EVVOSEMI®

THINK CHANGE DO

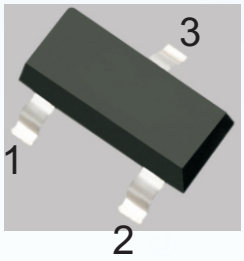
ESD TVS MOS LDO Diode Sensor DC-DC

Product Specification

Domestic Part Number	EVBAS40-S1, EVBAS40-XX-S1
Overseas Part Number	BAS40, BAS40-XX
Equivalent Part Number	BAS40, BAS40-XX

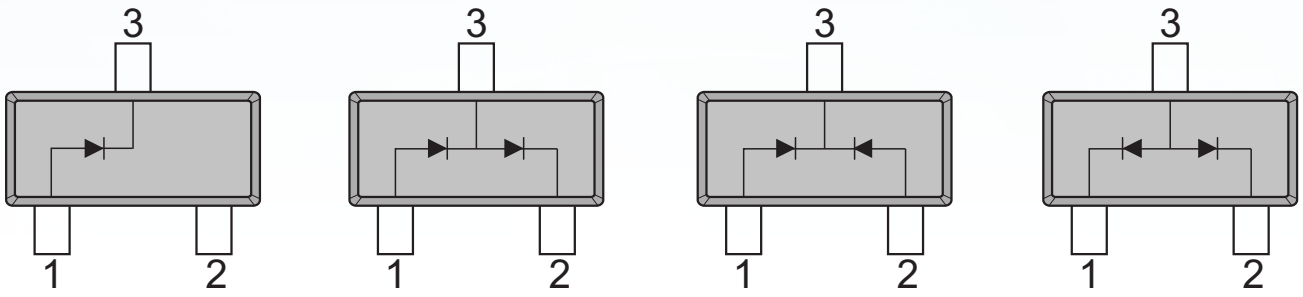
"S1" means SOT-23

SOT-23



BAS40/-04/-05/-06
SCHOTTKY BARRIER DIODE

FEATURES
- Low Forward Voltage
- Fast Switching



BAS40 BAS40-04 BAS40-05 BAS40-06

MAXIMUM RATINGS (Ta=25℃ unless otherwise noted)

Parameter	Symbol	Value	Unit
DC Blocking Voltage Working Peak Reverse Voltage Peak Repetitive Peak Reverse Voltage	V_R V_{RWM} V_{RRM}	40	V
Forward continuous current	I_{FM}	200	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	I_{FSM}	600	mA
Power Dissipation	P_D	200	mW
Thermal Resistance From Junction To Ambient	R_{thJA}	500	℃/W
Junction Temperature	T_j	125	℃
Storage Temperature Range	T_{stg}	-55 ~ +150	℃

ELECTRICAL CHARACTERISTICS(Ta=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	V_{BR}	I_R=10μA	40		V
Reverse voltage leakage current	I_R	V_R=30V		0.2	uA
Forward voltage	V_F	I_F=1mA I_F=40mA		0.38 1.0	V
Diode capacitance	C_D	V_R=0,f=1MHz		5	pF
Reverse recovery time	trr	I_{rr}=1mA, I_F= I_R=10mA R_L=100Ω		5	ns

