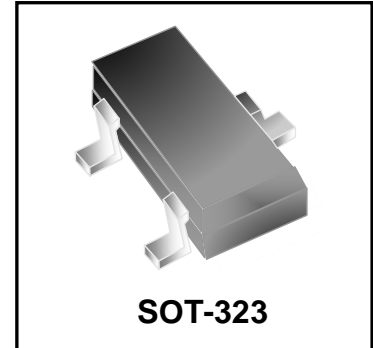


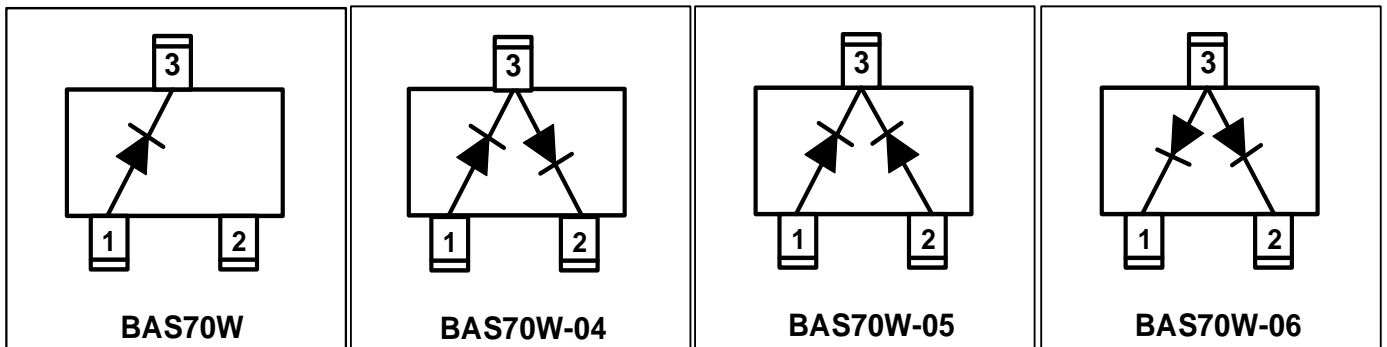
## Schottky Barrier Diode

### Features

- Low Forward Voltage Schottky Rectifier
- High Conductance
- Low Current Leakage
- RoHS Compliant / Green EMC



