



Features

Extremely Fast Switching Speed

Low Forward Voltage

Pb-Free Package is Available



SOD-523



Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
BAT54-02V-G3-08	SOD-523	JV	3000

Maximum Ratings (Ta=25°C unless otherwise noted)

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 _{θJA}	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 =100μA
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	μA	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

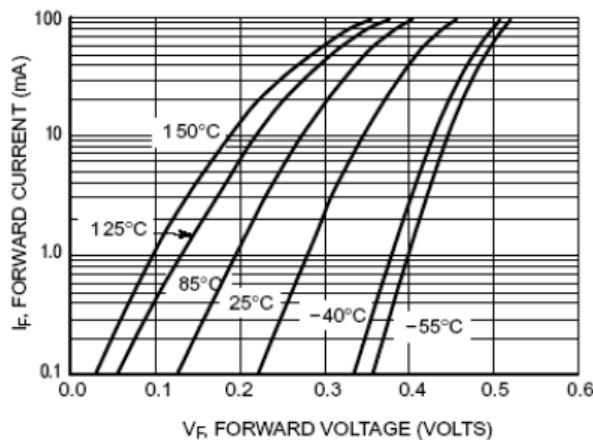


Figure 1. Forward Voltage

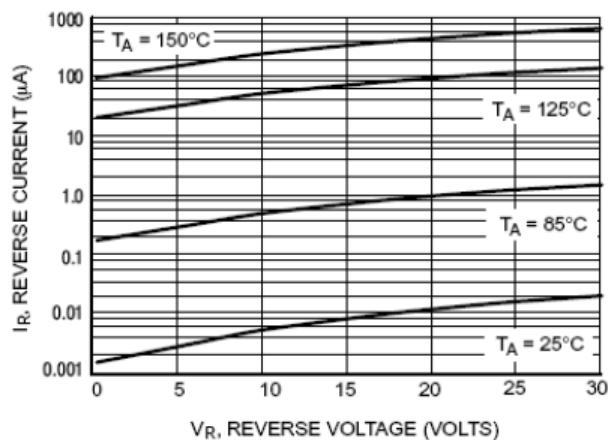


Figure 2. Leakage Current

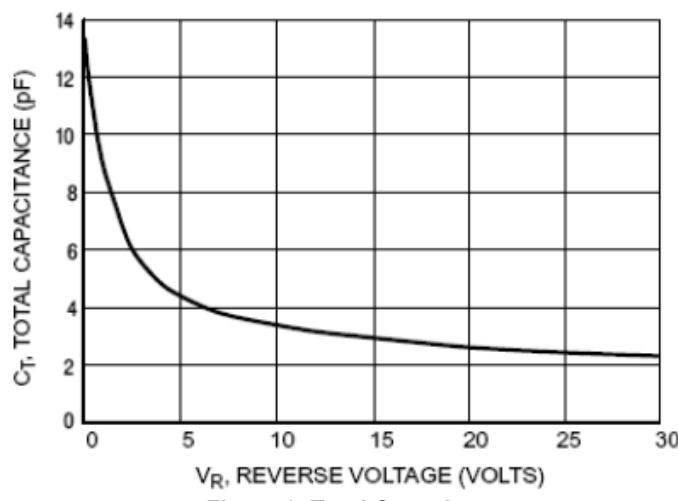
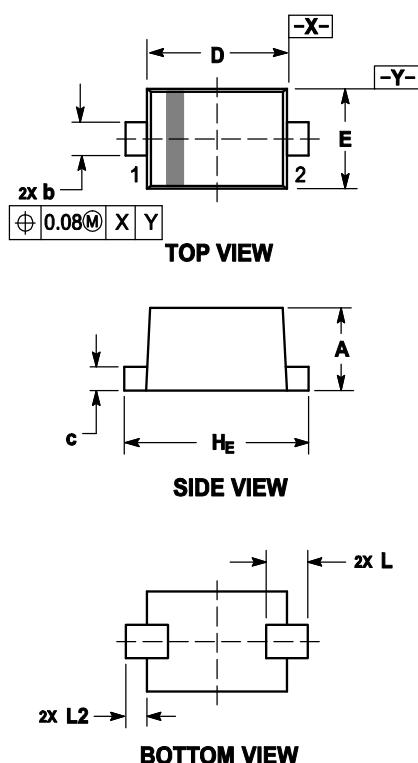


Figure 3. Total Capacitance



Outline And Dimensions

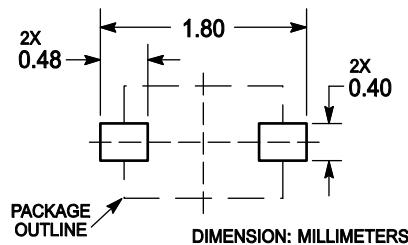


Notes:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: MILLIMETERS.
3. MAXIMUM LEAD THICKNESS INCLUDES LEAD THICKNESS OF BASE MATERIAL.
4. DIMENSIONS D AND E DO NOT INCLUDE MOLD FLASH, PROTRUSIONS OR GATE BURRS.

DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.50	0.60	0.70	0.020	0.024	0.028
b	0.25	0.30	0.35	0.010	0.012	0.014
c	0.07	0.14	0.20	0.003	0.006	0.008
D	1.10	1.20	1.30	0.043	0.047	0.051
E	0.70	0.80	0.90	0.028	0.031	0.035
H _E	1.50	1.60	1.70	0.059	0.063	0.067
L	0.30 REF			0.012 REF		
L ₂	0.15	0.20	0.25	0.006	0.008	0.010

Soldering Footprint





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