Fig.1 Power Derating Curve

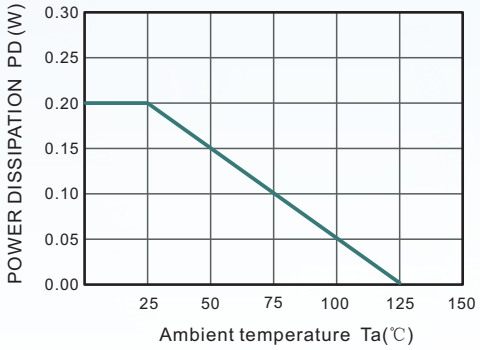


Fig.2 Typical Reverse Characteristics

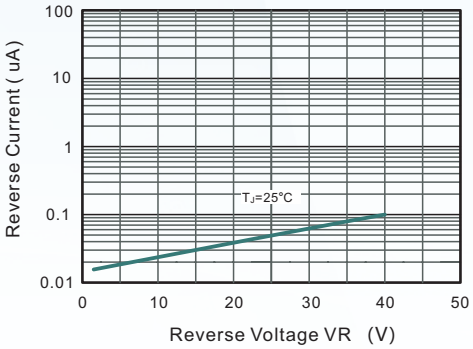


Fig.3 Forward Characteristics

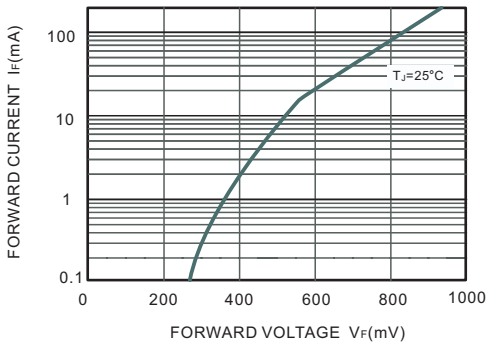
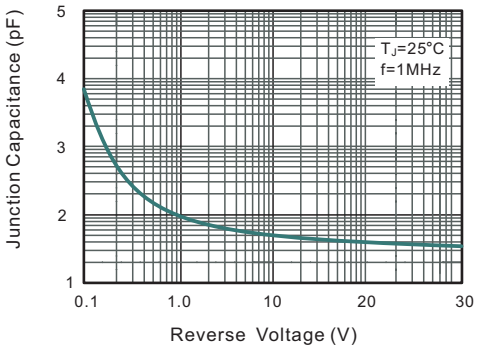
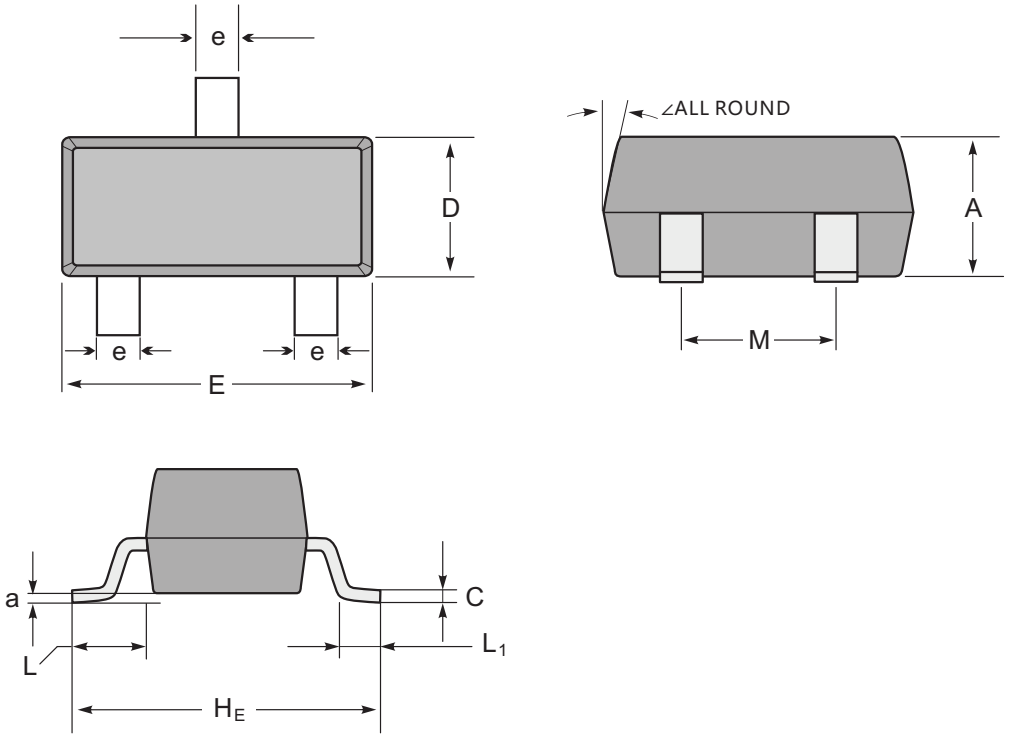


Fig.4 Typical Junction Capacitance



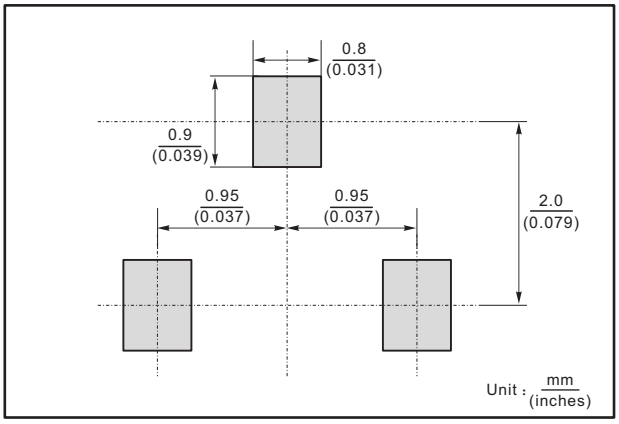
SOT-23 Package Outline Dimensions



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
BAS40	43
BAS40-04	44
BAS40-05	45
BAS40-06	46

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