

BAT54X

SURFACE MOUNT SCHOTTKY BARRIER

VOLTAGE 30 Volt **CURRENT** 0.2 Ampere

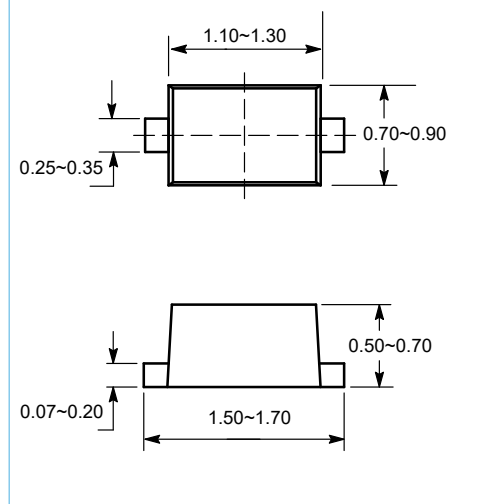
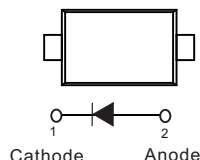
SOD-523 Unit:mm

FEATURES

- Extremely Fast Switching Speed
- Low Forward Voltage
- Lead free in compliance with EU RoHS
- Marking code: JV

MECHANICAL DATA

- Case Material: Molded Plastic.
- UL Flammability Classification Rating 94V-0



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS($T_A = 25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Units
Non-repetitive peak reverse voltage	V_{RM}	30	V
Forward continuous current	I_F	0.2	A
Non-repetitive Peak Forward surge current @ $t=8.3\text{ms}$	I_{FSM}	0.6	A
Repetitive peak forward current	I_{FRM}	0.3	A
Power dissipation	P_D	150	mW
Thermal resistance junction to ambient	$R_{\theta JA}$	635	$^{\circ}\text{C/W}$
Junction Temperature	T_J	125	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-55 to +125	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS($T_A = 25^{\circ}\text{C}$ unless otherwise noted)

Characteristic	Symbol	Conditions	Min	Typ	Max	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	($I_R = 100 \mu\text{A}$)	30			V
Reverse Leakage	I_R	($V_R = 25 \text{ V}$)			2.0	μA
Forward Voltage	V_F	($I_F = 0.1 \text{ mA}$) ($I_F = 1.0 \text{ mA}$) ($I_F = 10 \text{ mA}$) ($I_F = 30 \text{ mA}$) ($I_F = 100 \text{ mA}$)			0.24 0.32 0.40 0.50 1.00	V
Total Capacitance	C_T	($V_R = 1.0 \text{ V}$, $f = 1.0 \text{ MHz}$)			10	pF
Reverse Recovery Time	t_{rr}	$I_F=10\text{mA}$, $I_R=10\text{mA}$ to 1mA , $R_L=100 \Omega$			5.0	ns

