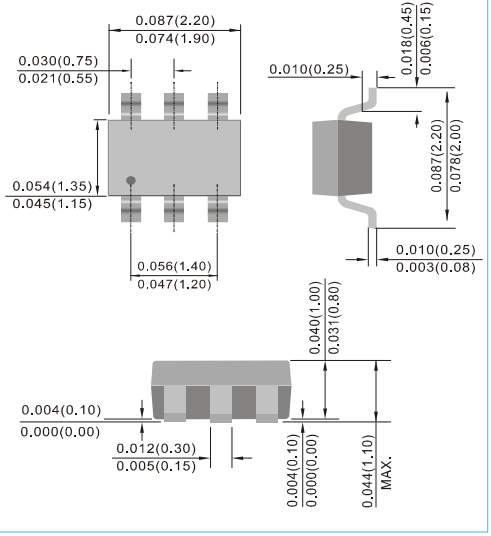
BAV99BRW

QUAD SURFACE MOUNT SWITCHING DIODE ARRAY

FEATURES

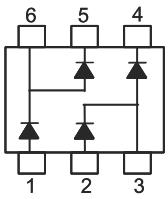
- Fast Switching Speed
- Ultra-Small Surface Mount Package
- For General Purpose Switching Applications
- High Conductance
- Easily Connected As Full-Wave Bridge
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

SOT-363 Unit : inch(mm)



MECHANICAL DATA

- Case : SOT-363, Plastic
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.0002 ounces, 0.006 grams
- Marking : PW



MAXIMUM RATINGS (T_A=25°C unless otherwise specified)

PARAMETER		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)		I_{FM}	300	mA
Average Rectified Output Current (Note 1)		I_O	215	mA
Non-Repetitive Peak Forward Surge Current	@ t=1μs @ t=1s	I_{FSM}	4 0.7	A
Power Dissipation (Note 1)		P_D	200	mW
Thermal Resistance Junction to Ambient Air (Note 1)		$R_{\Theta JA}$	625	°C/W
Operating and Storage Temperature Range		T_J,T_{STG}	-55 to + 150	°C

Notes : 1.Device mounted on FR-4 PC board with recommended pad layout.

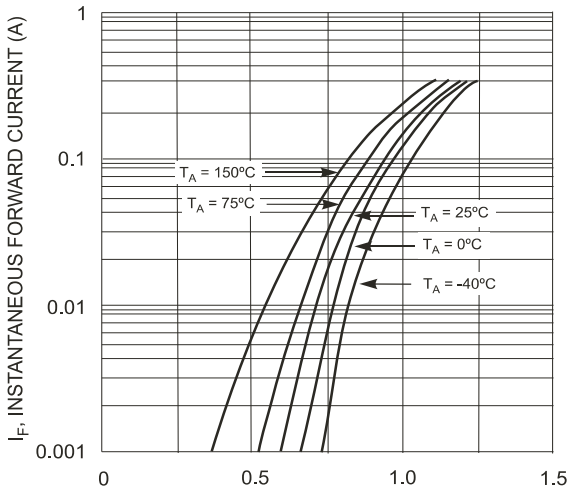
2. Short duration test pulse used to minimize self-heating effect.

3. No Purposefully added lead.

BAV99BRW

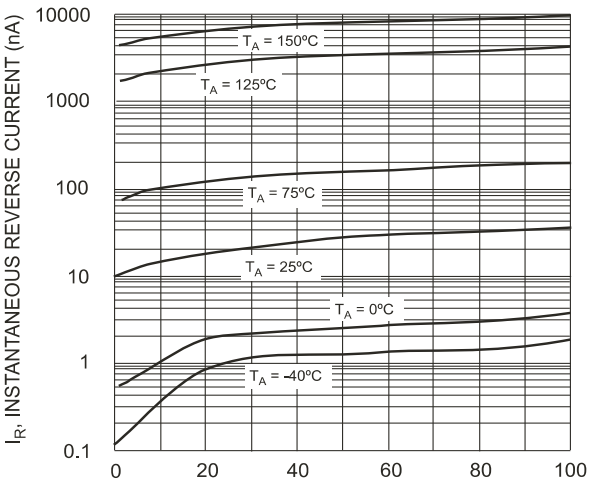
ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise specified)

PARAMETER	TEST CONDITION	SYMBOL	MIN.	MAX.	UNIT
Reverse Breakdown Voltage (Note 2)	I_R=2.5μA	$V_{(BR)R}$	75	-	V
Forward Voltage	I_F=1mA I_F=10mA I_F=50mA I_F=150mA	V_F	-	0.715 0.855 1 1.25	V
Reverse Current (Note 2)	V_R=75V V_R=75V,T_J=150°C V_R=25V,T_J=150°C V_R=25V	I_R	-	2.5 50 30 0.03	μA μA μA μA
Total Capacitance	V_R=0,f=1MHz	C_T	-	2	pF
Reverse Recovery Time	I_F=I_R=10mA, I_{RR}=0.1xI_R,R_L=100Ω	T_{RR}	-	4	ns



