

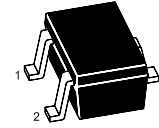
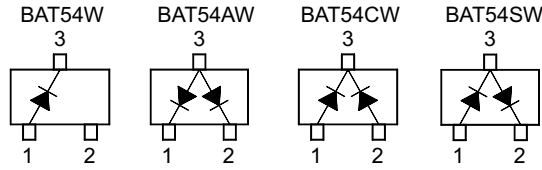


Features

*Low forward voltage

Applications

- *Ultra high-speed switching
- *Voltage clamping
- *Protection circuits



SOT-323 Plastic Package

BAT54W Marking Code: L4
 BAT54AW Marking Code: L42
 BAT54CW Marking Code: L43
 BAT54SW Marking Code: L44

Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	30	V
Reverse Voltage	V _R	30	V
Forward Current	I _F	200	mA
Repetitive Peak Forward Current	I _{FRM}	300	mA
Peak Forward Surge Current (t _p = 10 ms)	I _{FSM}	600	mA
Total Power Dissipation	P _{tot}	200	mW
Thermal Resistance from Junction Ambient	R _{thJA}	625	K/W
Junction Temperature	T _J	125	°C
Storage Temperature Range	T _s	- 65 to + 150	°C

Characteristics at T_a = 25 °C

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at I _F = 0.1 mA at I _F = 1 mA at I _F = 10 mA at I _F = 30 mA at I _F = 100 mA	V _F	-	240 320 400 500 1000	mV
Reverse Breakdown Voltage at I _R = 100 μA	V _{(BR)R}	30	-	V
Reverse Current at V _R = 25 V	I _R	-	2	uA
Total Capacitance at V _R = 1 V, f = 1 MHz	C _T	-	10	pF
Reverse Recovery Time at I _F = 10 mA through I _R = 10 mA to I _R = 1 mA, R _L = 100 Ω	t _{rr}	-	5	ns

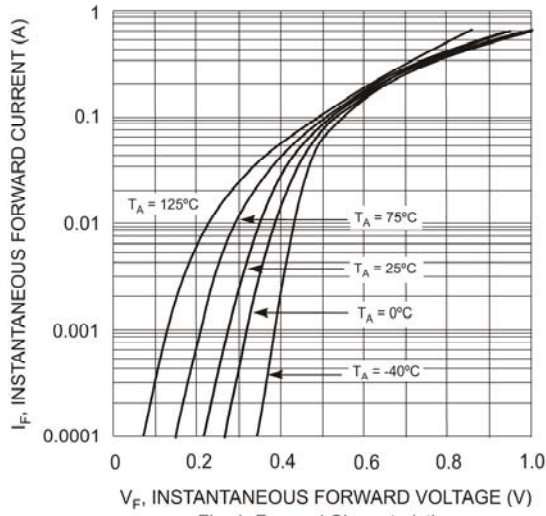


Fig. 1 Forward Characteristics

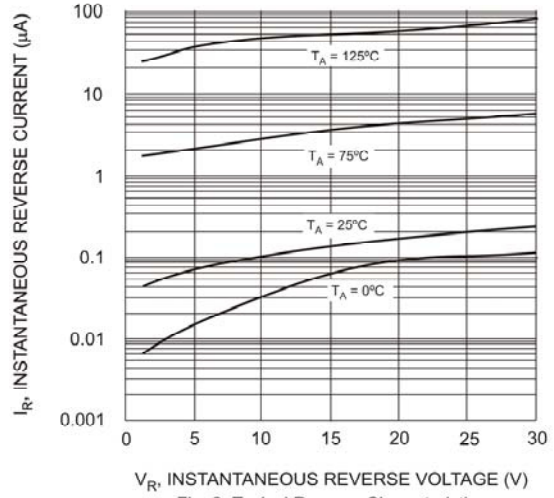


Fig. 2 Typical Reverse Characteristics

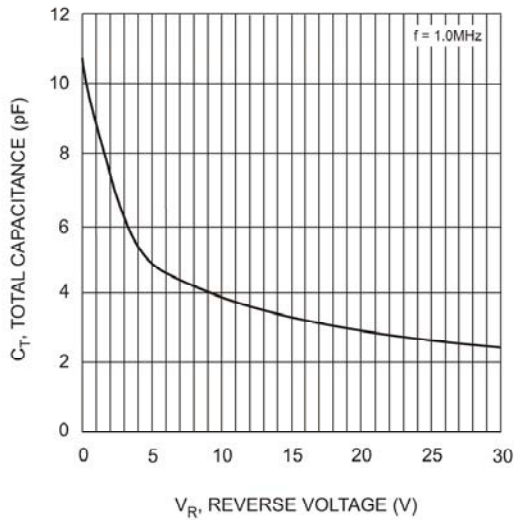


Fig. 3 Typical Capacitance vs. Reverse Voltage

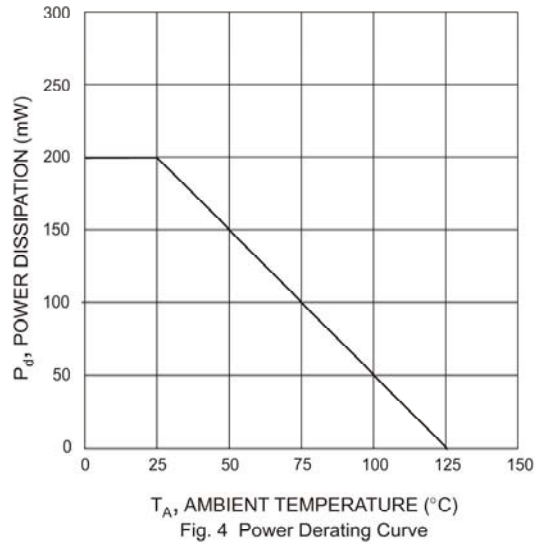


Fig. 4 Power Derating Curve