

EVVOSEMI[®]

THINK CHANGE DO



ESD



TVS



MOS



LDO



Diode



Sensor



DC-DC

Product Specification

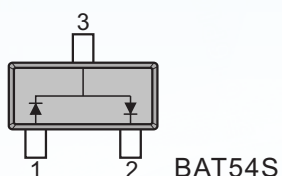
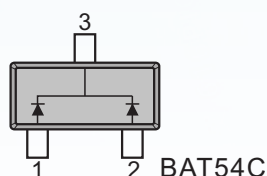
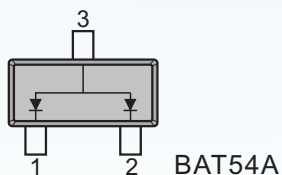
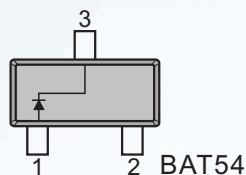
▶ Domestic	Part Number	EVBAT54/X-S1
▶ Overseas	Part Number	BAT54/X
▶ Equivalent	Part Number	BAT54/X

"S1" means SOT-23

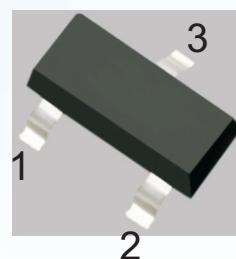
EV is the abbreviation of name EVVO

SCHOTTKY BARRIER DIODE FEATURES

- Extremely Fast Switching Speed



SOT-23



MAXIMUM RATINGS (Ta=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	30	V
Forward Continuous Current	I_{FM}	200	mA
Non-repetitive Peak Forward Surge Current @ $t=8.3ms$	I_{FSM}	600	mA
Repetitive Peak Forward Current @ $t \leq 1s, \delta \leq 0.5$	I_{FRM}	300	mA
Power Dissipation	P_D	200	mW
Thermal Resistance from Junction to Ambient	R_{thJA}	500	°C/W
Operating Junction Temperature Range	T_j	-40~+125	°C
Storage Temperature Range	T_{stg}	-55 ~ +150	°C

ELECTRICAL CHARACTERISTICS(Ta=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	V_{BR}	$I_R=100\mu A$	30			V
Reverse current	I_R	$V_R=25V$			2	μA
Forward voltage	V_F	$I_{F1}=0.1mA$			0.24	V
		$I_{F2}=1mA$			0.32	V
		$I_{F3}=10mA$			0.40	V
		$I_{F4}=30mA$			0.50	V
		$I_{F5}=100mA$			1	V
Diode capacitance	C_D	$V_R=4V, f=1MHz$		10		pF
Reverse recovery time	t_{rr}	$I_F=I_R=10mA,$ $I_{rr}=0.1 \times I_R, R_L=100\Omega$			5	ns