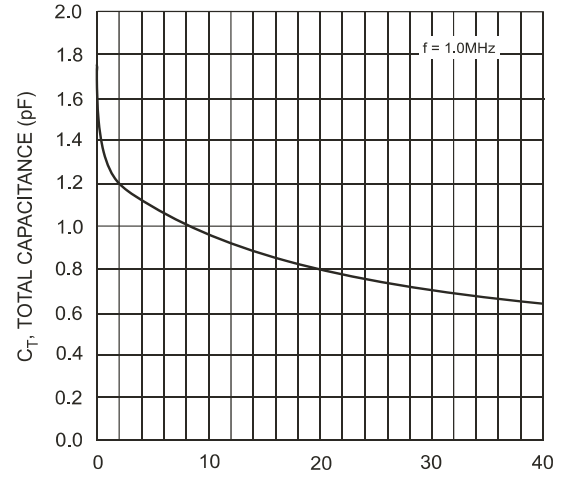
V_F, INSTANTANEOUS FORWARD VOLTAGE (V)

Fig. 1 Forward Characteristics



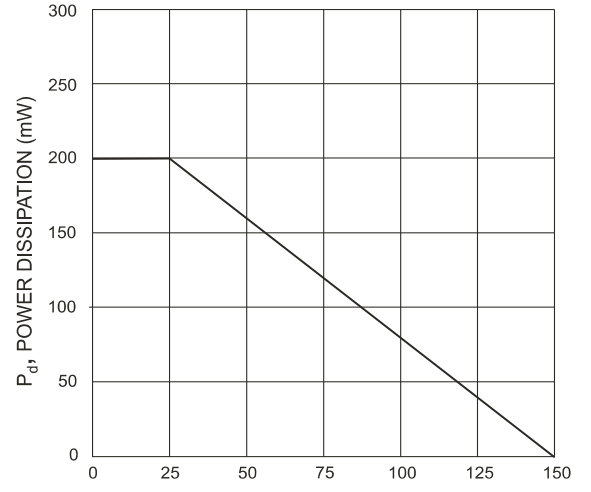
V_R, INSTANTANEOUS REVERSE VOLTAGE (V)

Fig. 2 Typical Reverse Characteristics



V_R, REVERSE VOLTAGE (V)

Fig. 3 Typical Capacitance vs. Reverse Voltage



T_A, AMBIENT TEMPERATURE (°C)

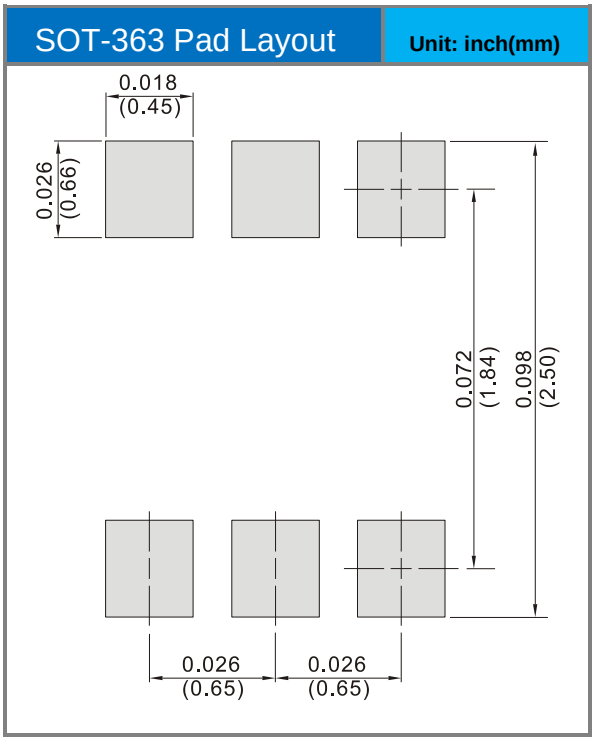
Fig. 4 Power Derating Curve

BAV99BRW

Product and Packing Information

Part No.	Package Type	Packing Type	Marking
BAV99BRW	SOT-363	3K pcs / 7” reel	PW
BAV99BRW	SOT-363	10K pcs / 13” reel	PW

Mounting Pad Layout



BAV99BRW

Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from PANJIT International Inc..
- PANJIT International Inc. reserves the rights to make changes of the content herein the document follow PCN procedure. Please refer to our website for the latest document.
- PANJIT International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- PANJIT International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. PANJIT International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed or authorized for equipment relating to human life, life-saving or life-sustaining applications, such as medical instruments, transportation equipment, aerospace machinery, or for other applications intended to cause personal injury. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify PANJIT International Inc. for any damages resulting from such improper use or sale. For additional terms and conditions regarding the use of PANJIT products, please refer to the Terms of Use available on the PANJIT website.
- Since PANJIT uses lot number as the tracking base, please provide the lot number for tracking when complaining.