

## Schottky barrier diode

## BAT17

## ■ Features

- Low forward voltage
- Small SMD package
- Low capacitance.

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

Parameter	Symbol	Min	Max	Unit
Continuous reverse voltage	$V_R$		4	V
Continuous forward current	$I_F$		30	mA
Storage temperature	$T_{stg}$	-65	+150	$^\circ\text{C}$
Junction temperature	$T_j$		100	$^\circ\text{C}$
thermal resistance from junction to ambient	$R_{th\ j-a}$		500	K/W

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

Parameter	Symbol	Conditions	Max	Unit
Forward voltage	$V_F$	$I_F = 0.1\text{ mA}$	350	mV
		$I_F = 1\text{ mA}$	450	
		$I_F = 10\text{ mA}$	600	
Reverse current	$I_R$	$V_R = 3\text{ V}$	0.25	$\mu\text{ A}$
		$V_R = 3\text{ V}; T_{amb} = 60^\circ\text{C}$	1.25	
Diode forward resistance	$r_D$	$f = 1\text{ KHz}; I_F = 5\text{ mA}$	15	$\Omega$
Diode capacitance	$C_d$	$f = 1\text{ MHz}; V_R = 0$	1	pF
noise figure	F	$f = 900\text{ MHz}; \text{Note 1}$	8	dB

Note

1. The local oscillator is adjusted for a diode current of 2 mA. IF amplifier noise  $F_{if} = 1.5\text{ dB}; f = 35\text{ MHz}$ .

## ■ Marking

Marking	A3p
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