

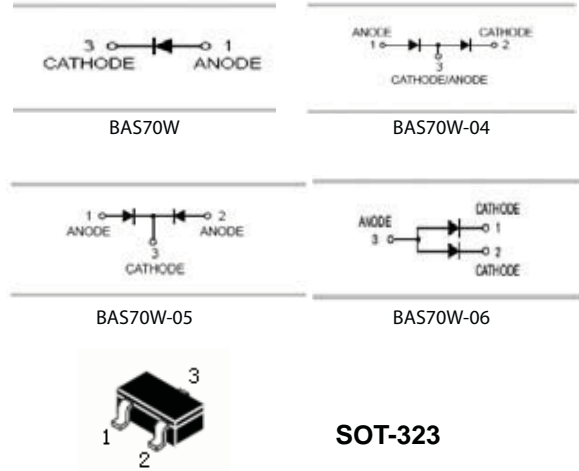
## Surface Mount Barrier Diodes: BAS70W/-04/-05/-06

### Features:

- Low turn-on voltage
- High breakdown voltage
- Guard ring protected
- Low capacitance
- Very small SMD package

### Applications:

- For high speed switching applications



### Maximum Rating @ Ta=25°C (unless otherwise specified):

Characteristic:	Symbol:	Limits:	Unit:
Peak repetitive reverse voltage	$V_{RRM}$	70	V
Working peak reverse voltage	$V_{RWM}$		
Diode reverse voltage	$V_R$		
Forward continuous current	$I_F$	70	mA
Non-repetitive peak forward surge current @ $t_p=1\mu s$	$I_{FS}$	100	mA
Power dissipation	$P_D$	200	mW
Junction temperature	$T_J$	150	°C
Storage temperature range	$T_{stg}$	-65 to +150	°C

### Electrical Characteristics @ Ta=25°C (unless otherwise specified):

Characteristic:	Symbol:	Min	Max	Unit:	Test Condition:
Reverse Breakdown Voltage	$V_{(BR)R}$	70	-	V	$I_R = 10 \text{ A}$
Forward voltage	$V_F$	-	410	mV	$t_p < 300\mu s, I_F = 1.0\text{mA}$ $t_p < 300\mu s, I_F = 15\text{mA}$
Reverse leakage current	$I_R$	-	100	nA	$t_p < 300\mu s, V_R = 50\text{V}$
Junction capacitance	$C_i$	-	2	pF	$V_R = 0\text{V}, f = 1.0\text{MHz}$
Reverse recovery time	$t_{rr}$	-	5	ns	$I_F = I_R = 10\text{mA}$ $R_L = 100 \text{ Ohms}$

## Surface Mount Barrier Diodes: BAS70W/-04/-05/-06

Ordering Information	Marking:	Package Code:
BAS70W	K73	SOT-323
BAS70W-04	K74	SOT-323
BAS70W-05	K75	SOT-323
BAS70W-06	K76	SOT-323

Typical Characteristics @  $T_a=25^\circ\text{C}$  (unless otherwise specified):

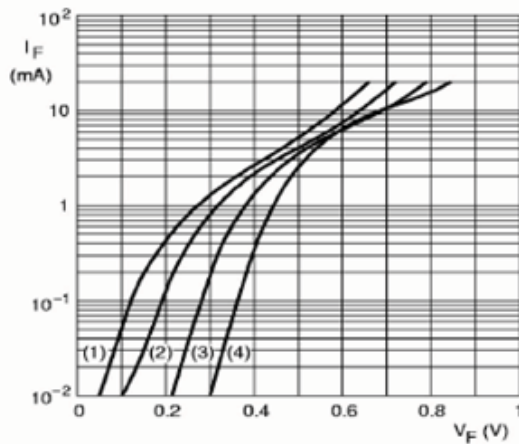


Fig.6 Forward current as a function of forward voltage; typical values.  
Fig.1

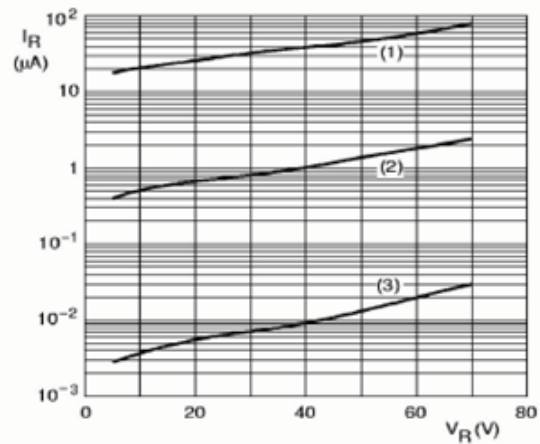


Fig.7 Reverse current as a function of reverse voltage; typical values.  
Fig.2

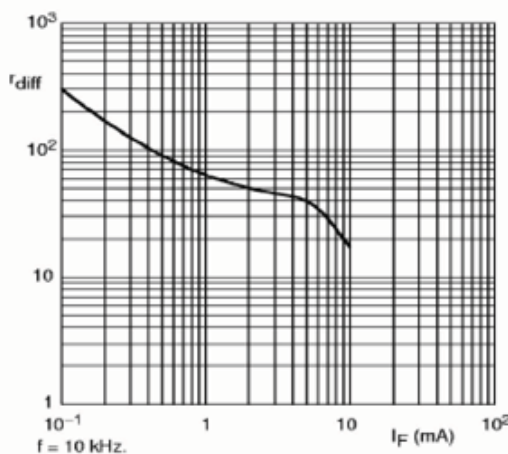


Fig.8 Differential forward resistance as a function of forward current; typical values.  
Fig.3