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Typical Characteristics

Figure 1. Forward Voltage

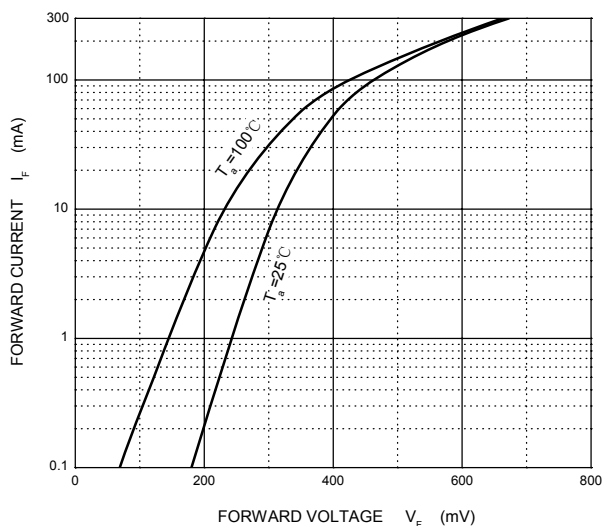


Figure 2. Reverse Characteristics

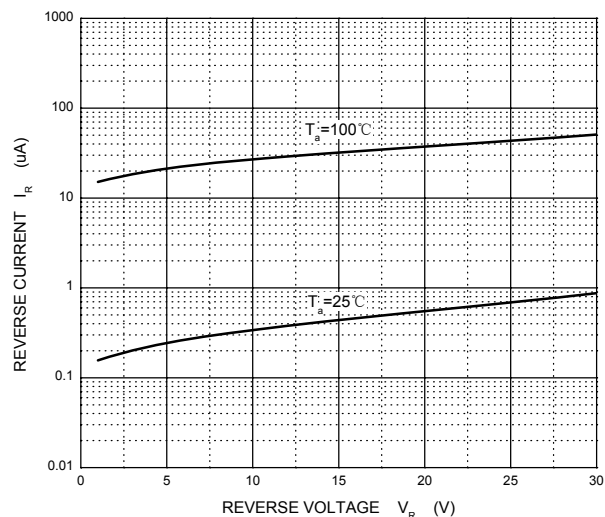


Figure 3. Total Capacitance

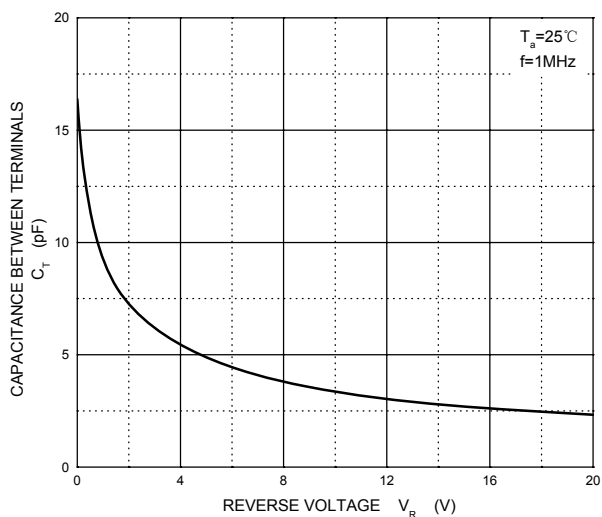
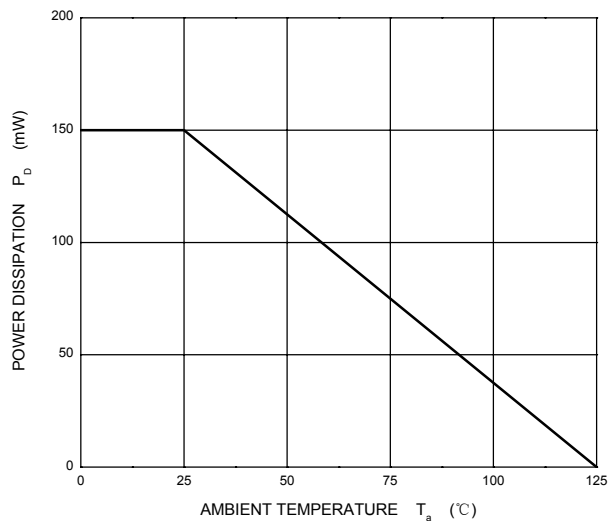


Figure 4. Power Derating Curve

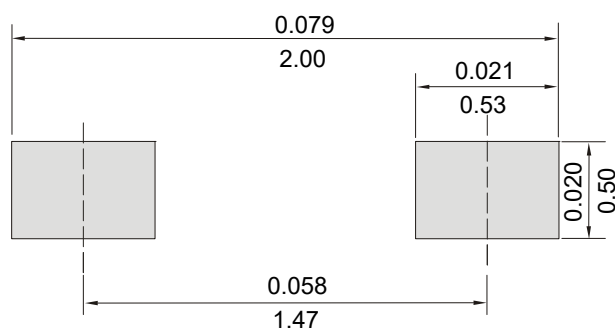


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MOUNTING PAD LAYOUT

SOD-523

Unit:Inch(mm)



ORDER INFORMATION

- Packing information

Part Number	Case	Reel Size	QUANTITY
BAT54X	SOD-523	7 Inch	8000