



Diode Semiconductor Korea

Surface Mount Schottky Barrier Diode

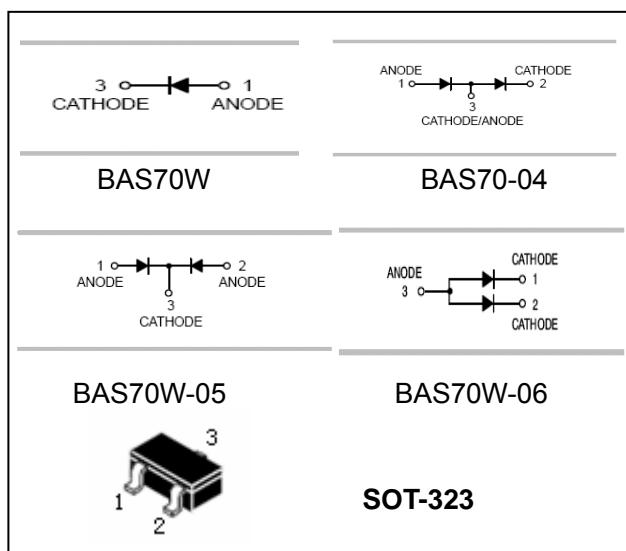
BAS70W/-04/-05/-06

FEATURES

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



Lead-free



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 _{RRM}		
Working peak reverse voltage	V _{RWM}	70	V
Diode reverse voltage	V _R		
Forward continuous Current	I _F	70	mA
Non-Repetitive peak forward surge Current @t=1μs	I _{FS}	100	mA
Power Dissipation	P _d	200	mW
Junction temperature	T _j	150	°C
Storage temperature range	T _{stg}	-65-+150	°C

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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

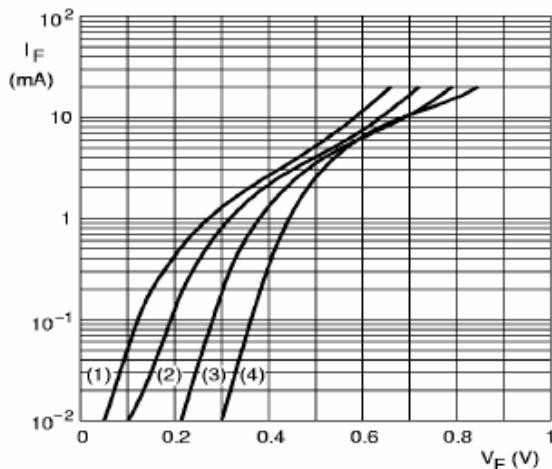


Fig.6 Forward current as a function of forward voltage; typical values.

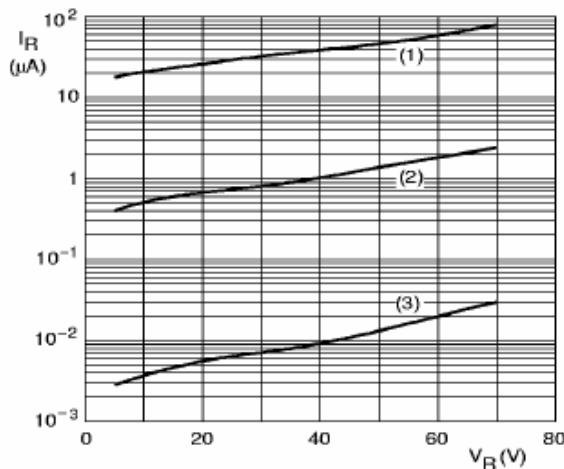


Fig.7 Reverse current as a function of reverse voltage; typical values.

