BAV756DW

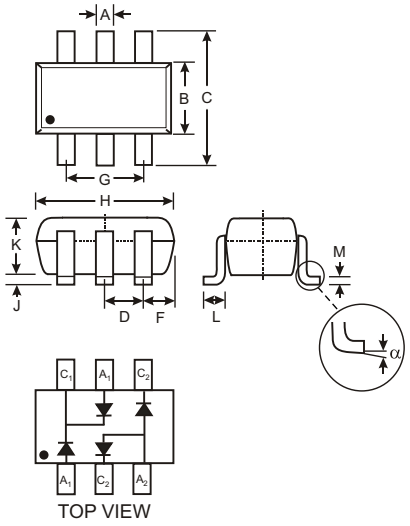
QUAD SURFACE MOUNT SWITCHING DIODE ARRAY

Features

- Fast Switching Speed
- Ultra-Small Surface Mount Package
- For General Purpose Switching Applications
- High Conductance
- One BAV70 Circuit and One BAW56 Circuit In One Package
- Easily Connected As Full Wave Bridge
- **Lead Free/RoHS Compliant (Note 4)**

Mechanical Data

- Case: SOT-363
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020C
- Terminals: Solderable per MIL-STD-202, Method 208
- Lead Free Plating (Matte Tin Finish annealed over Alloy 42 leadframe).
- Polarity: See Diagram
- Marking: KCA, See Page 2
- Ordering Information: See Page 2
- Weight: 0.006 grams (approximate)



SOT-363		
Dim	**Min**	**Max**
A	0.10	0.30
B	1.15	1.35
C	2.00	2.20
D	0.65 Nominal	
F	0.30	0.40
H	1.80	2.20
J		0.10
K	0.90	1.00
L	0.25	0.40
M	0.10	0.25
	0	8°
All Dimensions in mm		

Maximum Ratings @ T_A = 25 C unless otherwise specified

Characteristic	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	75	V
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Forward Continuous Current (Note 1 and 3)	I_{FM}	300	mA
Average Rectified Output Current (Note 1 and 3)	I_O	150	mA
Non-Repetitive Peak Forward Surge Current @ t = 1.0 s @ t = 1.0s	I_{FSM}	2.0 1.0	A
Power Dissipation (Note 1 and 3)	P_d	200	mW
Power Dissipation T_S = 60 C (Note 3)	P_d	300	mW
Thermal Resistance Junction to Ambient Air (Note 1 and 3)	R_{JA}	625	C/W
Thermal Resistance Junction to Soldering Point (Note 3)	R_{JS}	275	C/W
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +150	C

Electrical Characteristics @ T_A = 25 C unless otherwise specified

Characteristic	Symbol	Min	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 2)	$V_{(BR)R}$	75		V	I_R = 2.5 A
Forward Voltage	V_F		0.715 0.855 1.0 1.25	V	I_F = 1.0mA I_F = 10mA I_F = 50mA I_F = 150mA
Reverse Current (Note 2)	I_R		2.5 50 30 25	A A A nA	V_R = 75V V_R = 75V, T_j = 150 C V_R = 25V, T_j = 150 C V_R = 20V
Total Capacitance	C_T		2.0	pF	V_R = 0, f = 1.0MHz
Reverse Recovery Time	t_{rr}		4.0	ns	I_F = I_R = 10mA, I_{rr} = 0.1 x I_R, R_L = 100

Notes:
1. Device 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.
2. Short duration test pulse used to minimize self-heating effect.
3. One or more diodes loaded.
4. No purposefully added lead.

