

## Surface Mount Switching Multi-Chip Diode Array

**(Pb)** Lead(Pb)-Free

### Features:

- \* For General Purpose Switching Applications
- \* Fast Switching Speed
- \* High Conductance
- \* Easily Connected As Full Wave Bridge

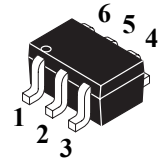
### Mechanical Data:

- \* 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
- \* Polarity : See Diagram
- \* Weight : 0.006 grams(appro)

**MULTI-CHIP DIODES**

**150m AMPERES**

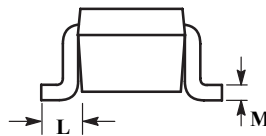
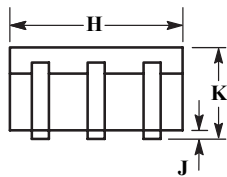
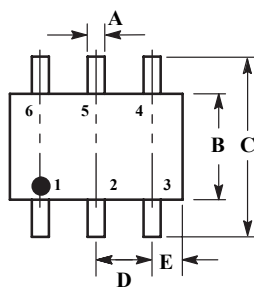
**75 VOLTS**



**SOT-363**

## SOT-363 Outline Dimensions

Unit:mm



SOT-363		
Dim	Min	Max
A	0.10	0.30
B	1.15	1.35
C	2.00	2.20
D	0.65 REF	
E	0.30	0.40
H	1.80	2.20
J	-	0.10
K	0.80	1.10
L	0.25	0.40
M	0.10	0.25

## Maximum Ratings (T<sub>A</sub>=25°C Unless otherwise noted)

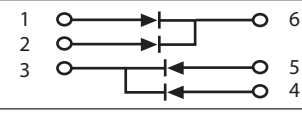
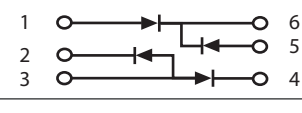
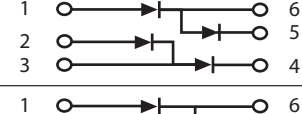
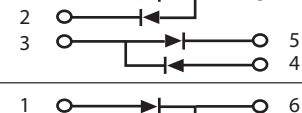
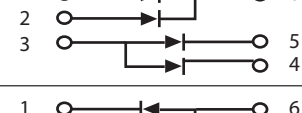
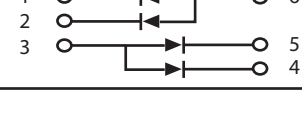
Characteristic	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V <sub>RM</sub>	100	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RM</sub> V <sub>R</sub>	75	V
RMS Reverse Voltage	V <sub>R(RSM)</sub>	53	V
Average Rectified Output Current <sup>(1,3)</sup>	I <sub>O</sub>	150	mA
Non-Repetitive Forward Current @t=1.0μs @t=1.0s	I <sub>FSM</sub>	2.0 1.0	A
Power Dissipation <sup>(1,3)</sup>	P <sub>D</sub>	200	mW
Thermal Resistance, Junction to Ambient Air <sup>(1,3)</sup>	R <sub>θJA</sub>	625	°C/W
Junction & Storage Temperature Range	T <sub>j</sub> ,T <sub>stg</sub>	-65 to +150	°C

## Electrical Characteristics (T<sub>A</sub>=25°C Unless otherwise noted)

Characteristic	Symbol	Min	Typ	Max	Unit
Reverse Breakdown Voltage <sup>(2)</sup> I <sub>R</sub> =2.5μA	V <sub>(BR)R</sub>	75	-	-	A
Reverse Current <sup>(2)</sup> V <sub>R</sub> =75V V <sub>R</sub> =20V	I <sub>R</sub>	-	-	2.5 25	μA nA
Forward Voltage <sup>(2)</sup> I <sub>F</sub> =1mA I <sub>F</sub> =10mA I <sub>F</sub> =50mA I <sub>F</sub> =150mA	V <sub>F</sub>	-	-	715 855 1000 1250	mV
Total Capacitance (V <sub>R</sub> =0V, f=1.0MHz)	C <sub>D</sub>	-	-	2.0	pF
Reverse Recover Time I <sub>F</sub> = I <sub>R</sub> = 10mA, I <sub>rr</sub> = 0.1 x I <sub>R</sub> , R <sub>L</sub> = 100Ω	T <sub>rr</sub>	-	-	4.0	nS

Notes: 1. Device mounted on FR-4 PC board with recommended pad layout.  
 2. Short duration test pulse used to minimize self-heating effect.  
 3. One or more diodes loaded.

