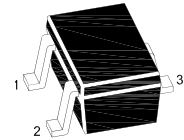
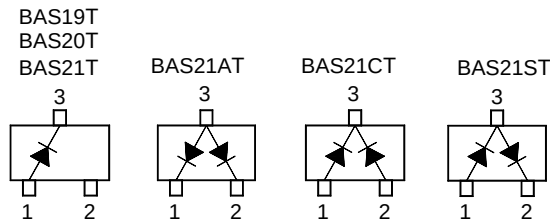


Silicon Epitaxial Planar Diodes

High Voltage Switching Diodes



SOT-523 Plastic Package
Marking Code:
BAS19T~BAS21T: T3
BAS21AT: F2
BAS21CT: F3
BAS21ST: F4

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

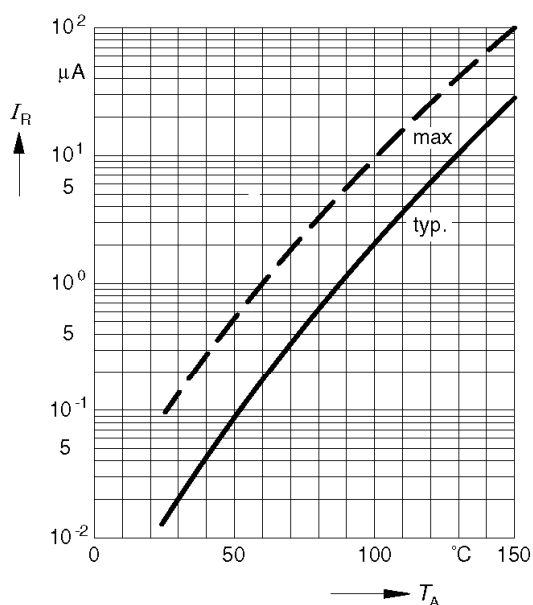
Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	120 200 250	V
Continuous Forward Current	$I_{F(AV)}$	200	mA
Repetitive Peak Forward Current	I_{FRM}	625	mA
Non-repetitive Peak Forward Surge Current	I_{FSM}	0.5 2.5	A
Total Device Dissipation	P_{tot}	150	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	833	$^\circ\text{C/W}$
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	$V_{(BR)R}$			V
at $I_R = 100 \mu\text{A}$		120	-	
at $I_R = 100 \mu\text{A}$		200	-	
at $I_R = 100 \mu\text{A}$		250	-	
Forward Voltage	V_F			V
at $I_F = 100 \text{ mA}$		-	1	
at $I_F = 200 \text{ mA}$		-	1.25	
Reverse Current	I_R			μA
at $V_R = 100 \text{ V}$		-	0.1	
at $V_R = 150 \text{ V}$		-	0.1	
at $V_R = 200 \text{ V}$		-	0.1	
at $V_R = 100 \text{ V}, T_j = 150^\circ\text{C}$		-	100	
at $V_R = 150 \text{ V}, T_j = 150^\circ\text{C}$		-	100	
at $V_R = 200 \text{ V}, T_j = 150^\circ\text{C}$		-	100	
Total Capacitance	C_{tot}			pF
at $V_R = 0, f = 1 \text{ MHz}$		-	5	
Reverse Recovery Time	t_{rr}			ns
at $I_F = I_R = 30 \text{ mA}, I_{R(REC)} = 3 \text{ mA}, R_L = 100 \Omega$		-	50	

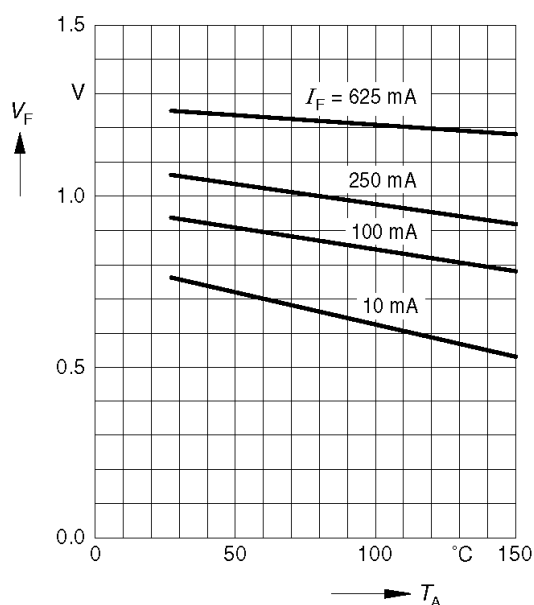
Reverse current $I_R = f(T_A)$

$V_R = 200V$



Forward Voltage $V_F = f(T_A)$

$I_F = \text{Parameter}$



Forward current $I_F = f(V_F)$

