

BAS21H

- We declare that the material of product compliance with RoHS requirements.
- S- Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC-Q101 Qualified and PPAP Capable.



MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Continuous Reverse Voltage	V_R	250	Vdc
Peak Forward Current	I_F	200	mAdc
Peak Forward Surge Current	$I_{F(surge)}$	625	mAdc

THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
Total Device Dissipation FR-5 Board,* $T_A = 25^\circ\text{C}$	P_D	200	mW
Derate above 25°C		1.57	$\text{mW}/^\circ\text{C}$
Thermal Resistance Junction to Ambient	R_{JJA}	635	$^\circ\text{C}/\text{W}$
Junction and Storage Temperature Range	T_J, T_{stg}	-55 to +150	$^\circ\text{C}$

*FR-5 Minimum Pad

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Characteristic	Symbol	Min	Max	Unit
OFF CHARACTERISTICS				
Reverse Voltage Leakage Current ($V_R = 200 \text{ Vdc}$)	I_R	—	0.1	μAdc
($V_R = 200 \text{ Vdc}, T_J = 150^\circ\text{C}$)		—	100	
Reverse Breakdown Voltage ($I_{BR} = 100 \mu\text{Adc}$)	$V_{(BR)}$	250	—	Vdc
Forward Voltage ($I_F = 100 \text{ mAdc}$)	V_F	—	1000	mV
($I_F = 200 \text{ mAdc}$)		—	1250	
Diode Capacitance ($V_R = 0, f = 1.0 \text{ MHz}$)	C_D	—	5.0	pF
Reverse Recovery Time ($I_F = I_R = 30 \text{ mAdc}, R_L = 100 \Omega$)	t_{rr}	—	50	ns