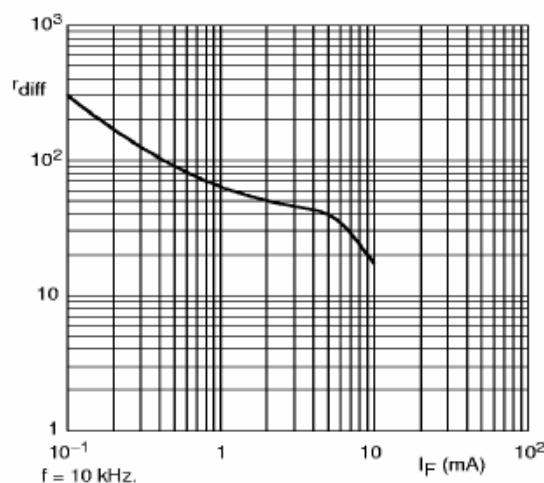


Fig.8 Differential forward resistance as a function of forward current; typical values.

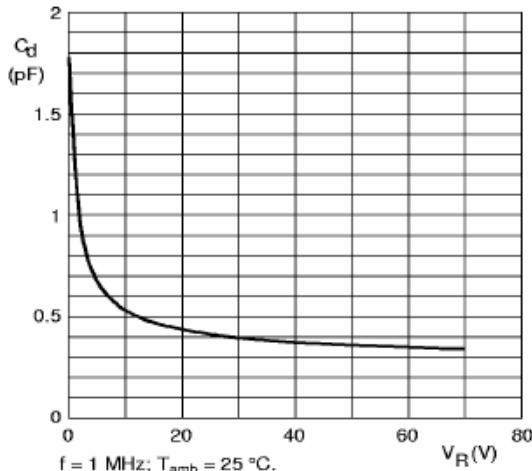
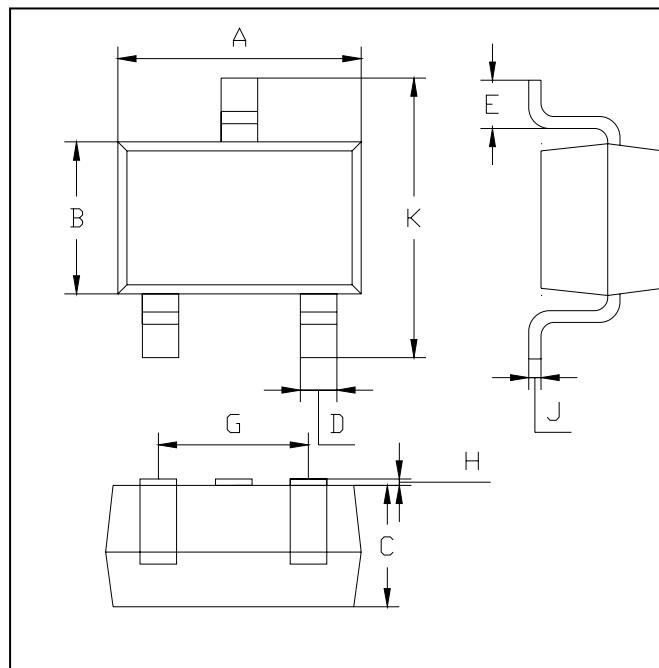


Fig.9 Diode capacitance as a function of reverse voltage; typical values.

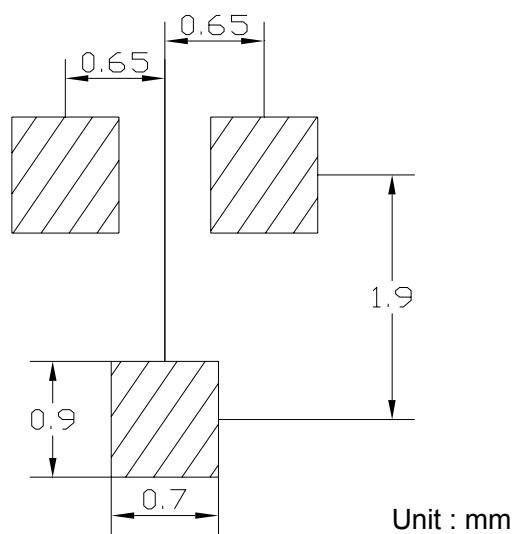
PACKAGE OUTLINE

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	2.1	2.3
All Dimensions in mm		

SOLDERING FOOTPRINT**PACKAGE INFORMATION**

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