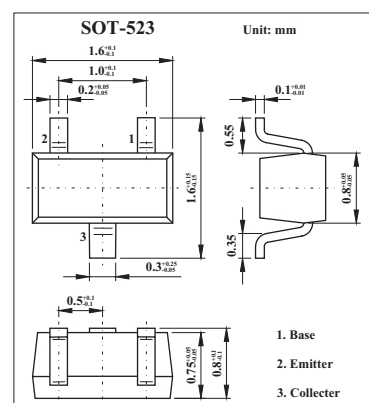


Switching Diode

BAT54T;BAT54AT BAT54CT;BAT54ST

■ Features

- Ultra-small surface mount package
- Low forward voltage drop
- Fast switching
- PN junction guard ring for transient and ESD protection
- Available in lead free version



■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Limits	Unit
Non-Repetitive Peak reverse voltage	V_{RM}	30	V
DC Blocking Voltage	V_R		
Average Rectified Output Current	I_o	200	mA
Power Dissipation	P_d	150	mW
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature range	T_{STG}	-65 to +150	$^\circ\text{C}$

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

Parameter	Symbol	Conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R = 100\ \mu\text{A}$	30		V
Reverse voltage leakage current	I_R	$V_R = 25\text{V}$		2	μA
Forward voltage	V_F	$I_F = 0.1\text{mA}$		240	mV
		$I_F = 1\text{mA}$		320	
		$I_F = 10\text{mA}$		400	
		$I_F = 30\text{mA}$		500	
		$I_F = 100\text{mA}$		1000	
Total capacitance	C_T	$V_R = 1\text{V}, f = 1\text{MHz}$		10	pF
Reverse recovery time	t_{rr}	$I_F = 10\text{mA}, I_R = 10\text{mA} \sim 1\text{mA}, R_L = 100\ \Omega$		5	ns

■ Marking

Type	BAT54T	BAT54AT	BAT54CT	BAT54ST
Marking	L1	L2	L3	L4