

Silicon RF Switching Diode

BAT18;BAT18-04
BAT18-05;BAT18-06

■ Features

- Low-loss VHF/UHF switch above 10 MHz
- Pin diode with low forward resistance

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

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	35	V
Forward Current	I_F	100	mA
Operating and storage temperature range	T_{op}, T_{stg}	-55 to +150	$^\circ\text{C}$
Junction - ambient	$R_{th JA}$	≤ 450	K/W

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

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_F	$I_F = 100\text{ mA}$		0.38	1.2	V
Reverse current	I_R	$V_R = 20\text{ V}$			20	nA
		$V_R = 20\text{ V}, T_A = 60^\circ\text{C}$			200	
Diode capacitance	C_T	$V_R = 20\text{ V}, f = 1\text{ MHz}$		0.75	1	pF
Forward resistance	r_f	$I_F = 5\text{ mA}, f = 100\text{ MHz}$		0.4	0.7	Ω
Series inductance	L_s			2		nH

■ Marking

Type	BAT18	BAT18-04	BAT18-05	BAT18-06
Marking	A2	AU	AS	AT

