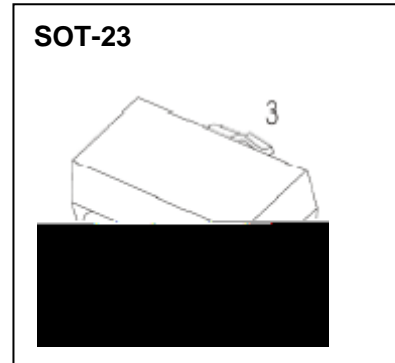




## SOT-23 Plastic-Encapsulate Diodes

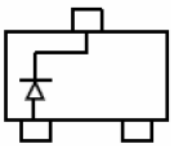
### BAT54/A/C/S SCHOTTKY BARRIER DIODE

SOT-23

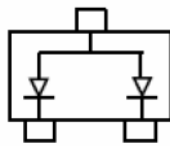


#### FEATURES

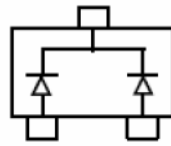
- Extremely Fast Switching Speed



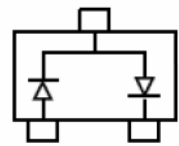
BAT54 MARKING: KL1



BAT54A MARKING: KL2



BAT54C MARKING: KL3



BAT54S MARKING: KL4

#### MAXIMUM RATINGS ( $T_a=25^\circ\text{C}$ unless otherwise noted )

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$	30	V
Working Peak Reverse Voltage	$V_{RWM}$		
DC Blocking Voltage	$V_R$		
Forward Continuous Current	$I_{FM}$	200	mA
Non-repetitive Peak Forward Surge Current @ $t < 1\text{s}$	$I_{FSM}$	600	mA
Repetitive Peak Forward Current @ $t \leq 1\text{s}, \delta \leq 0.5$	$I_{FRM}$	300	mA
Power Dissipation	$P_D$	200	mW
Thermal Resistance from Junction to Ambient	$R_{JA}$	500	$^\circ\text{C}/\text{W}$
Junction Temperature	$T_j$	125	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-55~+150	$^\circ\text{C}$

#### ELECTRICAL CHARACTERISTICS( $T_a=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Min	Typ	Max	Unit	Test conditions
Reverse voltage	$V_{(BR)}$	30			V	$I_R=100\mu\text{A}$
Forward voltage	$V_F$			0.24	V	$I_{F1}=0.1\text{mA}$
				0.32	V	$I_{F2}=1\text{mA}$
				0.40	V	$I_{F3}=10\text{mA}$
				0.50	V	$I_{F4}=30\text{mA}$
				1	V	$I_{F5}=100\text{mA}$
Reverse current	$I_R$			2	$\mu\text{A}$	$V_R=25\text{V}$
Diode capacitance	$C_D$			10	pF	$V_R=1\text{V}, f=1\text{MHz}$
Reverse recovery time	$t_{rr}$			5	ns	$I_F=I_R=10\text{mA}$ $I_{rr}=0.1 \times I_R, R_L=100\Omega$

