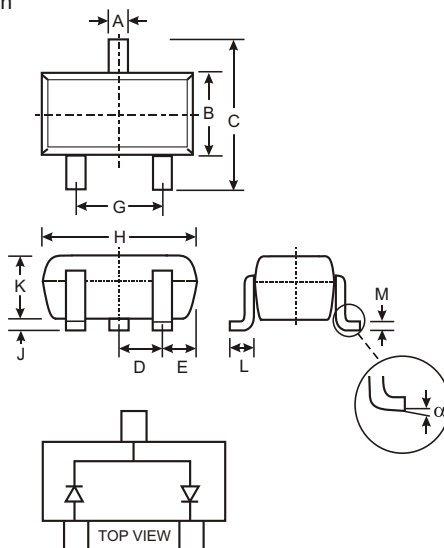


Features

Surface Mount Package Ideally Suited for Automatic Insertion
 Very Low Leakage Current
Lead Free By Design/RoHS Compliant (Note 3)
"Green Device" (Note 4)

Mechanical Data

Case: SOT-323
 Case Material: Molded Plastic, "Green" Molding Compound. UL Flammability Classification Rating 94V-0
 Moisture Sensitivity: Level 1 per J-STD-020C
 Terminals: Finish Matte Tin Finish annealed over Alloy 42 leadframe. Solderable per MIL-STD-202, Method 208
 Polarity: See Diagram
 Marking: K52 & Date Code (See Page 2)
 Weight: 0.006 grams (approximate)



SOT-323		
Dim	Min	Max
A	0.25	0.40
B	1.15	1.35
C	2.00	2.20
D	0.65 Nominal	
E	0.30	0.40
G	1.20	1.40
H	1.80	2.20
J	0.0	0.10
K	0.90	1.00
L	0.25	0.40
M	0.10	0.18
	0	8
All Dimensions in mm		

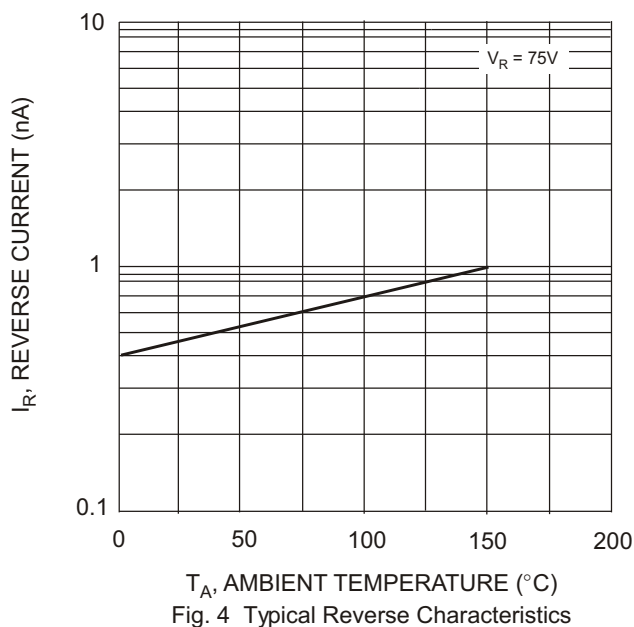
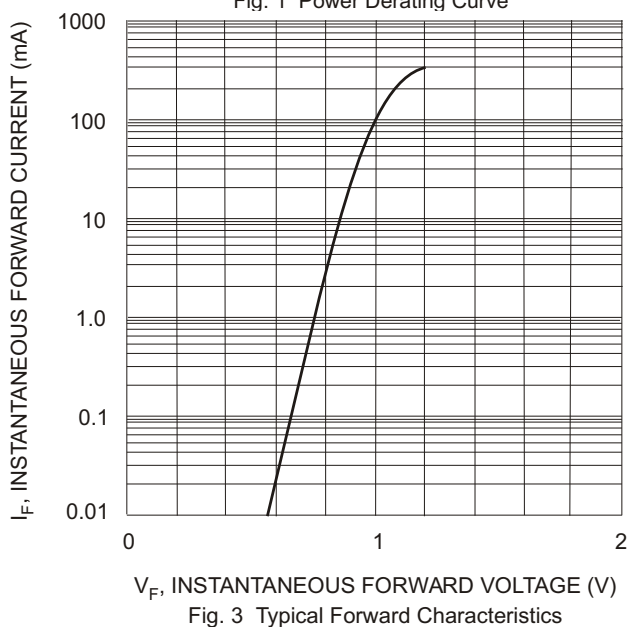
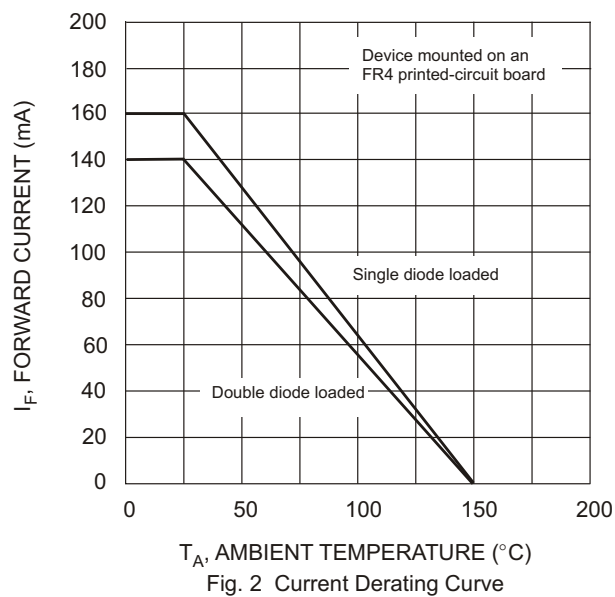
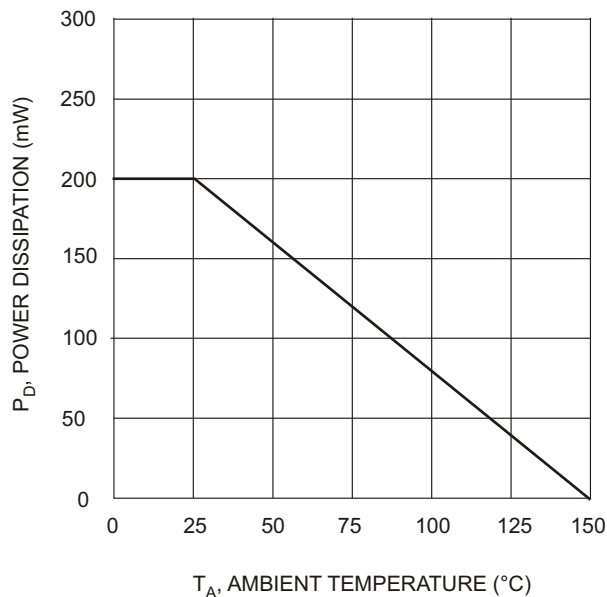
Maximum Ratings @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	85	V
RMS Reverse Voltage	$V_{R(RMS)}$	60	V
Forward Continuous Current (Note 2)	I_{FM}	160	mA
Single diode Double diode		140	
Repetitive Peak Forward Current (Note 2)	I_{FRM}	500	mA
Non-Repetitive Peak Forward Surge Current	I_{FSM}	4.0	A
@ $t = 1.0\text{ s}$		1.0	
@ $t = 1.0\text{ms}$ @ $t = 1.0\text{s}$		0.5	
Power Dissipation (Note 2)	P_d	200	mW
Thermal Resistance Junction to Ambient Air (Note 2)	R_{JA}	625	C/W
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +150	C

Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 1)	$V_{(BR)R}$	85			V	$I_R = 100\text{ }\mu\text{A}$
Forward Voltage	V_F			0.90 1.0 1.1 1.25	V	$I_F = 1.0\text{mA}$ $I_F = 10\text{mA}$ $I_F = 50\text{mA}$ $I_F = 150\text{mA}$
Leakage Current (Note 1)	I_R			5.0 80	nA nA	$V_R = 75\text{V}$ $V_R = 75\text{V}, T_j = 150^\circ\text{C}$
Total Capacitance	C_T		2		pF	$V_R = 0, f = 1.0\text{MHz}$
Reverse Recovery Time	t_{rr}			3.0	s	$I_F = I_R = 10\text{mA}$ $I_{rr} = 0.1 \times I_R, R_L = 100$

- Notes:
- Short duration test pulse to minimize self-heating effect.
 - Part mounted on FR-4 PC board with recommended pad layout, which can be found on our website at <http://www.diodes.com/datasheets/ap02001.pdf>.
 - No purposefully added lead.
 - Diodes Inc.'s "Green" policy can be found on our website at http://www.diodes.com/products/lead_free/index.php.

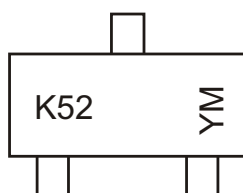


Ordering Information (Note 5)

Device	Packaging	Shipping
BAV199W-7	SOT-323	3000/Tape & Reel

Notes: 5. For Packaging Details, go to our website at <http://www.diodes.com/datasheets/ap02007.pdf>.

Marking Information



K52 = Product Type Marking Code
 YM = Date Code Marking
 Y = Year ex: T = 2006
 M = Month ex: 9 = September

Date Code Key

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012
Code	R	S	T	U	V	W	X	Y	Z

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Code	1	2	3	4	5	6	7	8	9	O	N	D



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