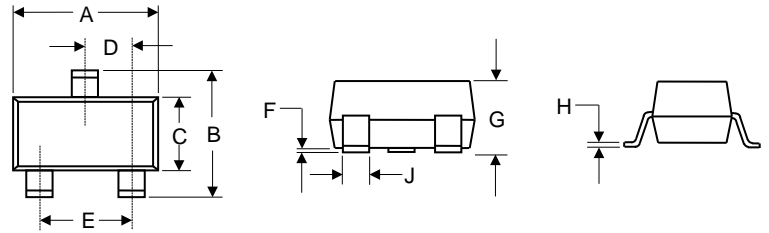
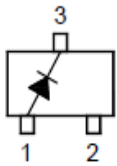


Features

- * High Voltage Switching Diodes
- * Marking Code: HC



RoHS
COMPLIANT



SOT-23				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.110	0.120	2.80	3.04
B	0.087	0.102	2.20	2.60
C	0.047	0.055	1.20	1.40
D	0.035	0.04	0.89	1.02
E	0.070	0.080	1.78	2.04
F	---	0.004	---	0.10
G	0.035	0.047	0.89	1.20
H	0.003	0.008	0.08	0.19
J	0.015	0.02	0.37	0.51

Maximum Ratings (T_A=25°C unless otherwise noted)

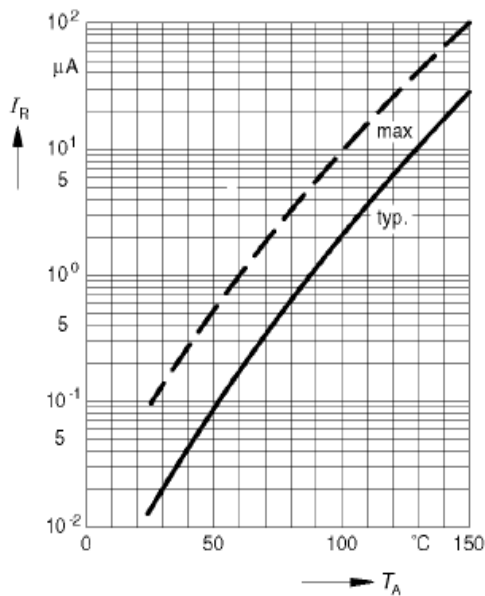
Parameter	Symbol	Value	Unit
Reverse Voltage BAS19 BAS20 BAS21	V _R	120 200 250	V
Continuous Forward Current	I _{F(AV)}	200	mA
Repetitive Peak Forward Current	I _{FRM}	625	mA
Non-repetitive Peak Forward Surge Current at t = 1 s at t = 1 μs	I _{FSM}	0.5 2.5	A
Total Device Dissipation	P _{tot}	350	mW
Thermal Resistance Junction to Ambient	R _{θJA}	357	°C/W
Junction and Storage Temperature Range	T _j / T _{stg}	- 55 to + 150	°C

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

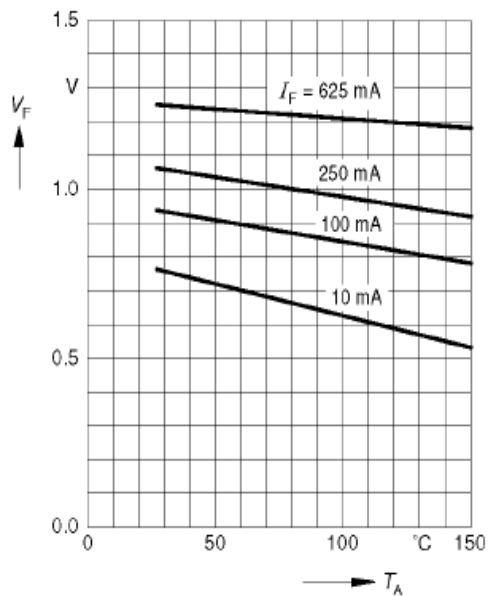
Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 100\text{ mA}$ at $I_F = 200\text{ mA}$	V_F	- -	1 1.25	V V
Reverse Breakdown Voltage at $I_R = 100\text{ }\mu\text{A}$ at $I_R = 100\text{ }\mu\text{A}$ at $I_R = 100\text{ }\mu\text{A}$	V_{BR}	120 200 250	- - -	V V V
Reverse Current at $V_R = 100\text{ V}$ at $V_R = 150\text{ V}$ at $V_R = 200\text{ V}$ at $V_R = 100\text{ V}, T_j = 150^\circ\text{C}$ at $V_R = 150\text{ V}, T_j = 150^\circ\text{C}$ at $V_R = 200\text{ V}, T_j = 150^\circ\text{C}$	I_R	- - - - - -	0.1 0.1 0.1 100 100 100	μA μA μA μA μA μA
Total Capacitance at $V_R = 0, f = 1\text{ MHz}$	C_{tot}	-	5	pF
Reverse Recovery Time at $I_F = I_R = 30\text{ mA}, I_{R(REC)} = 3\text{ mA}, R_L = 100\text{ }\Omega$	t_{rr}	-	50	ns

Ratings and Characteristic Curves

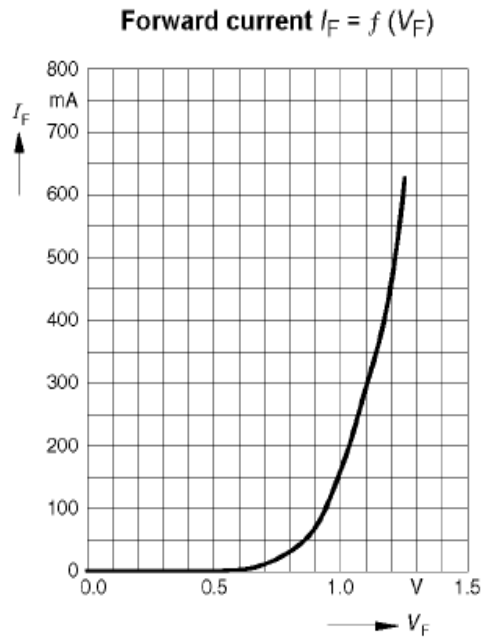
Reverse current $I_R = f(T_A)$
 $V_R = 200\text{ V}$



Forward Voltage $V_F = f(T_A)$
 $I_F = \text{Parameter}$



Ratings and Characteristic Curves



Ordering Information

Part No.	Package	Packing Code	Packing
BAS19, BAS20, BAS21	SOT-23	R30	3000pcs/Reel

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