

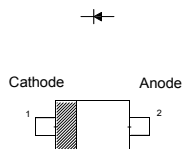
Features

- Low forward voltage
- Guard ring protected
- Small plastic SMD SOD-523 package

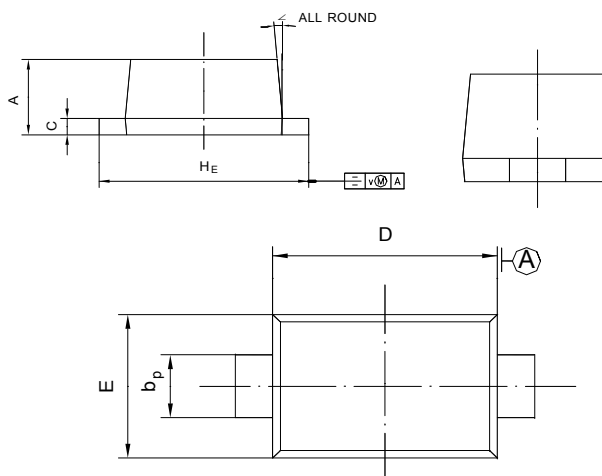
Applications

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

Marking Code: "3"



SOD-523



UNIT	A	b _p	C	D	E	H _E	V	∠
mm	0.70 0.50	0.40 0.20	0.14 0.05	1.30 1.10	0.90 0.75	1.70 1.50	0.1	5°

Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
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
Power Dissipation	P _D	230	mW
Thermal Resistance from Junction Ambient	R _{thJA}	500	K/W
Junction Temperature	T _J	125	°C
Storage Temperature Range	T _{stg}	- 65 to + 150	°C

BAT54WT

Characteristics at $T_a = 25\text{ }^{\circ}\text{C}$

Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 0.1\text{ mA}$ at $I_F = 1\text{ mA}$ at $I_F = 10\text{ mA}$ at $I_F = 30\text{ mA}$ at $I_F = 100\text{ mA}$	V_F	240 320 400 500 800	mV
Reverse Current at $V_R = 25\text{ V}$	I_R	2	μA
Total Capacitance at $V_R = 1\text{ V}$, $f = 1\text{ MHz}$	C_T	10	pF
Reverse Recovery Time at $I_F = 10\text{ mA}$, $V_R = 6\text{ V}$, $I_R = 10\text{ mA}$, $R_L = 100\text{ }\Omega$	t_{rr}	6	ns

RATING AND CHARACTERISTIC CURVES (BAT54WT)

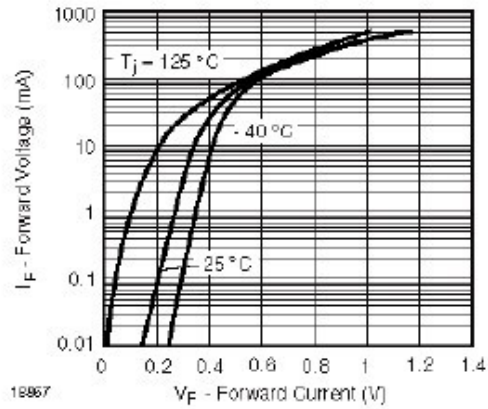


Figure 1. Typical Forward Voltage Forward Current at Various Temperatures

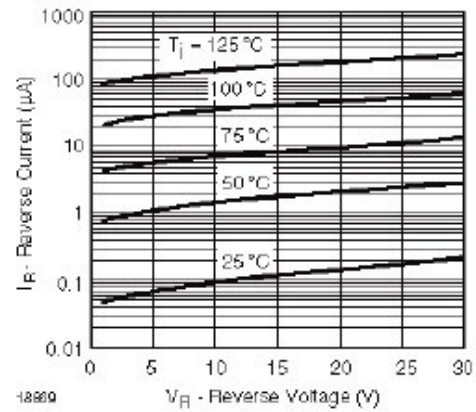


Figure 3. Typical Variation of Reverse Current at Various Temperatures

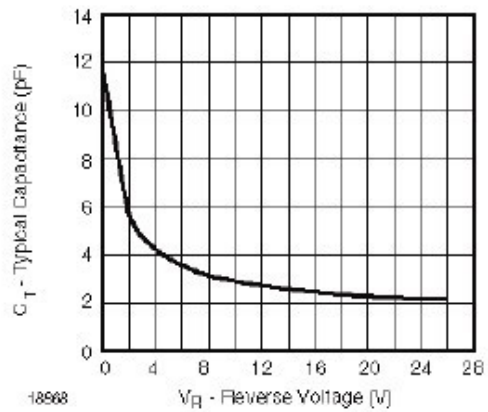


Figure 2. Typical Capacitance C_T vs. Reverse Applied Voltage V_R