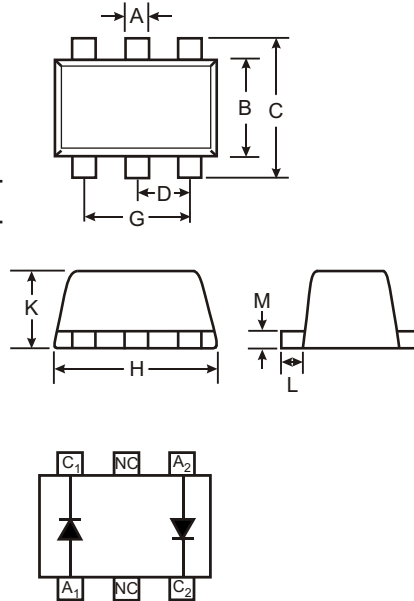


Features

Surface Mount Package Ideally Suited for Automatic Insertion
 Very Low Leakage Current
Lead Free By Design/RoHS Compliant (Note 1)

Mechanical Data

Case: SOT-563, Molded Plastic
 Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
 Moisture Sensitivity: Level 1 per J-STD-020C
 Terminal Connections: See Diagram
 Terminals: Finish Matte Tin annealed over Alloy 42 leadframe. Solderable per MIL-STD-202, Method 208
 Marking & Type Code Information: See Last Page
 Ordering Information: See Last Page
 Weight: 0.003 grams (approximate)



SOT-563			
Dim	Min	Max	Typ
A	0.15	0.30	0.25
B	1.10	1.25	1.20
C	1.55	1.70	1.60
D	0.50		
G	0.90	1.10	1.00
H	1.50	1.70	1.60
K	0.56	0.60	0.60
L	0.10	0.30	0.20
M	0.10	0.18	0.11
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}	215	mA
Repetitive Peak Forward Current	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	
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +150	°C

