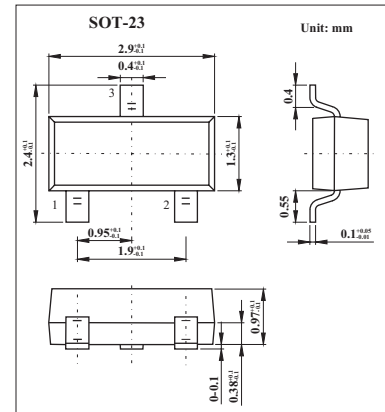


## Silicon Switching Diode

## BAR74

## ■ Features

- For high-speed switching applications

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

Parameter	Symbol	Value	Unit
Reverse voltage	$V_R$	50	V
Peak reverse voltage	$V_{RM}$	50	V
Forward current	$I_F$	250	mA
Surge forward current, $T = 1 \mu\text{s}$	$I_{FS}$	4.5	A
Total power dissipation, $T_s = 54^\circ\text{C}$	$P_{tot}$	370	mW
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature range	$T_{stg}$	-65 to +150	$^\circ\text{C}$
Junction ambient (Note 1)	$R_{th JA}$	$\leq 330$	K/W
Junction soldering point	$R_{th JS}$	$\leq 260$	K/W

## Note

1. Package mounted on epoxy pcb  $40 \text{ mm} \times 40 \text{ mm} \times 1.5 \text{ mm}/6 \text{ cm}^2 \text{ Cu}$ .

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

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Breakdown voltage	$V_R$	$I_R = 100 \mu\text{A}$	50			V
Forward voltage	$V_F$	$I_F = 100 \text{ mA}$			1	V
Reverse current	$I_R$	$V_R = 50 \text{ V}$			0.1	$\mu\text{A}$
		$V_R = 50 \text{ V}, T_a = 150^\circ\text{C}$			100	
Diode capacitance	$C_D$	$V_R = 0 \text{ V}, f = 1 \text{ MHz}$			2	pF
Reverse recovery time	$t_{rr}$	$I_F = I_R = 10 \text{ mA}, R_L = 100 \Omega$ , measured at $I_R = 1 \text{ mA}$			4	ns

## ■ Marking

Marking	JBs