Fig.1 Power Derating Curve

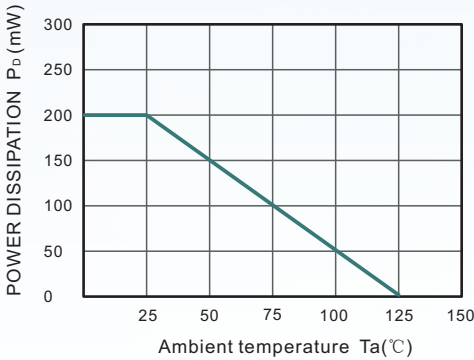


Fig.2 Reverse Characteristics

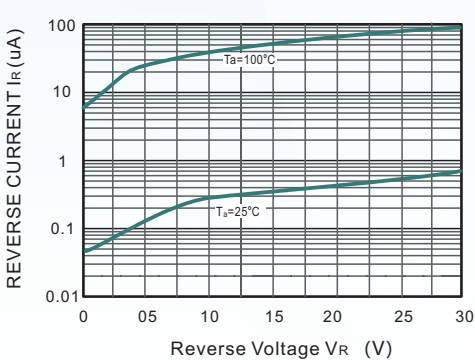


Fig.3 Forward Characteristics

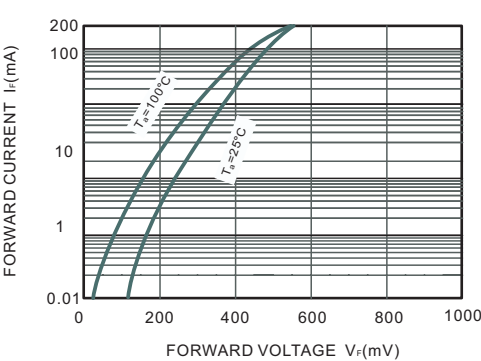
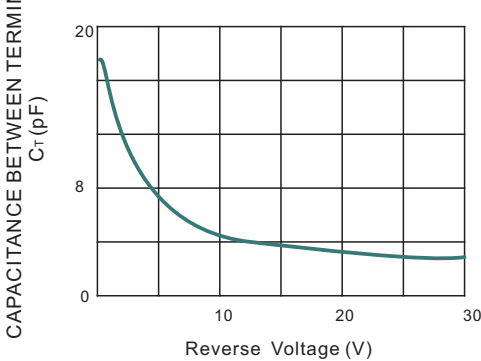
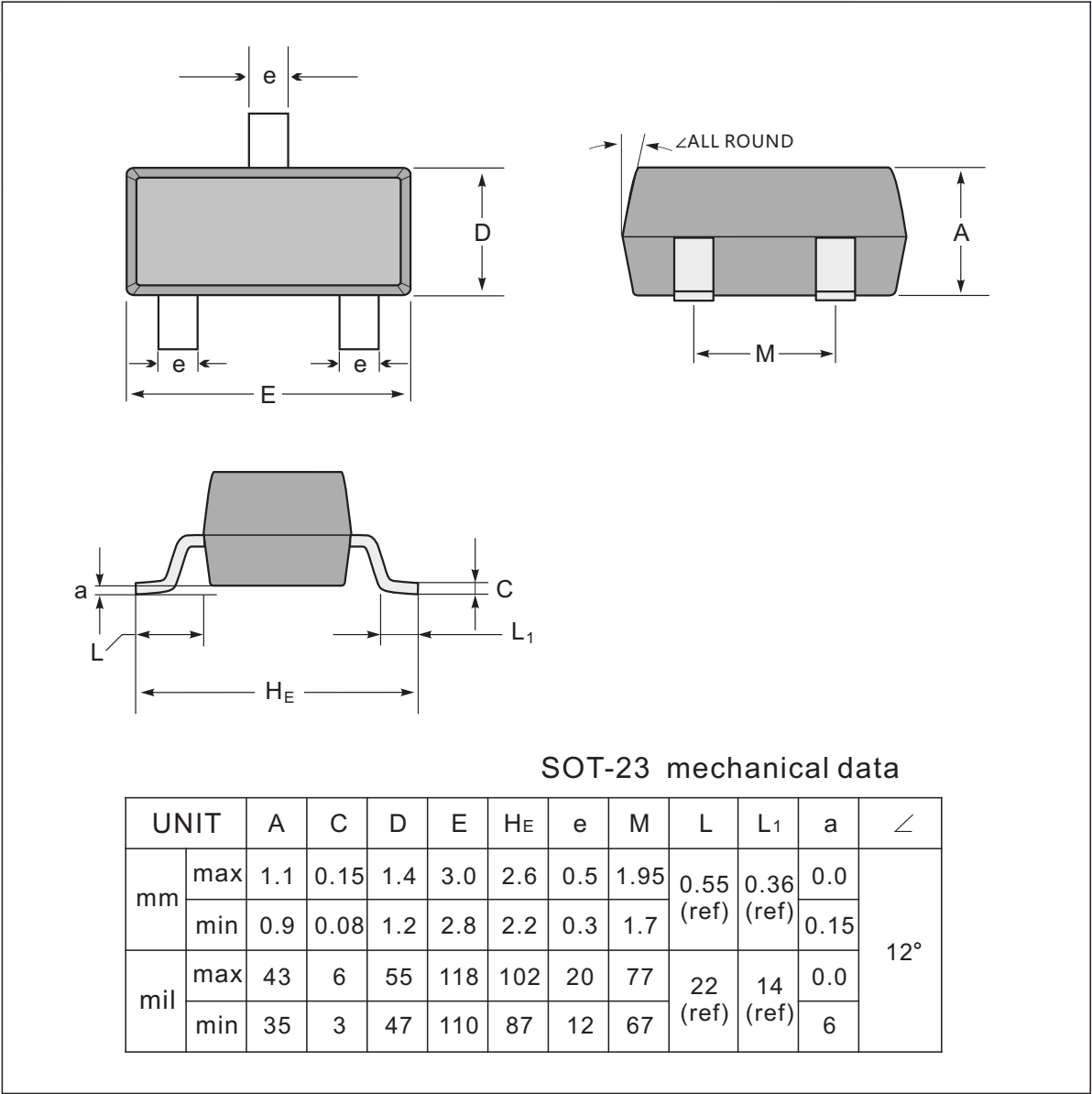


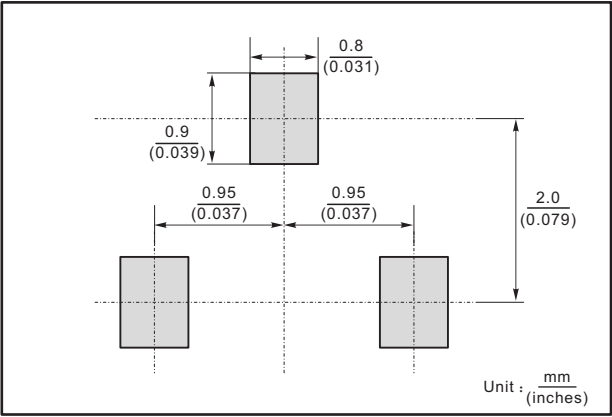
Fig.4 Capacitance Characteristics



SOT-23 Package Outline Dimensions



The recommended mounting pad size



Marking

Type number	Marking code
BAT54	KL1
BAT54A	KL2
BAT54C	KL3
BAT54S	KL4

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