

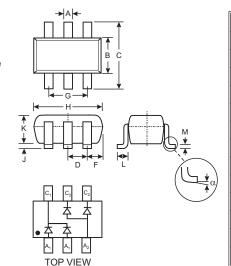
QUAD SURFACE MOUNT SWITCHING DIODE ARRAY

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
- Lead Free/RoHS Compliant (Note 3)
- Qualified to AEC-Q101 Standards for High Reliability

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: KAC (See Page 3)
- Weight: 0.006 grams (approximate)



SOT-363								
Dim	Min	Max						
Α	0.10	0.30						
В	1.15	1.35						
С	2.00	2.20						
D	0.65 Nominal							
F	0.30	0.40						
Н	1.80	2.20						
J	_	0.10						
K	0.90	1.00						
L	0.25	0.40						
М	0.10	0.25						
α	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}	V _{RM} 100			
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)	I _{FM}	mA			
Average Rectified Output Current (Note 1)	Io	150	mA		
Non-Repetitive Peak Forward Surge Current @ t = 1.0µs @ t = 1.0s	I _{FSM}	2.0 1.0	А		
Power Dissipation (Note 1)	Pd	200	mW		
Thermal Resistance Junction to Ambient Air (Note 1)	$R_{ hetaJA}$	625	°C/W		
Operating and Storage Temperature Range	T_j , T_{STG}	-65 to +150	°C		

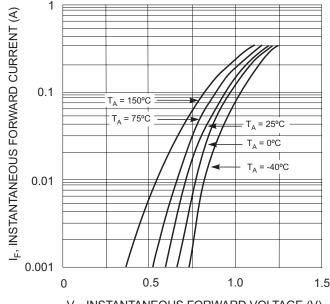
Electrical Characteristics @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	Min	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 2)	V _{(BR)R}	75	_	V	$I_R = 2.5 \mu A$
Forward Voltage (Note 2)	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	μΑ μΑ μΑ nA	$V_R = 75V$ $V_R = 75V$, $T_j = 150^{\circ}C$ $V_R = 25V$, $T_j = 150^{\circ}C$ $V_R = 20V$
Total Capacitance	C _T	_	2.0	pF	V _R = 0, f = 1.0MHz

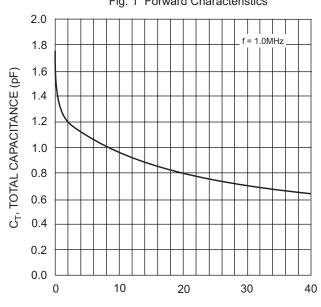
Notes: 1. Device mounted on FR-4 PC board with recommended pad layout, which can be found on our website at http://www.diodes.com/datasheets/ap02001.pdf.

- 2. Short duration test pulse used to minimize self-heating effect.
- 3. No purposefully added lead.

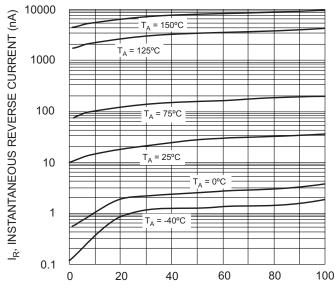




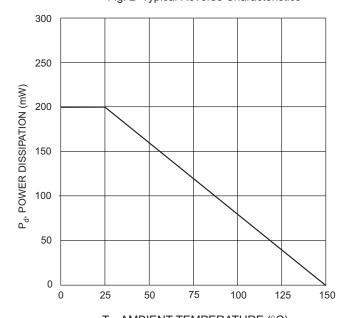
V_F, INSTANTANEOUS FORWARD VOLTAGE (V) Fig. 1 Forward Characteristics



 $\label{eq:VR} {\rm V_{R},\,REVERSE\,VOLTAGE\,(V)}$ Fig. 3 Typical Capacitance vs. Reverse Voltage



 V_R , INSTANTANEOUS REVERSE VOLTAGE (V) Fig. 2 Typical Reverse Characteristics



T_A, AMBIENT TEMPERATURE (°C) Fig. 4 Power Derating Curve

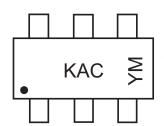


Ordering Information (Note 4)

Device	Packaging	Shipping		
BAW567DW-7-F	SOT-363	3000/Tape & Reel		

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

Marking Information



KAC = 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	200)4 2	2005	2006	2007	2008	2009
Code		М		N	Р	R		S	Т	U	V	W
Month	Jan	Feb	March	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Code	1	2	3	4	5	6	7	8	9	0	N	D

IMPORTANT NOTICE

Diodes, Inc. and its subsidiaries reserve the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes. Diodes, Inc. does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold Diodes Incorporated and all the companies whose products are represented on our website, harmless against all damages.

LIFE SUPPORT

The products located on our website at **www.diodes.com** are not recommended for use in life support systems where a failure or malfunction of the component may directly threaten life or cause injury without the express written approval of Diodes Incorporated.