



FUKUCOM COMPANY LTD.

福 靈 有 限 公 司

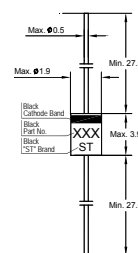
FLAT P, 3/F., EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,
KWUN TONG, KOWLOON, HONG KONG.

TEL: 852-2790 0314 FAX: 852-2790 0206

BAV19, BAV20, BAV21

Silicon Epitaxial Planar Diodes

High Voltage Switching Diodes



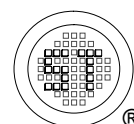
Glass Case DO-35
Dimensions in mm

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

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	BAV19 BAV20 BAV21	120 200 250	V
Reverse Voltage	BAV19 BAV20 BAV21	100 150 200	V
Continuous Forward Current	I_F	250	mA
Repetitive Peak Forward Current	I_{FRM}	625	mA
Non-repetitive Peak Forward Surge Current	at $t = 1\text{ s}$ at $t = 100\text{ }\mu\text{s}$ at $t = 1\text{ }\mu\text{s}$	1 3 9	A
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 $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 100\text{ }\mu\text{A}$	BAV19 BAV20 BAV21	120 200 250	- - -	V
Reverse Current at $V_R = 100\text{ V}$ at $V_R = 150\text{ V}$ at $V_R = 200\text{ V}$ at $V_R = 100\text{ V}$, $T_A = 150\text{ }^\circ\text{C}$ at $V_R = 150\text{ V}$, $T_A = 150\text{ }^\circ\text{C}$ at $V_R = 200\text{ V}$, $T_A = 150\text{ }^\circ\text{C}$	BAV19 BAV20 BAV21 BAV19 BAV20 BAV21	- - - - - -	100 100 100 100 100 100	nA nA nA μA μA μA
Forward Voltage at $I_F = 100\text{ mA}$ at $I_F = 200\text{ mA}$	V_F	- -	1 1.25	V
Diode Capacitance at $V_R = 0\text{ V}$, $f = 1\text{ MHz}$	C_d	-	5	pF
Reverse Recovery Time at $I_F = I_R = 30\text{ mA}$, $I_{rr} = 3\text{ mA}$, $R_L = 100\text{ }\Omega$	t_{rr}	-	50	ns



