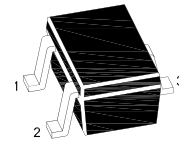
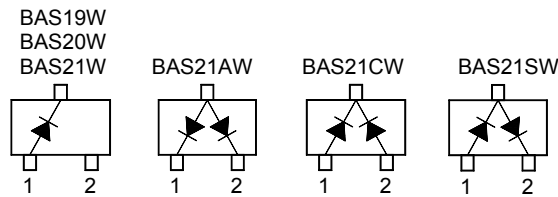


BAS19W, BAS20W, BAS21W

Silicon Epitaxial Planar Diodes

High Voltage Switching Diodes



SOT-323 Plastic Package

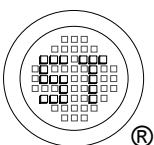
Marking Code:
 BAS19W~BAS21W: F5
 BAS21AW: F2
 BAS21CW: F3
 BAS21SW: F4

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

Parameter	Symbol	Value	Unit
Reverse Voltage	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	I_{FSM}	0.5 2.5	A
Total Device Dissipation	P_{tot}	250	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	357	$^\circ\text{C}/\text{W}$
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 $I_R = 100 \mu\text{A}$	$V_{(BR)R}$	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 $V_R = 200 \text{V}, T_j = 150^\circ\text{C}$	I_R	- - - - - -	0.1 0.1 0.1 100 100 100	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



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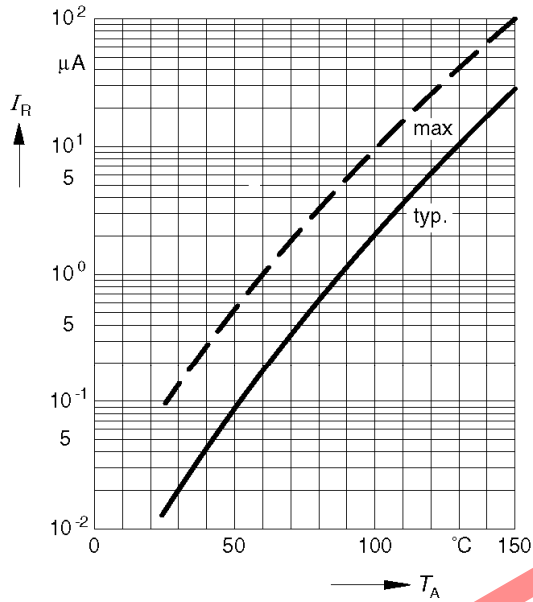


Dated: 02/05/2013 Rev: 03

BAS19W, BAS20W, BAS21W

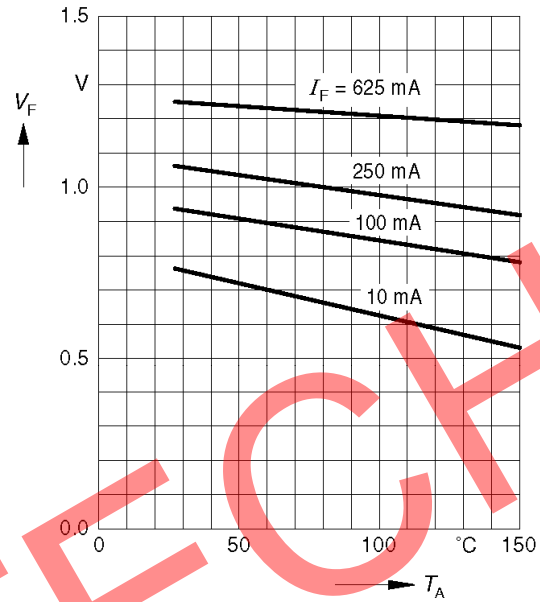
Reverse current $I_R = f(T_A)$

$V_R = 200V$

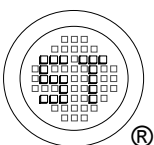
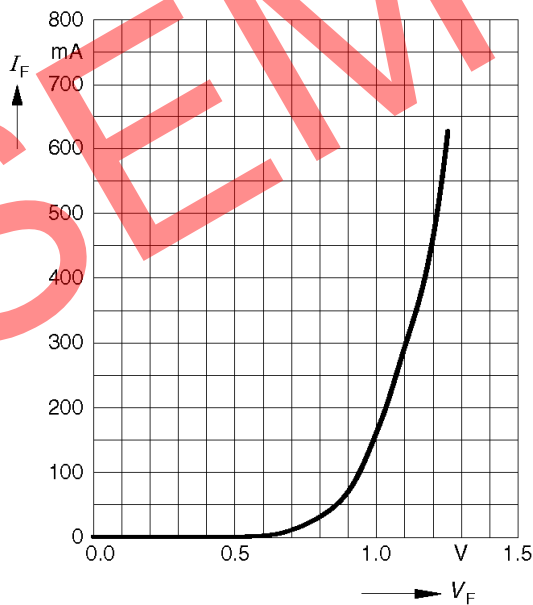


Forward Voltage $V_F = f(T_A)$

$I_F = \text{Parameter}$



Forward current $I_F = f(V_F)$



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