

## SCHOTTKY BARRIER DIODE

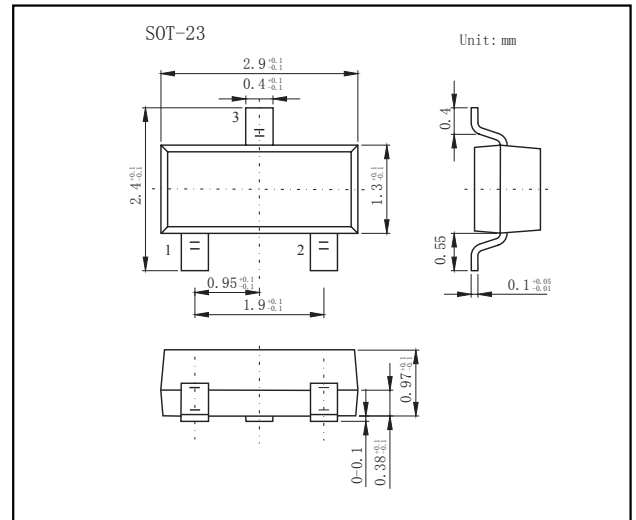
VOLTAGE RANGE: 30V PEAK PULSE POWER:200mW

### FEATURES

- Extremely Fast Switching Speed

### MECHANICAL DATA

- Case: SOT-23 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Mounting Position: Any



## MAXIMUM RATINGS AND CHARACTERISTICS





Ratings at 25 °C ambient temperature unless otherwise specified

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 @ $t=8.3ms$	$I_{FSM}$	600	mA
Repetitive Peak Forward Current @ $t \leq 1s, \delta \leq 0.5$	$I_{FRM}$	300	mA
Power Dissipation	$P_D$	200	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	500	°C/W
Junction Temperature	$T_j$	125	°C
Storage Temperature	$T_{stg}$	-55~+150	°C

## Electrical Specification ( $T_A=25^\circ C$ unless otherwise specified)

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

MARKING:

BAT54	BAT54A	BAT54C	BAT54S
			
BAT54 MARKING: KL1	BAT54A MARKING: KL2	BAT54C MARKING: KL3	BAT54S MARKING: KL4

# RATINGS AND CHARACTERISTIC CURVES

