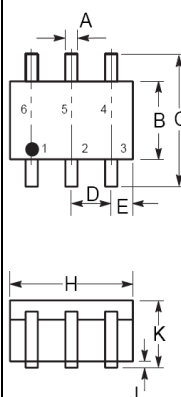


**SURFACE MOUNT
FAST SWITCHING DIODE**
**REVERSE VOLTAGE – 75 Volts
FORWARD CURRENT – 0.15 Ampere**
FEATURES

- Fast switching speed
- Ideally suited for automatic insertion
- For general purpose switching applications

MECHANICAL DATA

- Case: SOT-363 Plastic
- Case material: “Green” molding compound, UL flammability classification 94V-0, (No Br. Sb. Cl)
- Moisture sensitivity: Level 1 per J-STD-020D
- Lead free in RoHS 2002/95/EC compliant

SOT-363


SOT-363		
Dim.	Min.	Max.
A	0.15	0.35
B	1.15	1.35
C	2.15	2.45
D	0.65 TYP.	
E	0.40 REF.	
H	2.00	2.20
J	0.00	0.10
K	0.90	1.10
L	0.525 REF.	
M	0.08	0.15
Dimensions in millimeter		

Maximum Ratings & Thermal Characteristics @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	BAV99BRW	Units
Repetitive Peak Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	75	V
Forward Continuous Current	I _{FM}	300	mA
Average Rectified Output Current	I _O	150	mA
Non-Repetitive Peak Forward Surge Current @t=1us @t=1s	I _{FSM}	2 1	A
Power Dissipation	P _D	200	mW
Thermal Resistance Junction to Ambient	R _{θJA}	625	°C/W
Operating Temperature Range	T _J	150	°C
Storage Temperature Range	T _{STG}	-65~+150	°C

Electrical Characteristics @ T_A = 25°C unless otherwise specified

Characteristic	Test Condition	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	I _R = 2.5uA	V _{BR}	75	--	--	V
Maximum Forward Voltage	I _F = 1mA I _F = 10mA I _F = 50mA I _F = 150mA	V _F	-- -- -- --	-- -- -- --	715 855 1000 1250	mV
Maximum DC Reverse Current at Rated DC Blocking Voltage	V _R = 75V V _R = 20V	I _R	--	--	2.5 0.025	uA
Typical Diode Capacitance	V _R = 0V, f=1MHz	C _D	--	--	2	pF
Reverse Recovery time	I _{RR} =1mA, I _R =I _F =10mA R _L =100Ω	trr	--	--	4	ns

