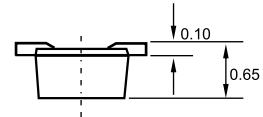
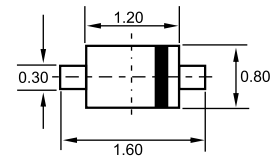


### SOD-523



Dimensions in inches and (millimeters)

## Features

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

## Applications

- ◇ High speed switching application.

## Ordering Information

Type No.	Marking	Package Code
BAT54X	JV	SOD-523

### 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	0.24	V	$I_F=0.1mA$
			0.41	0.5		$I_F=30mA$
			0.52	0.8		$I_F=100mA$
			0.29	0.32		$I_F=1.0mA$
			0.35	0.40		$I_F=10mA$
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

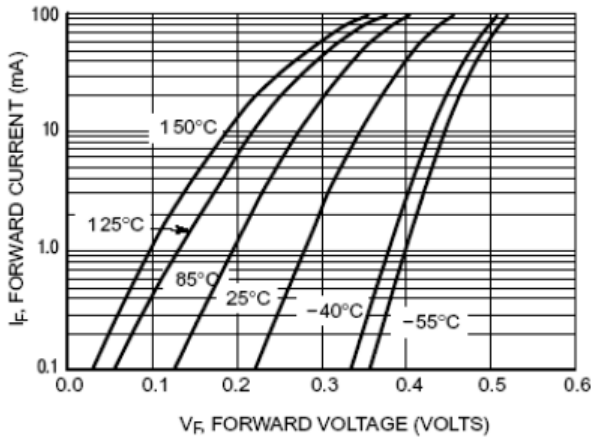


Figure 2. Forward Voltage

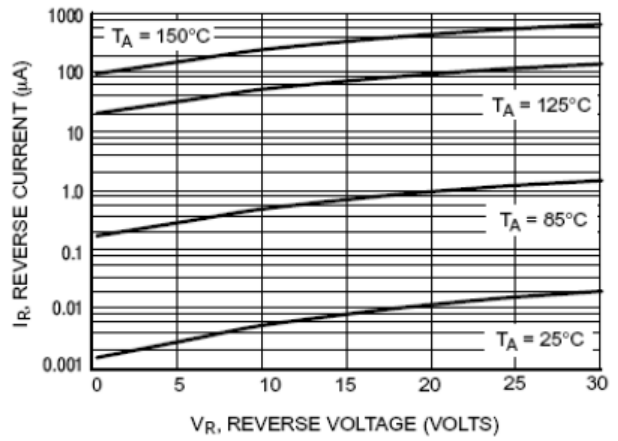


Figure 3. Leakage Current

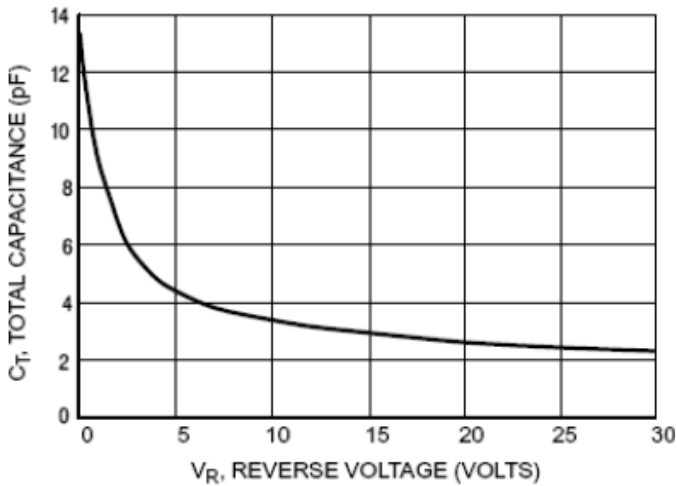


Figure 4. Total Capacitance