

**SURFACE MOUNT SCHOTTKY BARRIER DIODE ARRAYS**

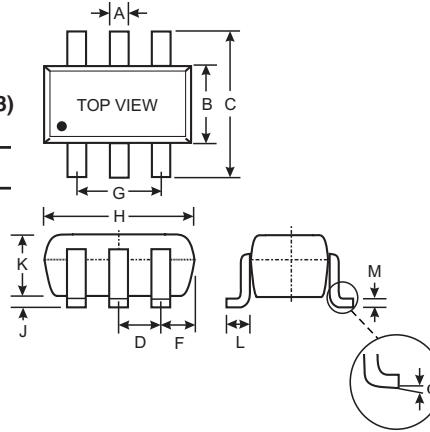
NEW PRODUCT

**Features**

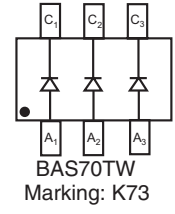
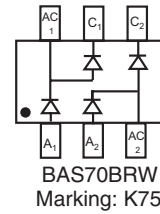
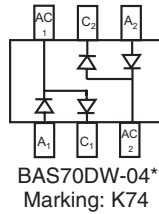
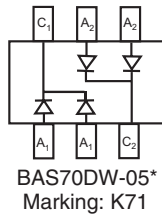
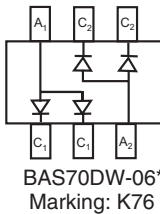
- Low Forward Voltage Drop
- Fast Switching
- Ultra-Small Surface Mount Package
- PN Junction Guard Ring for Transient and ESD Protection
- Available in Lead Free/RoHS Compliant Version (Note 3)

**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
- Also Available in Lead Free Plating (Matte Tin Finish annealed over Alloy 42 leadframe). Please see Ordering Information, Note 5, on Page 3
- Orientation: See Diagrams Below
- Weight: 0.006 grams (approx.)
- Marking: See Diagrams Below & Page 3



SOT-363		
Dim	Min	Max
A	0.10	0.30
B	1.15	1.35
C	2.00	2.20
D	0.65 Nominal	
F	0.30	0.40
H	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		



\*Symmetrical configuration, no orientation indicator.

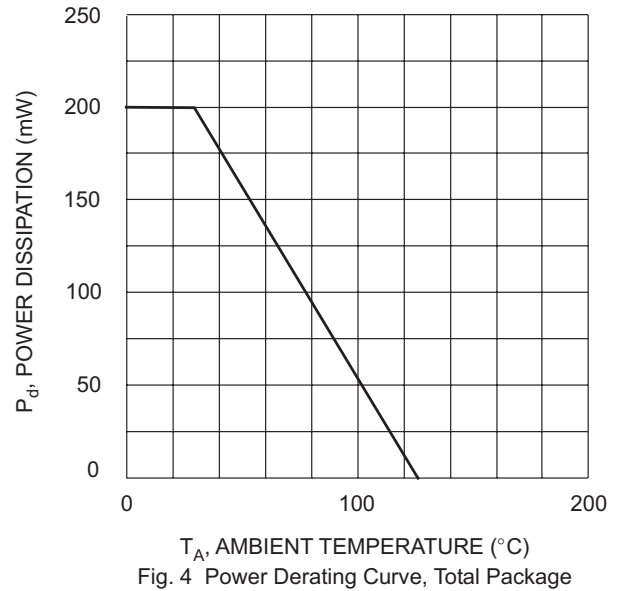
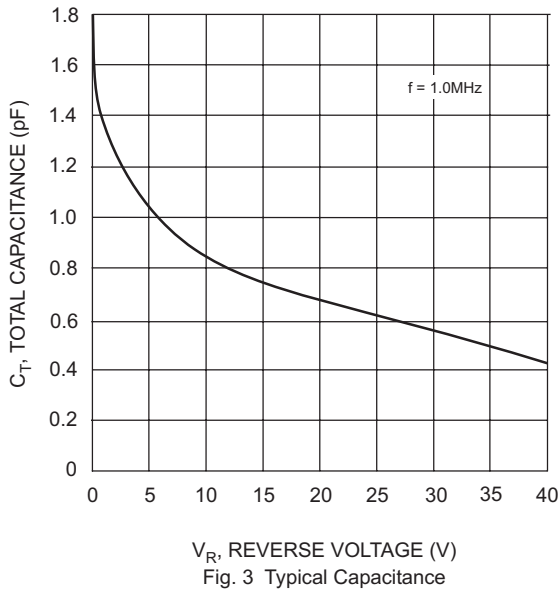
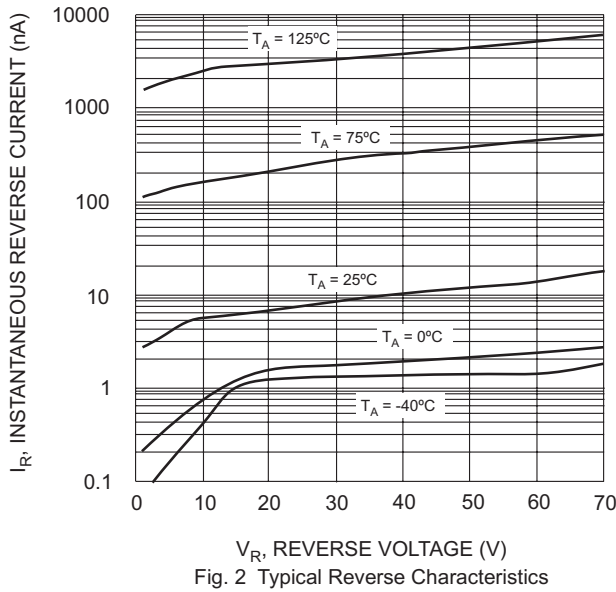
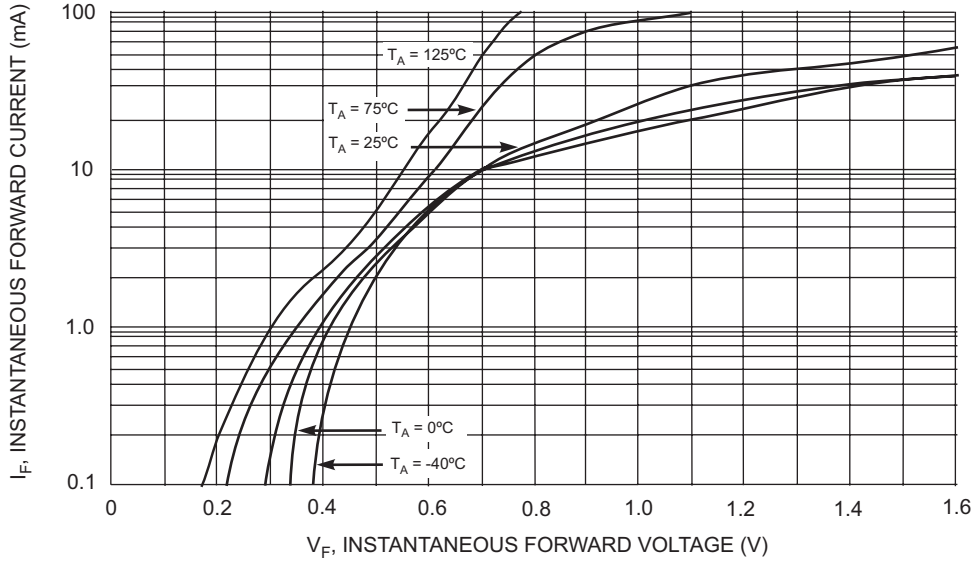
**Maximum Ratings @ TA = 25°C unless otherwise specified**

