BAS70TW/ADW/CDW/SDW

SURFACE MOUNT SCHOTTKY DIODES ARRAYS

These devices feature electrically-isolated Schottky diodes connected in varios configurations housed in a very small SOT-363

FEATURES

- Maximum forward voltage @ 1mA of 0.41V
- Maximum leakage current @ 50V of 100nA
- Reverse voltage rating of 70V
- Lead free in comply with EU RoHS 2011/65/EU directives
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

Case: SOT-363, Plastic

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

Approx weight: 0.00018 ounces, 0.005 grams

Marking: BAS70TW: A70, BAS70ADW:A72, BAS70CDW: A73, BAS70SDW:A74

APPLICATOINS

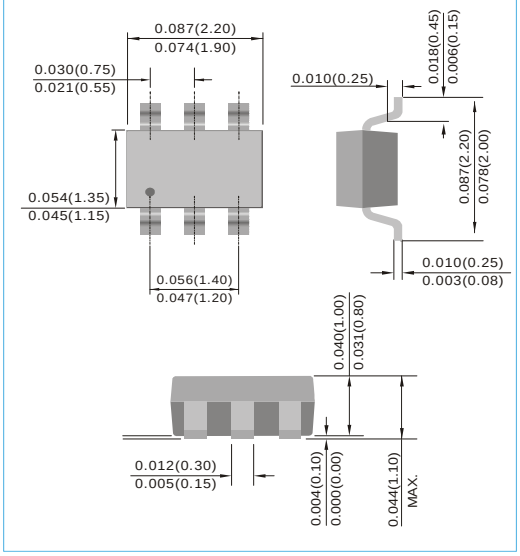
Rail-to rail ESD protection

Overshoot and undershoot switching control

Mobile phones and accessories

Video fame consoles connector ports

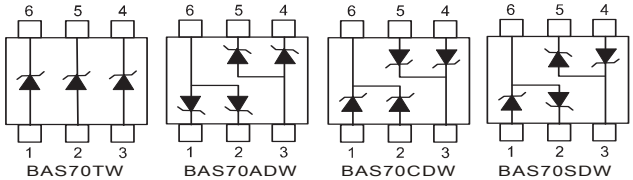
SOT-363 Unit : inch(mm)



MAXIMUM RATING (Per Diode) T_J=25°C Unless otherwise noted

Parameter	Symbol	Value	Units
Repetitve Peak Reverse Voltage	V_{RRM}	70	V
Continuous Reverse Voltage	V_R	70	V
Continuous Forward Current	I_F	200	mA
Non-repetitive Peak Forward Surge Current, t=1s, Square Wave	I_{FSM}	0.6	A
Total Power Dissipation (Note 1)	P_{TOT}	225	mW
Thermal Resistance, Junction to Ambient	$R_{\Theta JA}$	556	°C/W
Operating Junction Temperature Range	T_J	-55 to +125	°C
Storage Temperature Range	T_{STG}	-55 to +125	°C

Note : 1.FR-5 Board 1 x 0.75 x 0.062 in.



BAS70TW Fig.50 (TOP VIEW)

BAS70ADW Fig.46 (TOP VIEW)

BAS70CDW Fig.47 (TOP VIEW)

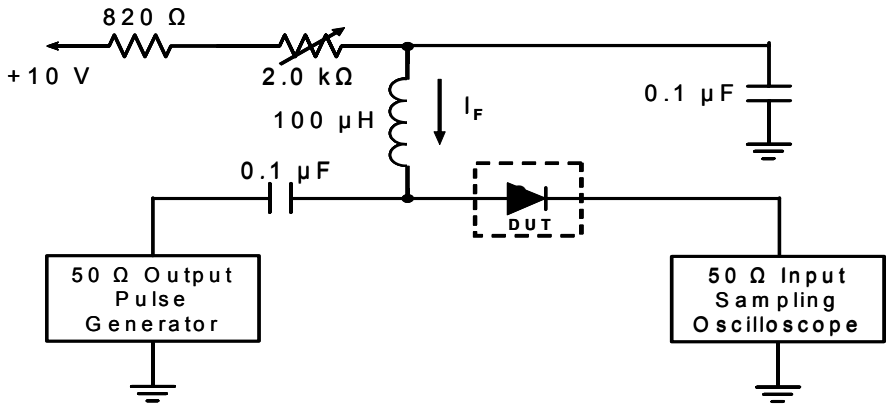
BAS70SDW Fig45 (TOP VIEW)

BAS70TW/ADW/CDW/SDW

ELECTRICAL CHARACTERISTICS (Per Diode) T_J=25°C Unless otherwise noted

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Units
Breakdown Voltage (Note 2)	V_{BR}	I_{BR}=100μA	70	--	--	V
Forward Voltage (Note 2)	V_F	I_F=1mA I_F=10mA I_F=15mA	--	--	0.41 0.75 1	V
Reverse Leakage Current (Note 2)	I_R	V_R=50 V	--	--	100	nA
Junction Capacitance	C_D	V_R=0V, f=1MHz	--	1.25	2	pF
Reverse Recovery Time (See Figure 1)	T_{RR}	I_F=10mA,I_R=10mA R_L=100Ω measured at I_{rrec}=1mA	--	--	5	ns

Note : 1.Short duration (< 300μs) test pulse to minmize self heating



Notes: 1. A 2.0kΩ variable resistor adjusted for a forward current (I_F) to 10mA
2. Input pulse is adjusted to $I_{R(peak)}$ is equal to 10mA