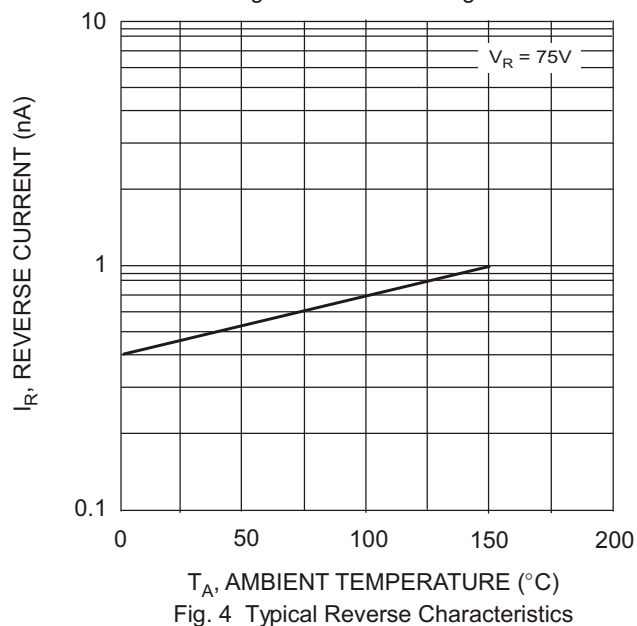
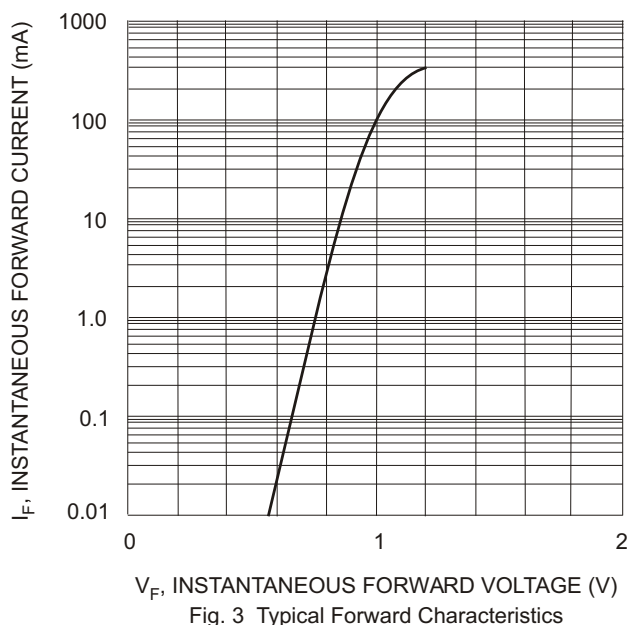
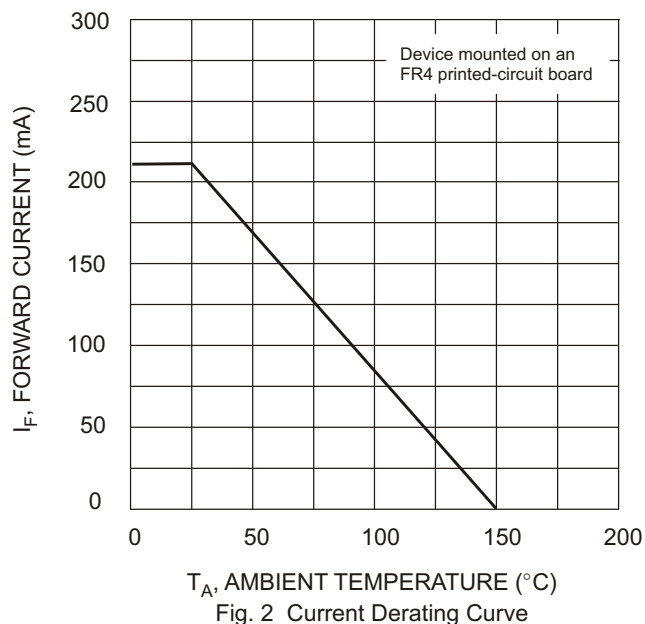
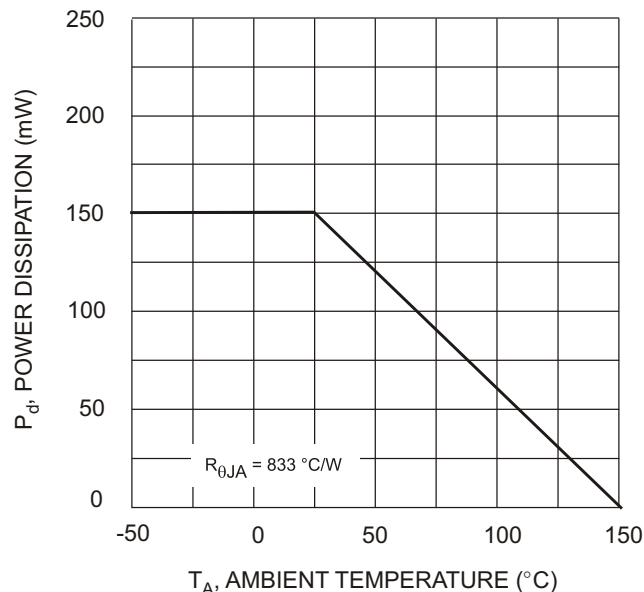
Thermal Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Value	Unit
Power Dissipation (Note 2)	P_d	150	mW
Thermal Resistance Junction to Ambient Air (Note 2)	R_{JA}	833	°C/W

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

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 3)	$V_{(BR)R}$	85			V	$I_R = 100\text{ }\mu\text{A}$
Forward Voltage	V_{FM}			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 3)	I_{RM}			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	$I_F = I_R = 10\text{mA}$, $t_{rr} = 0.1 \times I_R, R_L = 100\text{ }\Omega$

- Note:
- No purposefully added lead.
 - Part mounted on FR-4 board with recommended pad layout, which can be found on our website at <http://www.diodes.com/datasheets/ap02001.pdf>.
 - Short duration test pulse used to minimize self-heating effect.

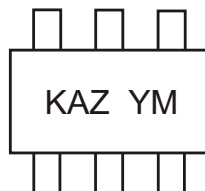


Ordering Information (Note 4)

Device	Packaging	Shipping
BAS116V-7	SOT-563	3000/Tape & Reel

Notes: 4. For Packaging Details, go to our website at <http://www.diodes.com/datasheets/ap02007.pdf>.

Marking Information



KAZ = Product Type Marking Code (See Page 1 Diagrams)
 YM = Date Code Marking
 Y = Year (ex: R = 2004)
 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	March	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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