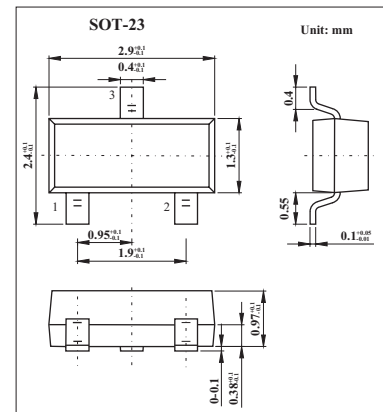


## Silicon Schottky Diode

## BAT17-04;BAT17-05;BAT17-06

## ■ Features

- For mixer applications in VHF/UHF range
- For high-speed switching application

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

Parameter	Symbol	Value	Unit
Diode reverse voltage	$V_R$	4	V
Forward current	$I_F$	130	mA
Total power dissipation	$P_{tot}$	150	mW
BAT17-04, BAT17-06, $T_s \leq 61^\circ\text{C}$			
BAT17-05, $T_s \leq 46^\circ\text{C}$			
Junction temperature	$T_j$	150	$^\circ\text{C}$
Operating temperature range	$T_{op}$	-55 to +125	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$
Junction - soldering point(Note 1)	$R_{thJS}$	$\leq 590$	K/W
BAT17-04, BAT17-06			
BAT17-05			

Note

1. For calculation of  $R_{thJA}$  please refer to Application Note Thermal Resistance

**BAT17-04;BAT17-05;BAT17-06**■ Electrical Characteristics  $T_a = 25^\circ\text{C}$ 

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Breakdown voltage	$V_{(BR)}$	$I_{(BR)} = 10 \mu\text{A}$	4			V
Reverse current	$I_R$	$V_R = 3\text{V}$			0.25	$\mu\text{A}$
		$V_R = 4\text{V}$			10	
		$V_R = 3\text{V}, T_A = 60^\circ\text{C}$			1.25	
Forward voltage	$V_F$	$I_F = 0.1\text{mA}$	200	275	350	mV
		$I_F = 1\text{mA}$	250	340	450	
		$I_F = 10\text{mA}$	350	425	600	
Forward voltage matching(Note 1)	$\Delta V_F$	$I_F = 1\text{mA}$			20	mV
Diode capacitance	$C_T$	$V_R = 0, f = 1\text{MHz}$	0.4	0.55	0.75	pF
Differential forward resistance	$R_F$	$I_F = 5\text{mA}, f = 10\text{kHz}$		8	15	$\Omega$

Note

1.  $\Delta V_F$  is the difference between lowest and highest  $V_F$  in multiple diode component.

## ■ Marking

Type	BAT17-04	BAT17-05	BAT17-06
Marking	54s	55s	56s