### Schematic & PIN Configuration

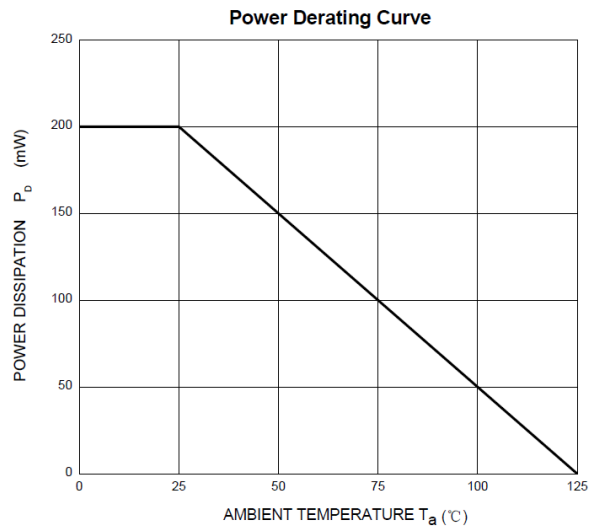
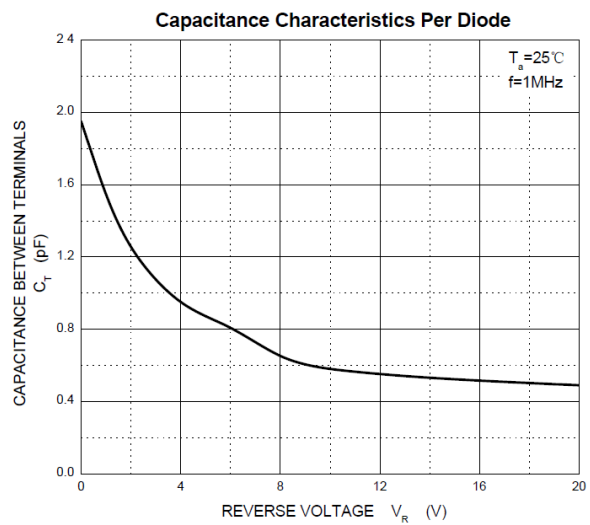
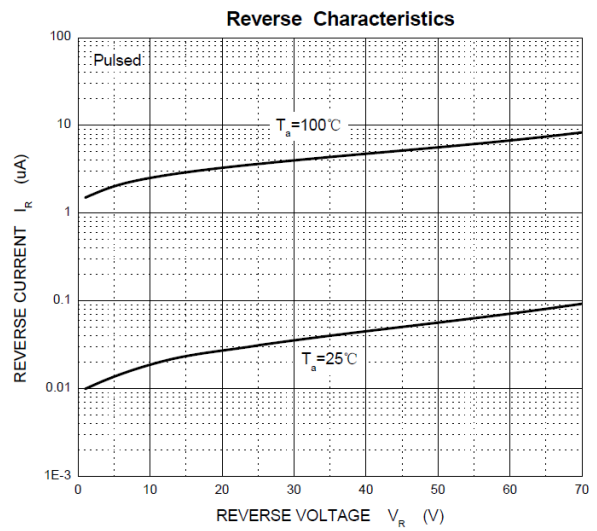
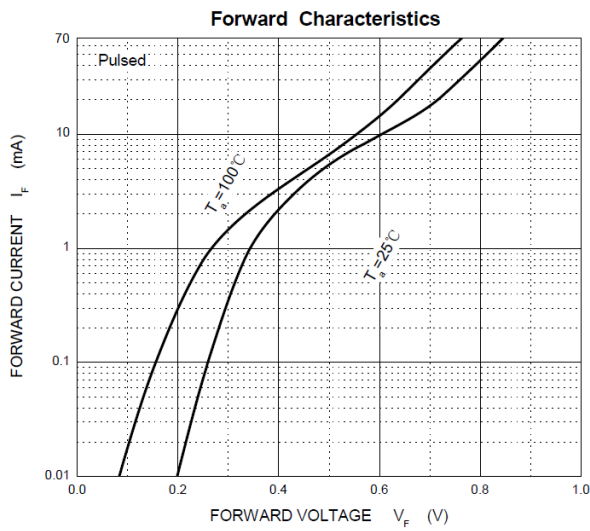


### Absolute Maximum Rating

Parameter	Symbol	Value	Unit
Reverse Voltage	$V_R$	70	V
Forward Continuous Current	$I_F$	200	mA
Power Dissipation	$P_D$	200	mW
Peak Forward Surge Current(t=1s, NON-Repetitive)	$I_{FSM}$	0.6	A
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	500	°C/W
Junction Temperature	$T_J$	125	°C
Storage Temperature	$T_{stg}$	-55 to 150	°C

