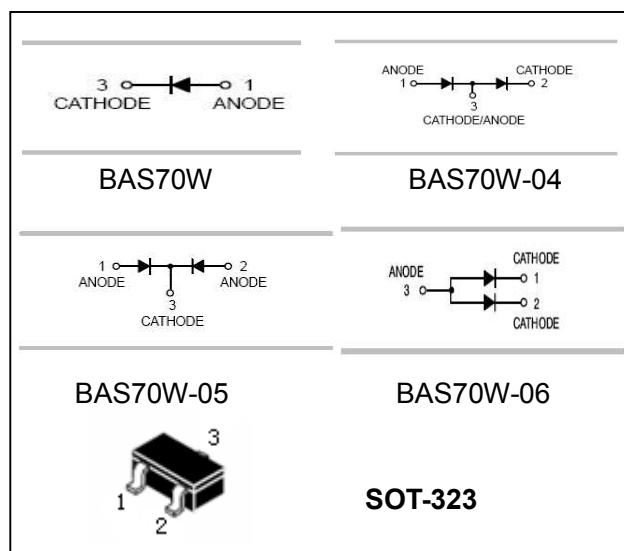


# Surface Mount Schottky Barrier Diode **BAS70W/-04/-05/-06**

## FEATURES

- Low Forward voltage drop.
- High breakdown voltage.
- Guard ring protected.
- Low capacitance.
- Very small SMD package.



## APPLICATIONS

- For high speed switching applications.

## ORDERING INFORMATION

Type No.	Marking	Package Code
BAS70W	K73	SOT-323
BAS70W-04	K74	SOT-323
BAS70W-05	K75	SOT-323
BAS70W-06	K76	SOT-323

## MAXIMUM RATING @ Ta=25°C unless otherwise specified

Parameter	Symbol	Limits	Unit
Repetitive Peak reverse voltage	V <sub>RRM</sub>		
Working peak reverse voltage	V <sub>RWM</sub>	70	V
Diode reverse voltage	V <sub>R</sub>		
Forward continuous Current	I <sub>F</sub>	70	mA
Non-Repetitive peak forward surge Current @t=1μs	I <sub>FS</sub>	100	mA
Power Dissipation	P <sub>d</sub>	200	mW
Operating Junction Temperature Range	T <sub>j</sub>	-55 to +125	°C
Storage temperature range	T <sub>stg</sub>	-65 to +150	°C

## Surface Mount Schottky Barrier Diode **BAS70W/-04/-05/-06**

ELECTRICAL CHARACTERISTICS @  $T_a=25^\circ\text{C}$  unless otherwise specified

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	$V_{(\text{BR})R}$	$I_R = 10\mu\text{A}$	70		V
Reverse voltage leakage current	$I_R$	$V_R=50\text{V}$		100	nA
Forward voltage	$V_F$	$I_F=1.0\text{mA}$ $I_F=15\text{mA}$		410 1000	mV
Diode capacitance	$C_D$	$V_R=0\text{V}$ $f=1\text{MHz}$		2	pF
Reverse recovery time	$t_{rr}$	$I_F=I_R=10\text{mA}$ $R_L=100\Omega$		5	nS

TYPICAL CHARACTERISTICS @  $T_a=25^\circ\text{C}$  unless otherwise specified

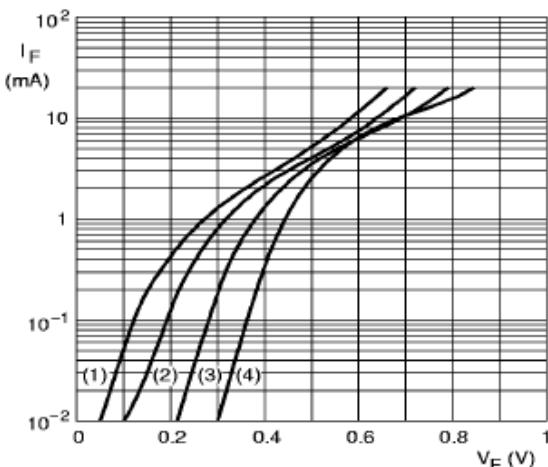


Fig.6 Forward current as a function of forward voltage; typical values.

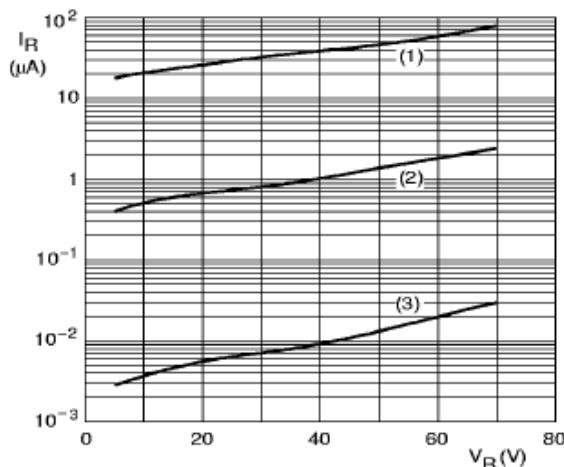


Fig.7 Reverse current as a function of reverse voltage; typical values.

