Kingtronics®

BAV21

FEATURES AND BENEFITS

Glass Package for High Reliability
Planar Die Construction
Low Reverse Leakage Current
Also available in Surface Mount Package
(BAV20W and BAV21W)

Mechanical Data

Case: DO-35, Glass

Leads: Solderable per MIL-STD-202,

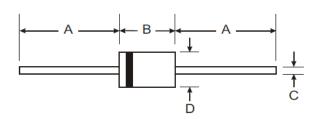
Method 208

Marking: Cathode Band and Type Number

Weight: 0.13 grams (approx.)

FAST SWITCHING DIODE

DO-35



DO-35						
Dim	Min	Max				
Α	25.40	_				
В	_	4.00				
С	_	0.60				
D	_	2.00				
All Dimensions in mm						

Maximum Ratings @ TA = 25°C unless otherwise specified

Characteristic	Symbol	BAV21	UNITS
Repetitive Peak Reverse Voltage	Vrrm	250	V
Working Peak Reverse Voltage	V_{RWM}	200	V
DC Blocking Voltage	V_R	200	V
RMS Reverse Voltage	$V_{R(RMS)}$	141	V
Forward Continuous Current (Note 1)	I _{FM}	250	mA
Average Rectified Output Current (Note 1)	I ₀	200	mA
Forward Surge Current @ t = 1.0s	I _{FSM}	1.0	Α
Repetitive Peak Forward Current (Note 1)	I _{FRM}	625	mA
Power Dissipation (Note 1)	PD	500	mW
Thermal Resistance, Junction to Ambient Air (Note 1)	R θ JA	300	K/W
Operating and Storage Temperature Range	Tj, Tstg	-65 to +175	°C

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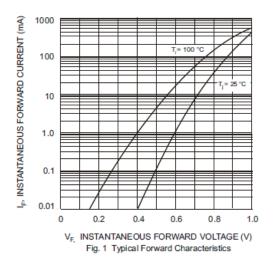
RAV21

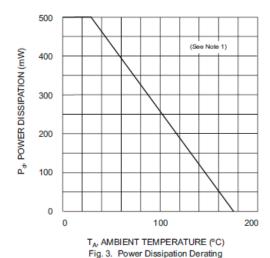
Characteristics at Ta = 25 °C

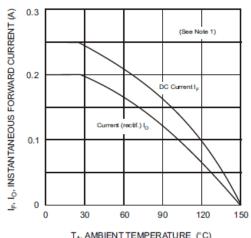
Characteristic		Symbol	Min	TYP	Max	UNITS	Test Condition
Maximum Forward Voltage		VFM	-	-	1.0	V	IF = 100mA
Maximum Peak Reverse Current	BAV21	lR	lr -	-	100	nA	VR = 200V
	BAV21				15	_A	$V_R = 200V, T_j = 100_C$
Dynamic Forward Resistance		rf	-	5.0	-	Ω	IF = 10mA
Junction Capacitance		Cj	-	1.5	-	pF	VR = 0, f = 1.0MHz
Reverse Recovery Time		trr	-	-	50	nS	IF = IR = 30mA to IR = 3.0mA;
							$RL = 100 \Omega$

Notes: 1. Valid provided that leads are kept at ambient temperature at a distance of 8.0mm.

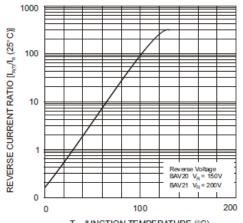
RATINGS AND CHARACTERISTIC CURVER







T_A, AMBIENT TEMPERATURE (°C) Fig. 2 Forward Current Derating



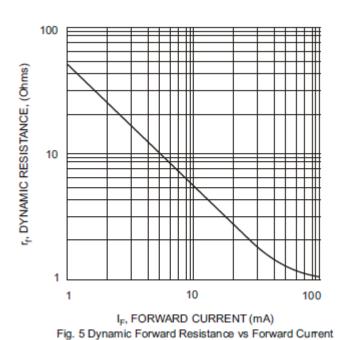
 $\label{eq:TJ_JUNCTION TEMPERATURE (°C)} \mbox{Fig. 4 Relative Reverse Current vs Junction Temperature}$

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V_R, REVERSE VOLTAGE (V)
Fig. 6 Typical Junction Capacitance vs Reverse Voltage

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