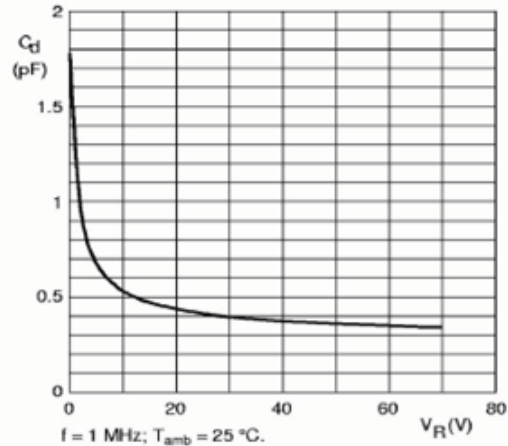


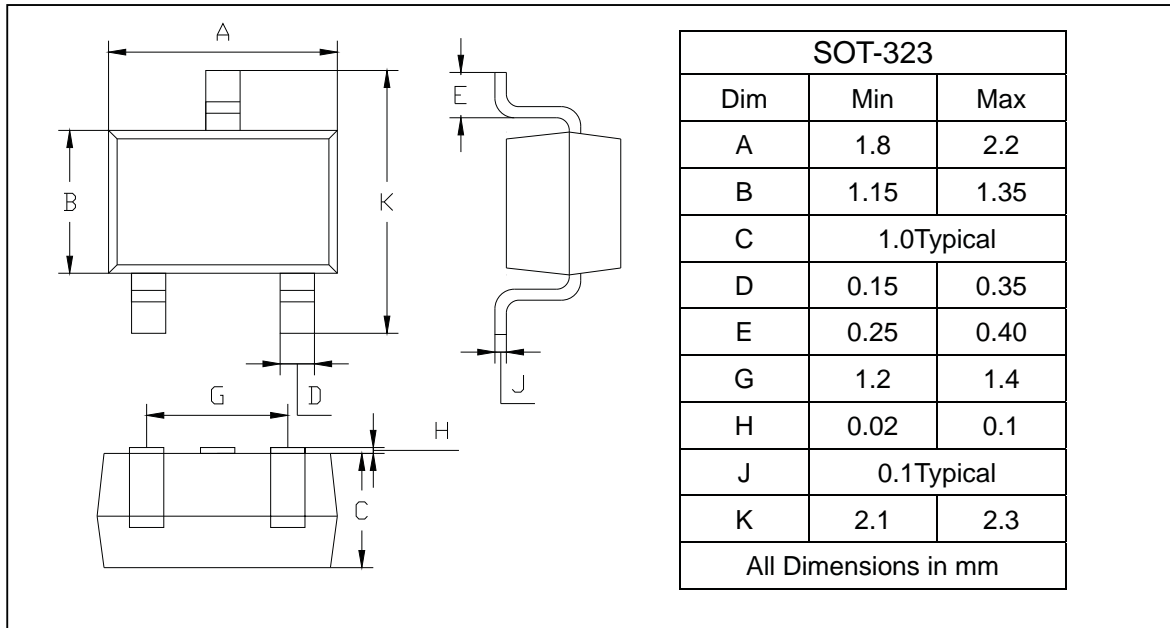
Fig.9 Diode capacitance as a function of reverse voltage; typical values.  
Fig.4

# Surface Mount Barrier Diodes: BAS70W-04/-04/-05/-06

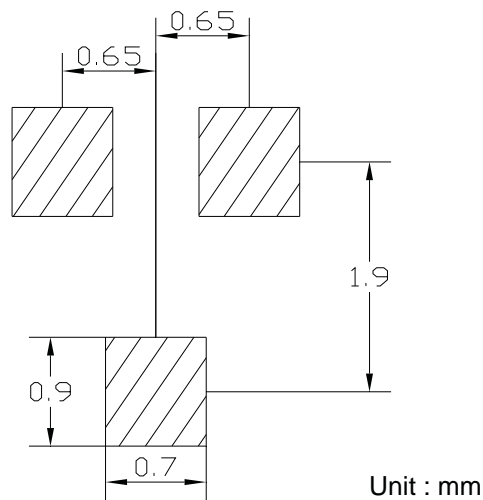
## PACKAGE OUTLINE

Plastic surface mounted package

SOT-323



## SOLDERING FOOTPRINT



## PACKAGE INFORMATION

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