## Device Marking

Item	Marking	Equivalent Circuit diagram
BAV70DW	KJA	
BAV756DW	KCA	
BAV99BRW	KGJ	
BAV99DW	KJG	
BAW567DW	KAC	
BAW56DW	KJC	

## Typical Characteristics

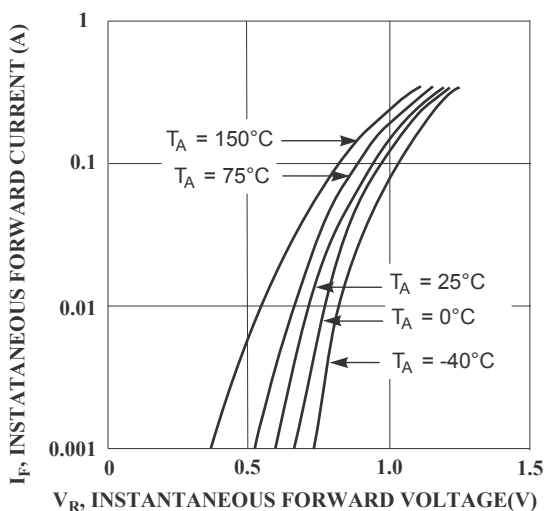


Fig.1 Forward Characteristics

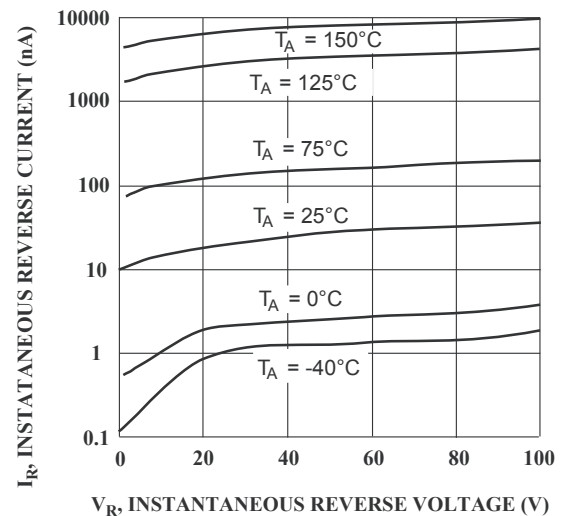


Fig.2 Typical Reverse Characteristics

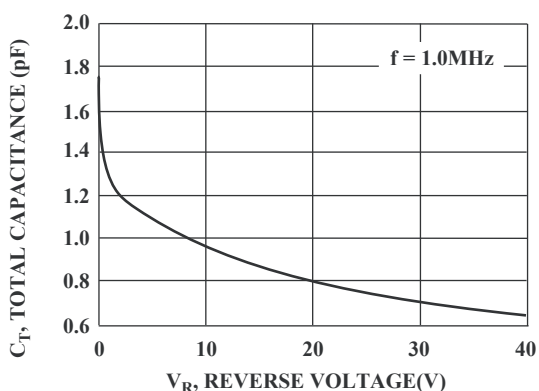


Fig.3 Typical Capacitance vs. Reverse Voltage

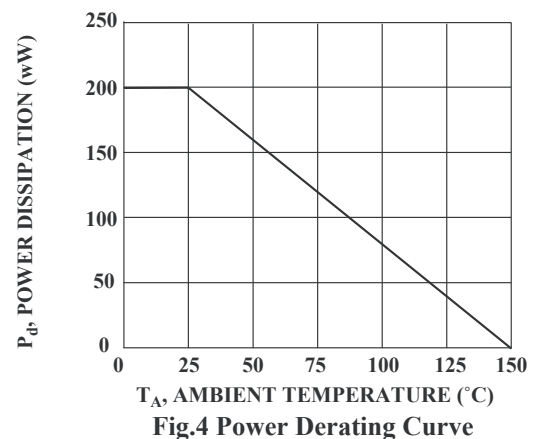


Fig.4 Power Derating Curve