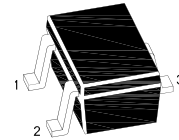
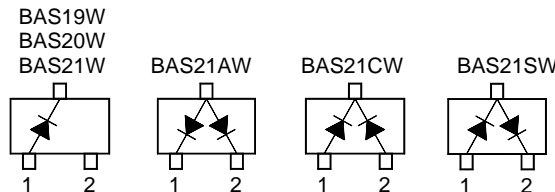




Silicon Epitaxial Planar Diodes

High Voltage Switching Diodes



SOT-323 Plastic Package
Marking Code:
BAS19W~BAS21W: T3
BAS21AW: F2
BAS21CW: F3
BAS21SW: F4

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

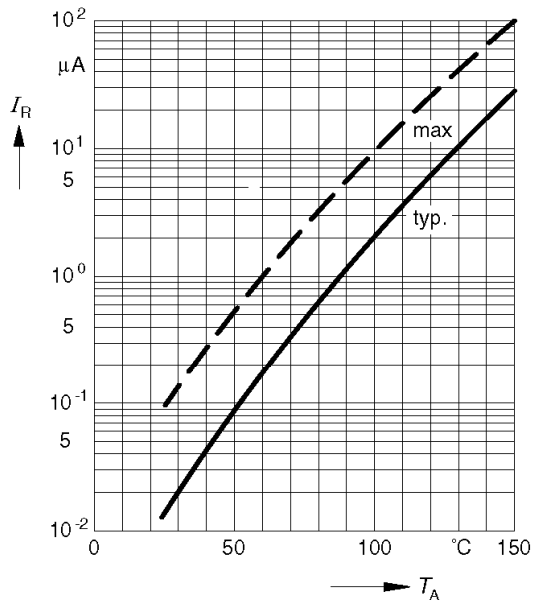
Parameter	Symbol	Value	Unit
Reverse Voltage	BAS19W BAS20W BAS21W	120 200 250	V
Continuous Forward Current	$I_{F(AV)}$	200	mA
Repetitive Peak Forward Current	I_{FRM}	625	mA
Non-repetitive Peak Forward Surge Current	at $t = 1\text{ s}$ at $t = 1\ \mu\text{s}$	0.5 2.5	A
Total Device Dissipation	P_{tot}	250	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	357	$^\circ\text{C/W}$
Junction and Storage Temperature Range	T_j, T_{stg}	- 55 to + 150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 100\ \mu\text{A}$ at $I_R = 100\ \mu\text{A}$ at $I_R = 100\ \mu\text{A}$	BAS19W BAS20W BAS21W	120 200 250	- - -	V
Forward Voltage at $I_F = 100\ \text{mA}$ at $I_F = 200\ \text{mA}$	V_F	- -	1 1.25	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 $V_R = 200\ \text{V}, T_j = 150^\circ\text{C}$	BAS19W BAS20W BAS21W	- - -	0.1 0.1 0.1	μA
Total Capacitance at $V_R = 0, f = 1\ \text{MHz}$	C_{tot}	-	5	pF
Reverse Recovery Time at $I_F = I_R = 30\ \text{mA}, I_{R(REC)} = 3\ \text{mA}, R_L = 100\ \Omega$	t_{rr}	-	50	ns

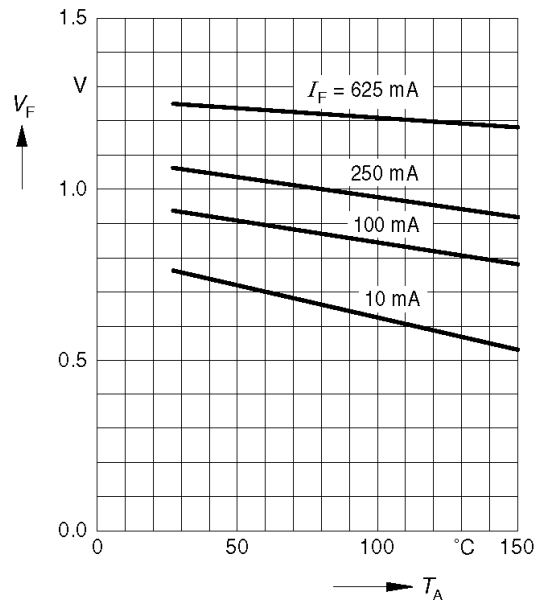
Reverse current $I_R = f(T_A)$

$V_R = 200V$



Forward Voltage $V_F = f(T_A)$

$I_F = \text{Parameter}$



Forward current $I_F = f(V_F)$