Dated : 15/06/2009



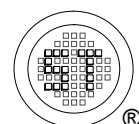
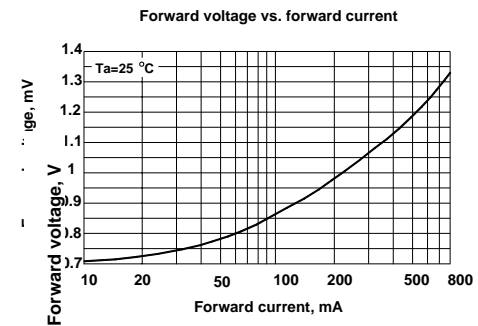
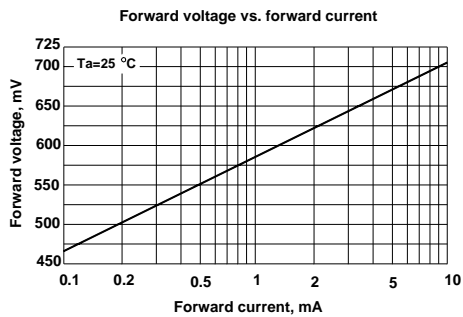
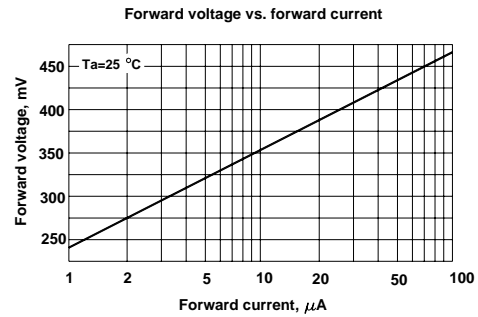
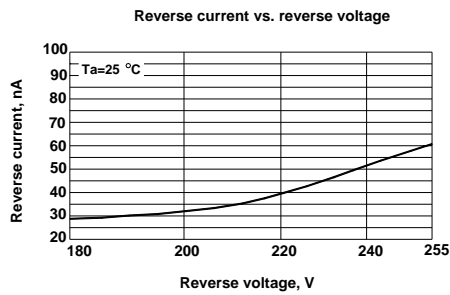
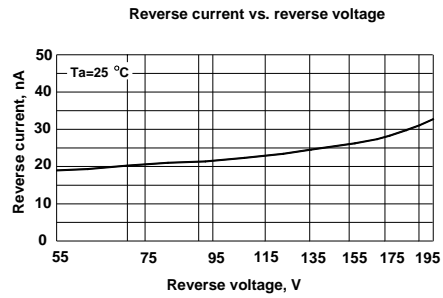
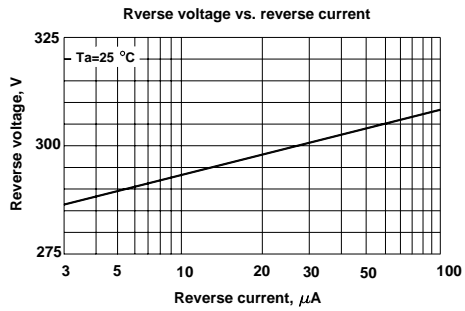
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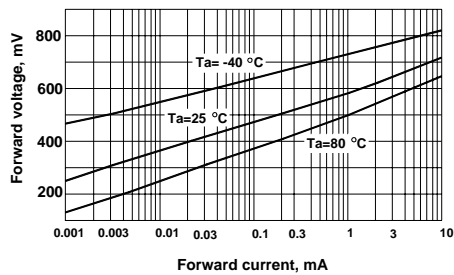
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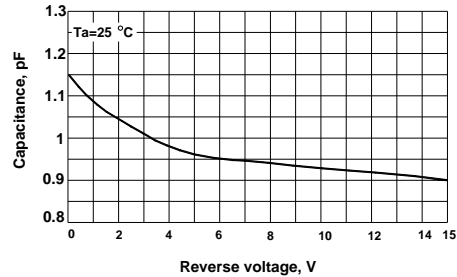
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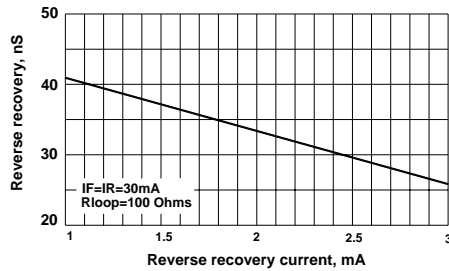
Forward voltage vs. ambient temperature



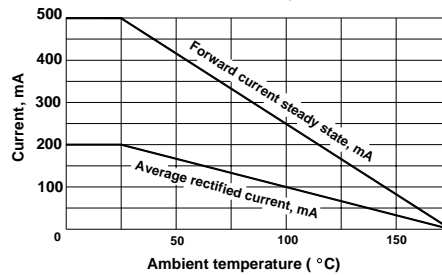
Capacitance vs. reverse voltage



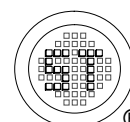
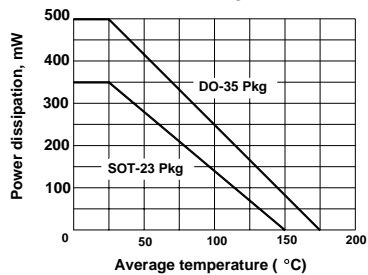
Reverse recovery time vs. reverse recovery current



Average rectified current & forward current vs. ambient temperature



Power derating curve



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