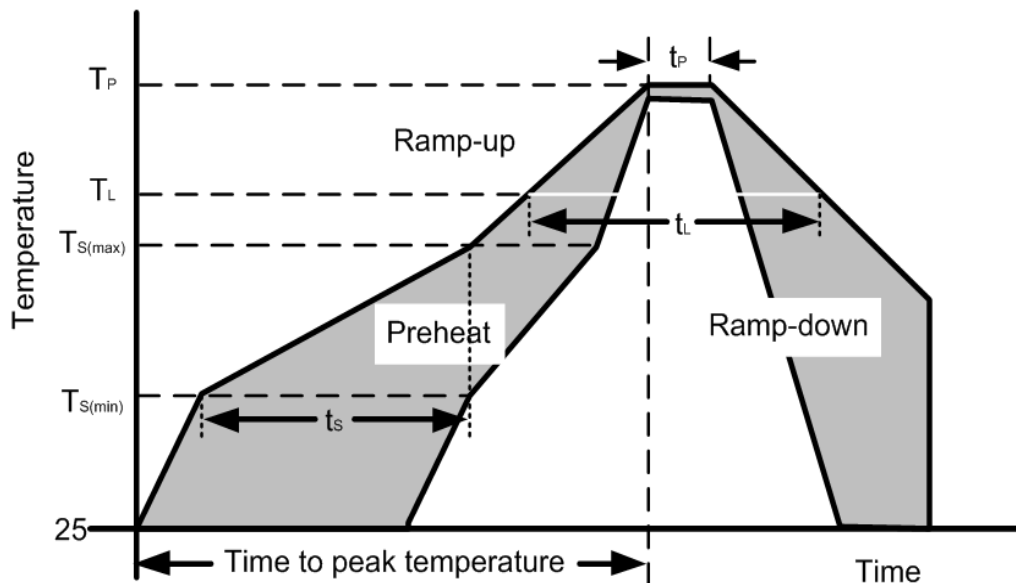
Electrical Characteristics ( $T_{amb}=25^{\circ}C$  unless otherwise noted)

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	$V_{BR}$	$I_R = 10\mu A$	70	-	-	V
Reverse Voltage Leakage Current	$I_R$	$V_R = 50V$	-	-	200	nA
Forward Voltage	$V_F$	$I_F = 1mA$	-	-	0.41	V
		$I_F = 15mA$	-	-	1	
Diode Capacitance	$C_D$	$V_R = 0, f = 1MHz$	-	-	2	pF
Reverse Recovery Time	$T_{rr}$	$I_F=I_R=10mA, I_{rr}=1mA$	-	-	5	ns



## Soldering Parameters

Reflow Condition		Pb – Free assembly
Pre Heat	Temperature Min ( $T_{S(min)}$ )	150°C
	Temperature Max ( $T_{S(max)}$ )	200°C
	Time (min to max) ( $t_s$ )	60 – 190 secs
Average ramp up rate (Liquidus Temp) ( $T_L$ ) to peak		5°C/second max
$T_{S(max)}$ to $T_L$ —Ramp-up Rate		5°C/second max
Reflow	Temperature ( $T_L$ ) (Liquidus)	217°C
	Temperature ( $t_L$ )	60 – 150 seconds
Peak Temperature ( $T_P$ )		260+0/-5 °C
Time within actual peak Temperature ( $t_p$ )		20 – 40 seconds
Ramp-down Rate		5°C/second max
Time 25°C to peak Temperature ( $T_P$ )		8 minutes Max.
Do not exceed		280°C



## Outline Drawing –SOT-323

PACKAGE OUTLINE		SOT-323		
<b>DIMENSIONS</b>				
SYMBOL	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	0.90	1.10	0.035	0.043
A1	0.00	0.10	0.000	0.004
b	0.20	0.40	0.008	0.016
c	0.08	0.15	0.003	0.006
D	2.00	2.20	0.079	0.087
E	2.15	2.45	0.085	0.096
E1	1.15	1.35	0.045	0.053
e	0.65TYP		0.026TYP	
e1	1.20	1.40	0.047	0.055
L	0.525REF		0.021REF	

DIMENSIONS		
DIM	INCHES	MILLIMETERS
M	0.075	1.90
C	0.035	0.90
Z	0.110	2.80
e	0.025 BSC	0.65 BSC
e1	0.051BSC	1.3 BSC
b	0.024	0.60

**Notes**

1. Dimensioning and tolerances per ANSI Y14.5M, 1985.
2. Controlling Dimension: Inches
3. Pin 3 is the cathode (Unidirectional Only).
4. Dimensions are exclusive of mold flash and metal burrs.

## Marking Codes

Part Number	BAS70W	BAS70W-04	BAS70W-05	BAS70W-06
Marking Code				

## Package Information

Qty: 3k/Reel

## CONTACT INFORMATION

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For additional information, please contact your local Sales Representative.

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