REV.1, Oct-2010, KSYR41

RATING AND CHARACTERISTIC CURVES
BAV99BRW



Fig.1 Typical Forward Characteristics

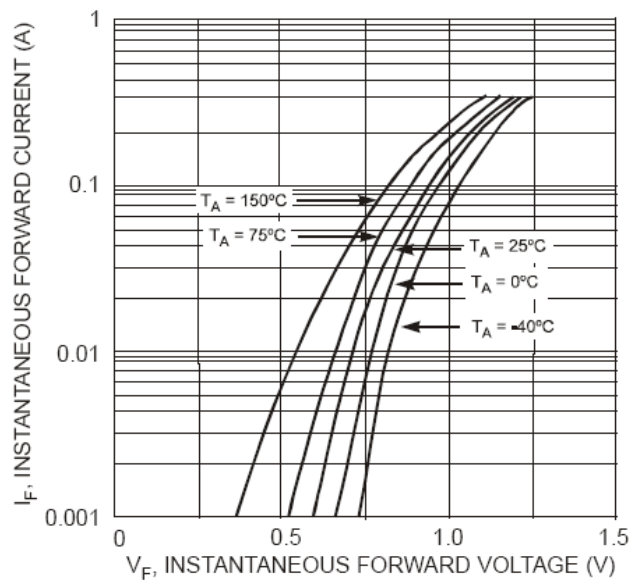


Fig.2 Typical Reverse Characteristics

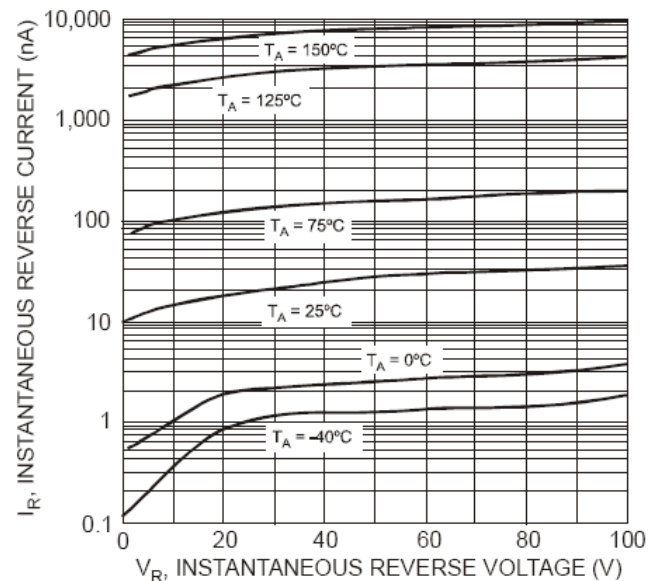


Fig.3 Total Capacitance vs. Reverse Voltage

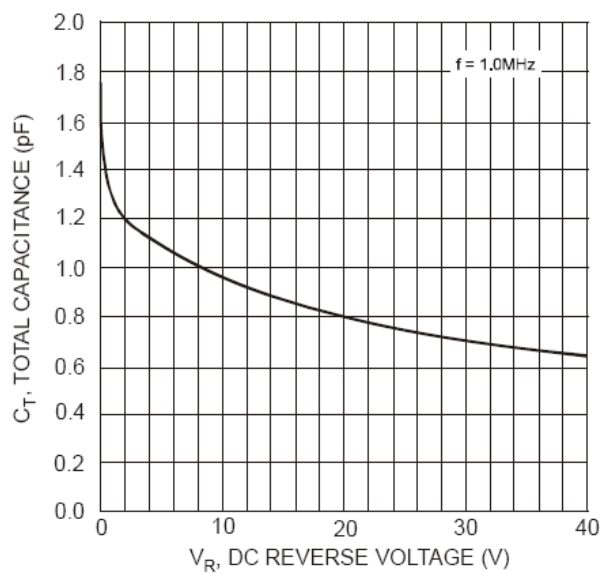
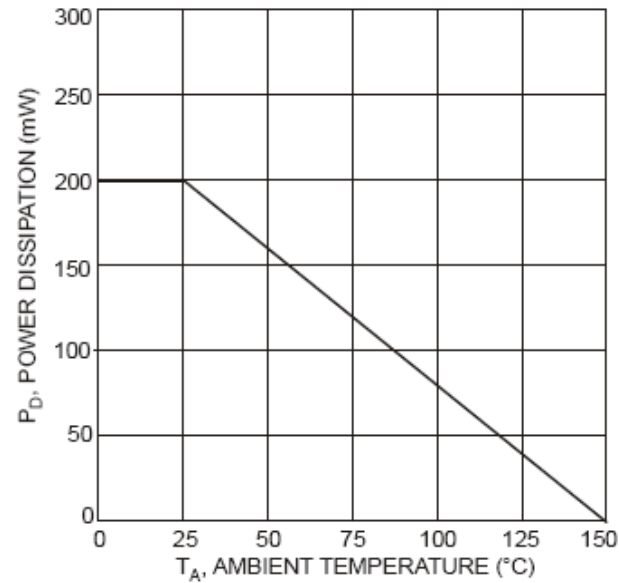


Fig.4 Power Derating Curve



Device Marking :

Device P/N	Marking code	Equivalent Circuit Diagram
BAV99BRW	KGJ	

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