

## BAT54X

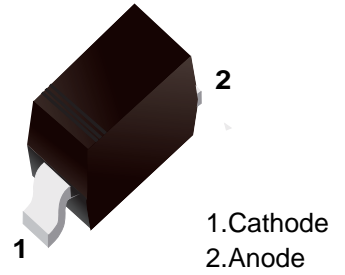
■ Schottky Barrier Diode

■ FEATURES

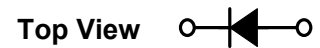
- Extremely fast switching speed.
- Low forward voltage—0.35v(Typ).

■ APPLICATIONS

- High speed switching application.



■ Simplified outline(SOD-523)



■ Marking

Marking	JV
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■ MAXIMUM RATING @ Ta=25°C unless otherwise specified

Parameter	Symbol	Limits	Unit
DC Reverse voltage	$V_R$	30	V
Continuous forward current	$I_F$	200	mA
Peak forward surge current	$I_{FSM}$	600	mA
Total power dissipation	$P_{tot}$	200	mW
Total resistance junction to ambient	$R_{\theta JA}$	635	°C/W
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-55-150	°C

■ ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse breakdown voltage	$V_{(BR)R}$	30			V	$I_R=100\mu A$
Forward voltage	$V_F$		0.22 0.41 0.52 0.29 0.35	0.24 0.5 0.8 0.32 0.40	V	$I_F=0.1mA$ $I_F=30mA$ $I_F=100mA$ $I_F=1.0mA$ $I_F=10mA$
Reverse current	$I_R$		0.5	2.0	$\mu A$	$V_R=25V$
Diode capacitance	$C_d$		7.6	10	pF	$V_R=1V, f=1MHz$
Reverse recovery time	$t_{rr}$			5	ns	$I_F=I_R=10mA$

TYPICAL CHARACTERISTICS @  $T_a=25^\circ\text{C}$  unless otherwise specified

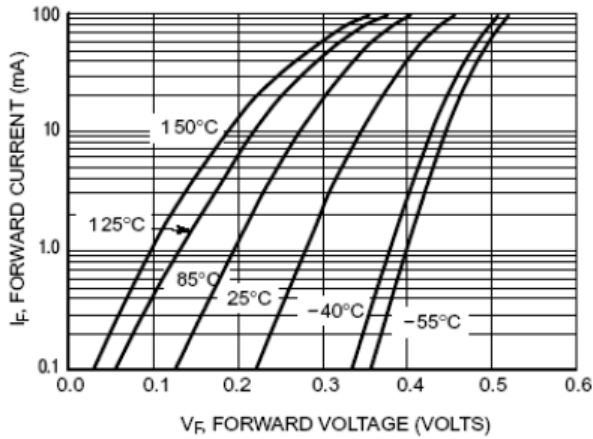


Figure 2. Forward Voltage

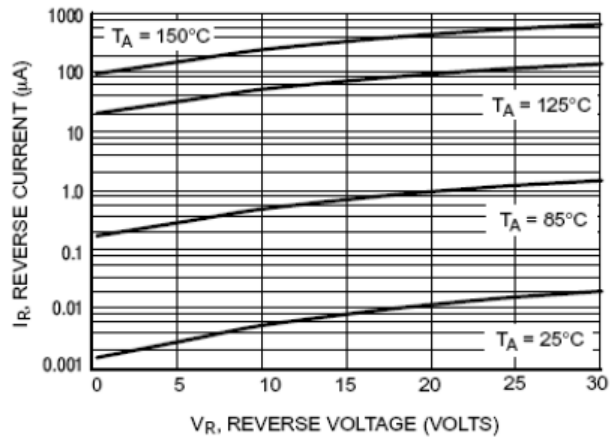


Figure 3. Leakage Current

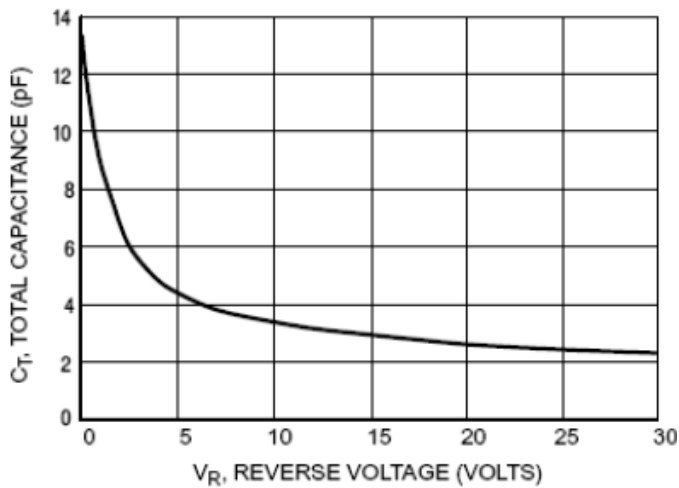
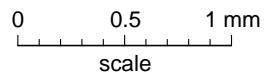
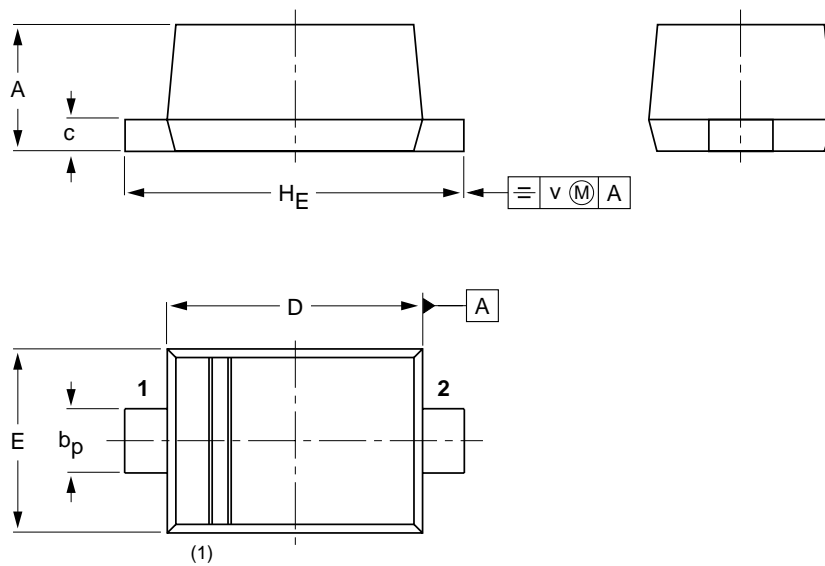


Figure 4. Total Capacitance

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■ SOD-523



**DIMENSIONS (mm are the original dimensions)**

UNIT	A	bp	c	D	E	HE	v
mm	0.7 0.5	0.35 0.25	0.2 0.1	1.3 1.1	0.9 0.7	1.7 1.5	0.15

**Note**

1. The marking bar indicates the cathode.