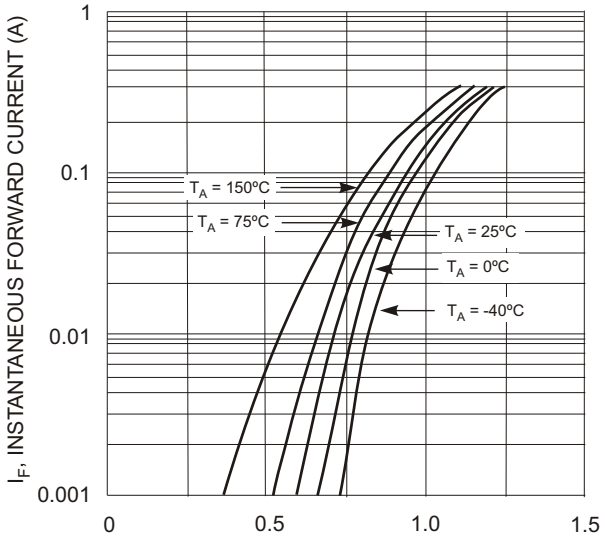


Fig. 1 Forward Characteristics

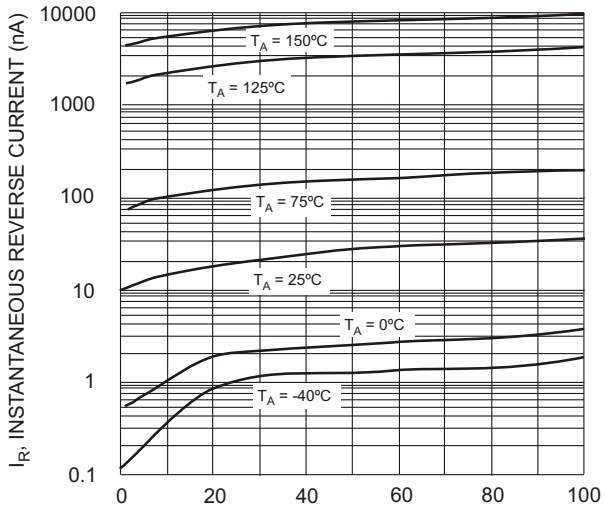


Fig. 2 Typical Reverse Characteristics

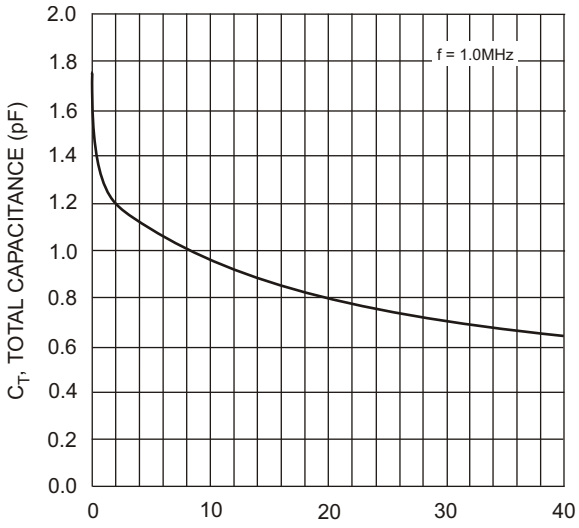


Fig. 3 Typical Capacitance vs. Reverse Voltage

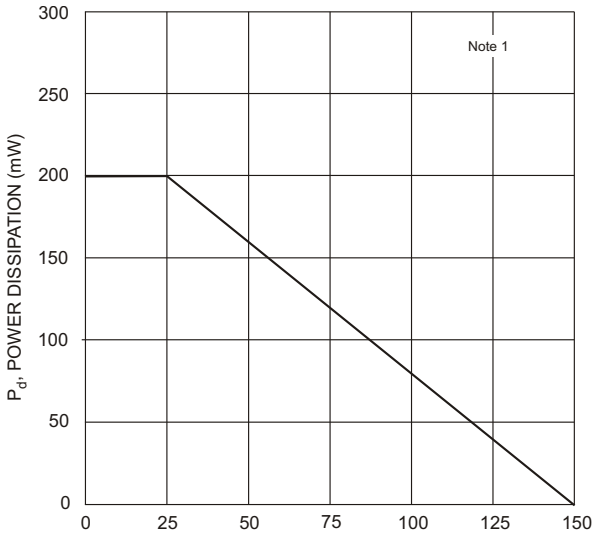


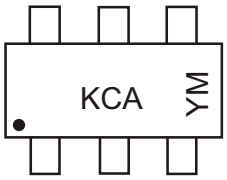
Fig. 4 Power Derating Curve

Ordering Information (Note 5)

Device	Packaging	Shipping
BAV756DW-7-F	SOT-363	3000/Tape & Reel

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

Marking Information



KCA = Product Type Marking Code
YM = Date Code Marking
Y = Year ex: N = 2002
M = Month ex: 9 = September

Date Code Key

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Code	M	N	P	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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