



#### 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 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

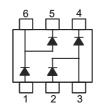
#### **MECHANICAL DATA**

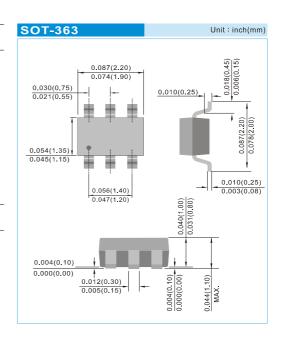
ð Case: SOT-363, Plastic

ð Terminals : Solderable per MIL-STD-750, Method 2026

ð Approx. Weight: 0.0002 ounces, 0.006 grams

ð Marking: PW





#### MAXIMUM RATINGS (Ta=25°C unless otherwise specified)

PARAMETER		SYMBOL	VALUE	UNIT
Non-Repetitive Peak Reverse Voltage		VRM	100	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage		VRRM VRWM VR	75	V
RMS Reverse Voltage		VR(RMS)	53	V
Forward Continuous Current (Note 1)		I FM	300	mA
Average Rectified Output Current (Note 1)		lo	215	mA
Non-Repetitive Peak Forward Surge Current	@ t=1μs @ t=1s	I FSM	4 0.7	А
Power Dissipation (Note 1)		PD	200	mW
Thermal Resistance Junction to Ambient Air (Note 1)		Rөja	625	°C/W
Operating and Storage Temperature Range		TJ,TSTG	-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





#### ELECTRICAL CHARACTERISTICS (TA=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	-	٧
Forward Voltage	F=1mA   F=10mA   F=50mA   F=150mA	VF	-	0.715 0.855 1 1.25	V
Reverse Current (Note 2)	VR=75V VR=75V,TJ=150°C VR=25V,TJ=150°C VR=25V	l R	-	2.5 50 30 0.03	μΑ μΑ μΑ μΑ
Total Capacitance	V <sub>R</sub> =0, f=1 MHz	Ст	-	2	pF
Reverse Recovery Time	F=  R=10mA,   RR=0.1x  R,RL=100Ω	TRR	-	4	ns

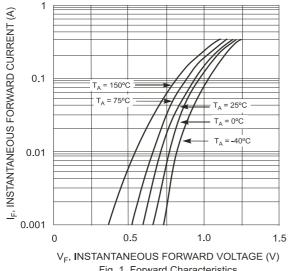
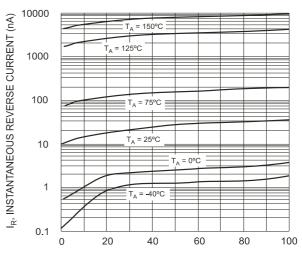
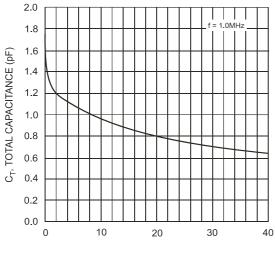


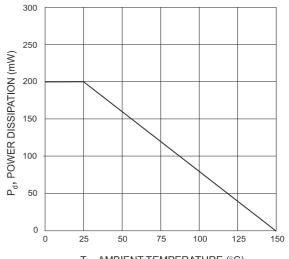
Fig. 1 Forward Characteristics



 $V_{\rm R}$ , INSTANTANEOUS REVERSE VOLTAGE (V) Fig. 2 Typical Reverse Characteristics



 $V_R$ , REVERSE VOLTAGE (V) Fig. 3 Typical Capacitance vs. Reverse Voltage



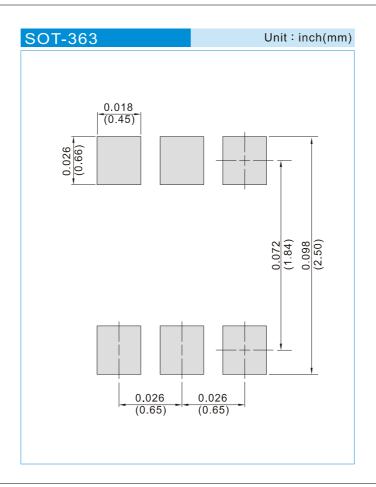
T<sub>A</sub>, AMBIENT TEMPERATURE (°C) Fig. 4 Power Derating Curve

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#### **MOUNTING PAD LAYOUT**



#### **ORDER INFORMATION**

· Packing information

T/R - 10K per 13" plastic Reel

T/R - 3K per 7" plastic Reel





### Part No\_packing code\_Version

BAV99BRW\_R1\_00001 BAV99BRW\_R2\_00001

# For example : RB500V-40\_R2\_00001 Part No. Serial number Version code means HF Packing size code means 13"

Packing Code XX			Version Code XXXXX			
Packing type	1st Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code
Tape and Ammunition Box (T/B)	Α	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	В	13"	2			
Tube Packing (T/P)	Т	26mm	Х			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Υ			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			

Packing type means T/R





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