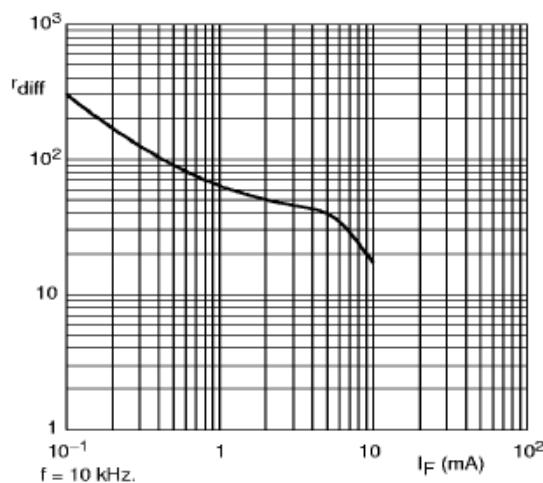


Fig.8 Differential forward resistance as a function of forward current; typical values.

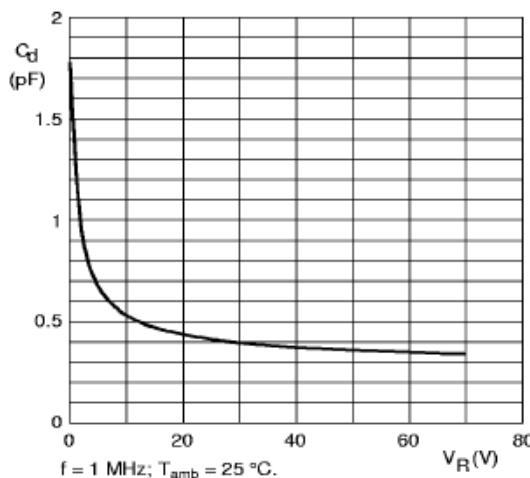


Fig.9 Diode capacitance as a function of reverse voltage; typical values.

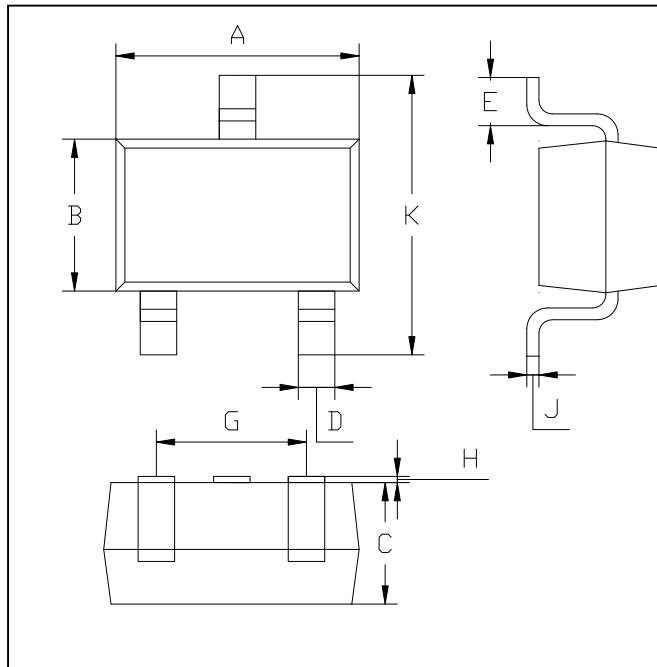
## Surface Mount Schottky Barrier Diode

**BAS70W/-04/-05/-06**

### PACKAGE OUTLINE

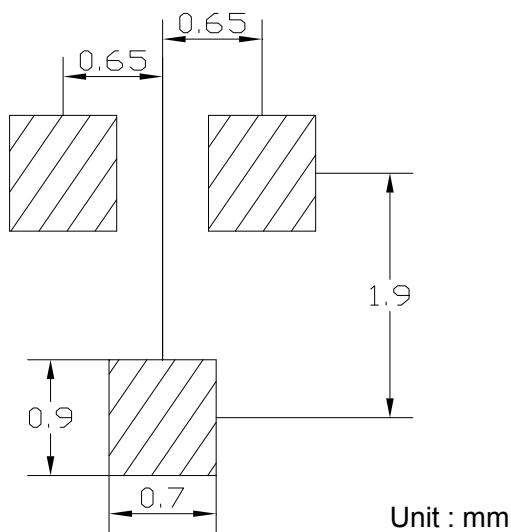
Plastic surface mounted package

SOT-323



SOT-323		
Dim	Min	Max
A	1.8	2.2
B	1.15	1.35
C	1.0Typical	
D	0.15	0.35
E	0.25	0.40
G	1.2	1.4
H	0.02	0.1
J	0.1Typical	
K	2.2	2.4
All Dimensions in mm		

### SOLDERING FOOTPRINT



### PACKAGE INFORMATION

Device	Package	Shipping
BAS70W/-04/-05/-06	SOT-323	3000/Tape&Reel