

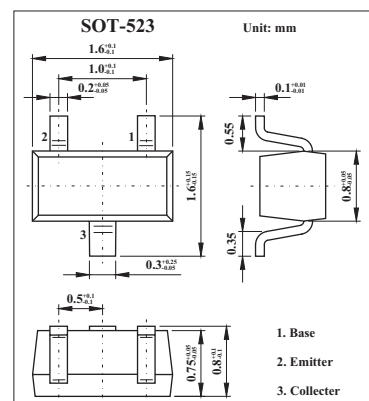
## Switching Diode

### 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	$\mu\text{A}$
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