Figure 1. REVERSE RECOVERY TIME EQUIVALENT TEST CIRCUIT

BAS70TW/ADW/CDW/SDW

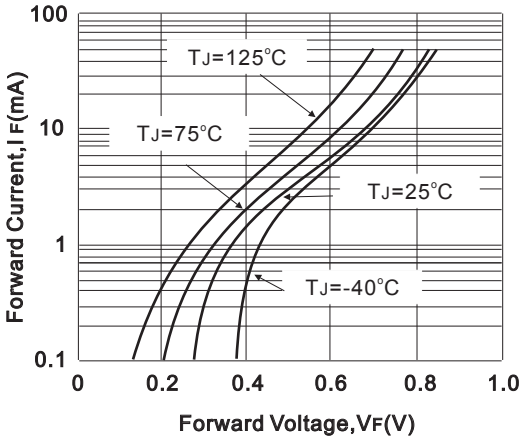


Fig.2 Typical Forward Characteristics

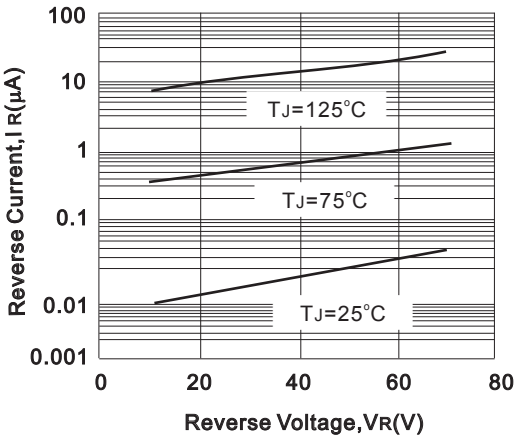


Fig.3 Typical Reverse Characteristics

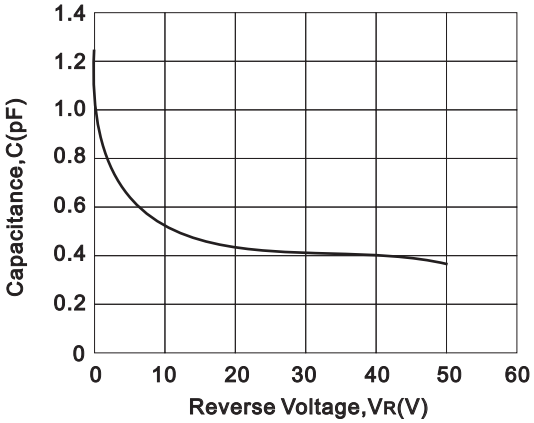
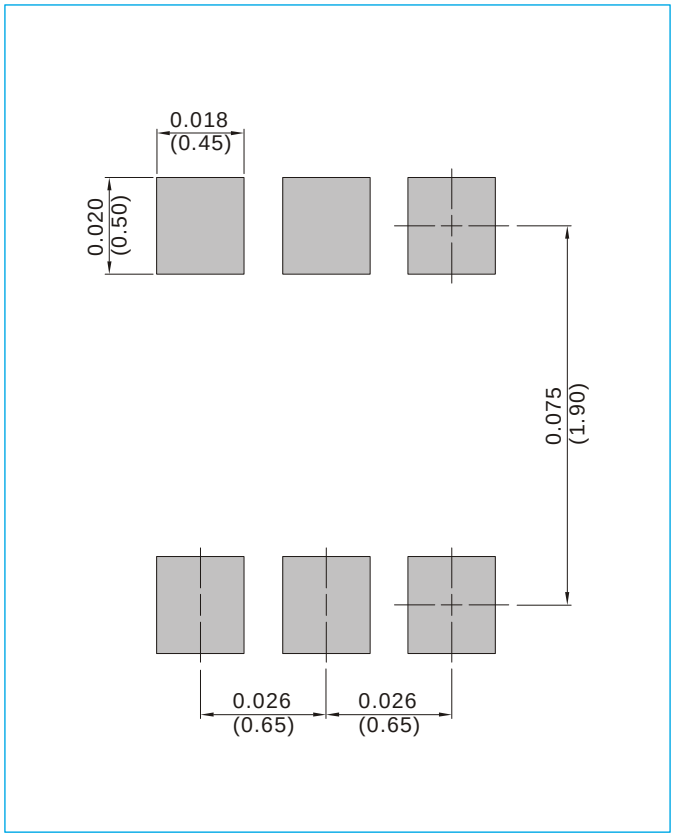


Fig.4 Typical Reverse Characteristics

BAS70TW/ADW/CDW/SDW

MOUNTING PAD LAYOUT

SOT-363 Unit : inch(mm)



ORDER INFORMATION

- Packing information

  T/R - 10K per 13" plastic Reel

  T/R - 3K per 7" plastic Reel

BAS70TW/ADW/CDW/SDW

Part No_packing code_Version

BAS70TW_R1_00001

BAS70TW_R2_00001

For example :

RB500V-40_R2_00001

Part No.

Serial number

Version code means HF

Packing size code means 13"

Packing type means T/R

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

BAS70TW/ADW/CDW/SDW

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 anytime without notification. 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 and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. 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.
- Since Panjit uses lot number as the tracking base, please provide the lot number for tracking when complaining.