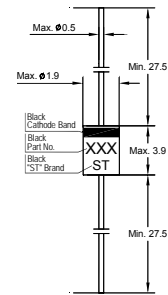


## BAV19, BAV20, BAV21

### Silicon Epitaxial Planar Diodes

High Voltage Switching Diodes



Glass Case DO-35  
Dimensions in mm

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

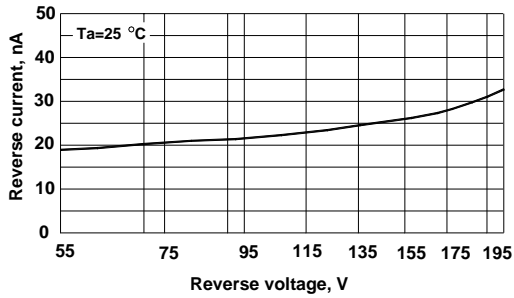
Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	120	V
		200	
		250	
Reverse Voltage	$V_R$	100	V
		150	
		200	
Continuous Forward Current	$I_F$	250	mA
Repetitive Peak Forward Current	$I_{FRM}$	625	mA
Non-repetitive Peak Forward Surge Current	$I_{FSM}$	1	A
at $t = 1$ s		3	
at $t = 100 \mu\text{s}$		9	
Total Power Dissipation	$P_{tot}$	500	mW
Junction Temperature	$T_j$	175	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	- 65 to + 175	$^\circ\text{C}$

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

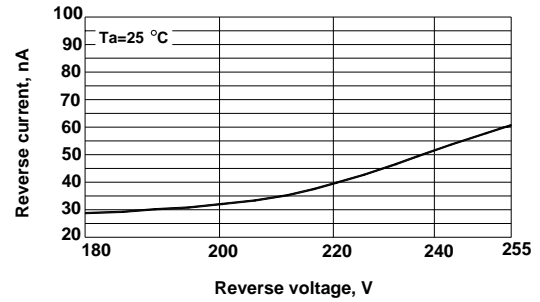
Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 100 \mu\text{A}$	$V_{(BR)R}$	120	-	V
		200	-	
		250	-	
Forward Voltage at $I_F = 100$ mA at $I_F = 200$ mA	$V_F$	-	1	V
		-	1.25	
Reverse Current at $V_R = 100$ V at $V_R = 150$ V at $V_R = 200$ V at $V_R = 100$ V, $T_A = 150^\circ\text{C}$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

## BAV19, BAV20, BAV21

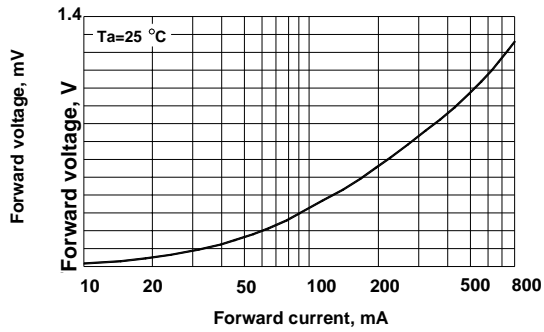
Reverse current vs. reverse voltage



Reverse current vs. reverse voltage



Forward voltage vs. forward current



Capacitance vs. reverse voltage

