



BAS70TW /DW-04 / DW-05 /DW-06 /BRW

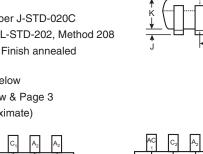
SURFACE MOUNT SCHOTTKY BARRIER DIODE ARRAYS

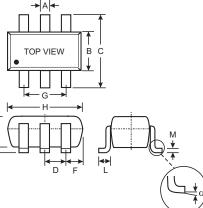
Features

- Low Forward Voltage Drop
- Fast Switching
- Ultra-Small Surface Mount Package
- PN Junction Guard Ring for Transient and ESD Protection
- Lead Free/RoHS Compliant (Note 3)

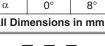
Mechanical Data

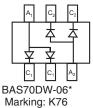
- Case: SOT-363
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020C
- Terminals: Solderable per MIL-STD-202, Method 208
- Lead Free Plating (Matte Tin Finish annealed over Alloy 42 leadframe).
- Orientation: See Diagrams Below
- Marking: See Diagrams Below & Page 3
- Weight: 0.006 grams (approximate)

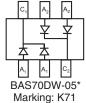


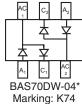


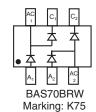
	SOT-363									
Dim	Min	Max								
Α	0.10	0.30								
В	1.15	1.35								
С	2.00	2.20								
D	0.65 Nominal									
F	0.30	0.40								
Н	1.80	2.20								
J	_	0.10								
K	0.90	1.00								
L	0.25	0.40								
M	0.10	0.25								
α	0°	8°								
All Dimensions in mm										

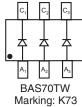












Maximum Ratings @ TA = 25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	70	V
RMS Reverse Voltage	V _{R(RMS)}	49	V
Forward Continuous Current (Note 1)	I _{FM}	70	mA
Non-Repetitive Peak Forward Surge Current @ t < 1.0s	I _{FSM}	100	mA
Power Dissipation (Note 1)	P _d	200	mW
Thermal Resistance Junction to Ambient Air (Note 1)	$R_{ heta JA}$	625	°C/W
Operating and Storage Temperature Range	T _j T _{STG}	-55 to +125 -65 to +125	°C

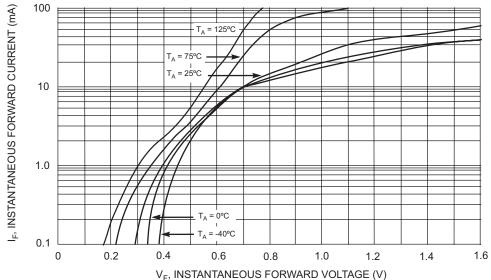
Electrical Characteristics @ TA = 25°C unless otherwise specified

Characteristic	Symbol	Min	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 2)	V _{(BR)R}	70	_	V	$I_R = 10\mu A$
Forward Voltage	V _F	_	410 1000	mV mV	$t_p < 300 \mu s$, $I_F = 1.0 mA$ $t_p < 300 \mu s$, $I_F = 15 mA$
Reverse Current (Note 2)	I _R	_	100	nA	$t_p < 300 \mu s, V_R = 50 V$
Total Capacitance	C _T	_	2.0	pF	V _R = 0V, f = 1.0MHz
Reverse Recovery Time	t _{rr}	_	5.0	ns	$I_F = I_R = 10$ mA to $I_R = 1.0$ mA, $Irr = 0.1 \times I_R$, $R_L = 100\Omega$

- Notes: 1. Part mounted on FR-4 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. DS30158 Rev. 10 2

^{*}Symmetrical configuration, no orientation indicator.





, INSTANTANEOUS FORWARD VOLTAGE (V Fig. 1 Typical Forward Characteristics

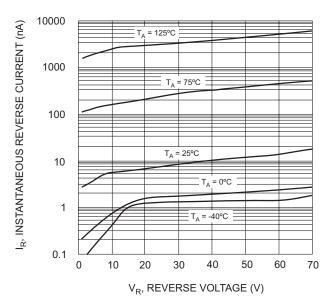
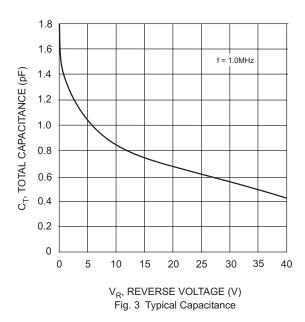


Fig. 2 Typical Reverse Characteristics



250
Note 1
Note

Fig. 4 Power Derating Curve, Total Package

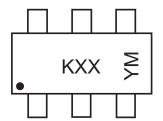


Ordering Information (Note 4)

Device	Packaging	Shipping
BAS70DW-04-7-F	SOT-363	3000/Tape & Reel
BAS70DW-05-7-F	SOT-363	3000/Tape & Reel
BAS70DW-06-7-F	SOT-363	3000/Tape & Reel
BAS70BRW-7-F	SOT-363	3000/Tape & Reel
BAS70TW-7-F	SOT-363	3000/Tape & Reel

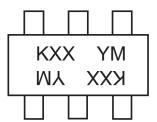
Notes: 4. For Packaging Details, go to our website at http://www.diodes.com/datasheets/ap02007.pdf.

Marking Information



KXX = Product Type Marking Code (See Page 1)

YM = Date Code Marking Y = Year ex: N = 2002 M = Month ex: 9 = September



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For Symmetrical Configuration, No Orientation Indicator

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Date Code Key

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Code	M	N	Р	R	S	Т	U	V	W	Х	Υ	Z

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

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