23



DIMENSIONS (mm are the original dimensions)

UNIT	A	A <sub>1</sub> max.	b <sub>p</sub>	c	D	E	e	e <sub>1</sub>	H <sub>E</sub>	L <sub>p</sub>	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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