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)	$R_{\theta JA}$	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
Forward Voltage (Note 2)	$V_F$	—	410 1000	mV mV	$t_p < 300\mu s, I_F = 1.0mA$ $t_p < 300\mu s, I_F = 15mA$
Reverse Current (Note 2)	$I_R$	—	100	nA	$t_p < 300\mu s, V_R = 50V$
Total Capacitance	$C_T$	—	2.0	pF	$V_R = 0V, f = 1.0MHz$
Reverse Recovery Time	$t_{rr}$	—	5.0	ns	$I_F = I_R = 10mA$ to $I_R = 1.0mA$ , $I_{rr} = 0.1 \times I_R, R_L = 100\Omega$

- 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.

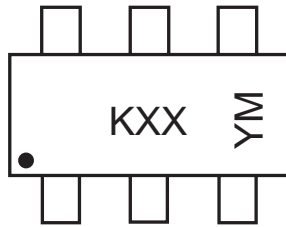


**Ordering Information** (Note 4)

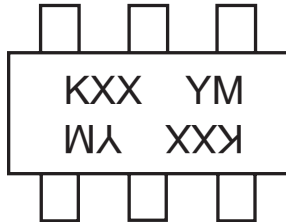
Device	Packaging	Shipping
BAS70DW-04-7	SOT-363	3000/Tape & Reel
BAS70DW-05-7	SOT-363	3000/Tape & Reel
BAS70DW-06-7	SOT-363	3000/Tape & Reel
BAS70BRW-7	SOT-363	3000/Tape & Reel
BAS70TW-7	SOT-363	3000/Tape & Reel

- Notes: 4. For Packaging Details, go to our website at <http://www.diodes.com/datasheets/ap02007.pdf>.  
 5. For Lead Free/RoHS Compliant version part number, please add "-F" suffix to the part number above. Example: BAS70TW-7-F.

**Marking Information**



KXX = Product Type Marking Code (See Page 1)  
 YM = Date Code Marking  
 Y = Year ex: N = 2002  
 M = Month ex: 9 = September



KXX = Product Type Marking Code (See Page 1)  
 For Symmetrical Configuration, No Orientation Indicator  
 YM = Date Code Marking  
 Y = Year ex: N = 2002  
 M = Month ex: 9 = September

Date Code Key

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009
Code	M	N	P	R	S	T	U	V	W

Month	Jan	Feb	March	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Code	1	2	3	4	5	6	7	8	9	O	N	D