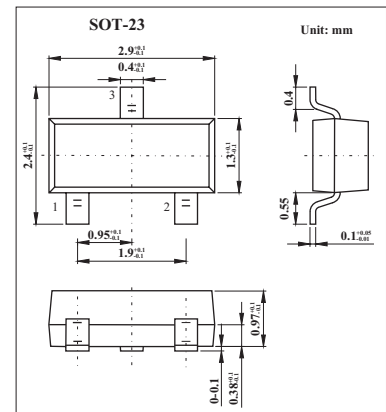


Silicon Schottky Diode

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}	≤ 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	μA
		$V_R = 4\text{V}$			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)	ΔV_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	Ω

Note

1. ΔV_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