

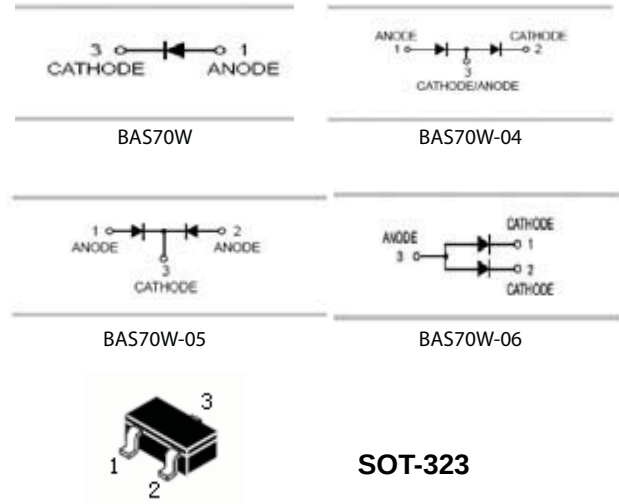
Surface Mount Barrier Diodes: BAS70W/-04/-05/-06

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 1000	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_j	-	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):

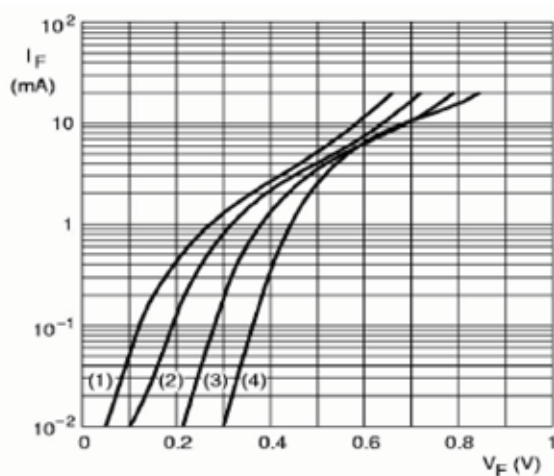


Fig.6 Forward current as a function of forward voltage; typical values.
Fig.1

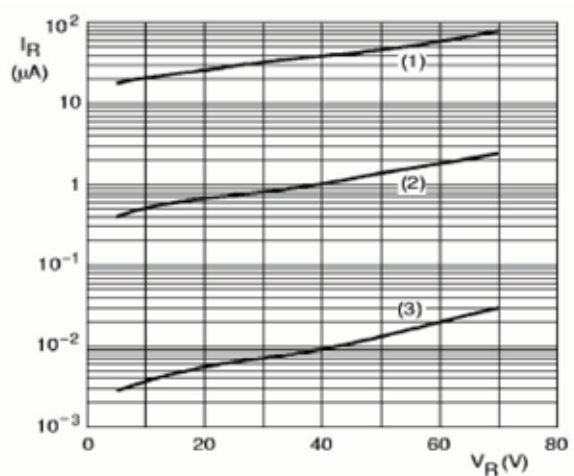


Fig.7 Reverse current as a function of reverse voltage; typical values.
Fig.2

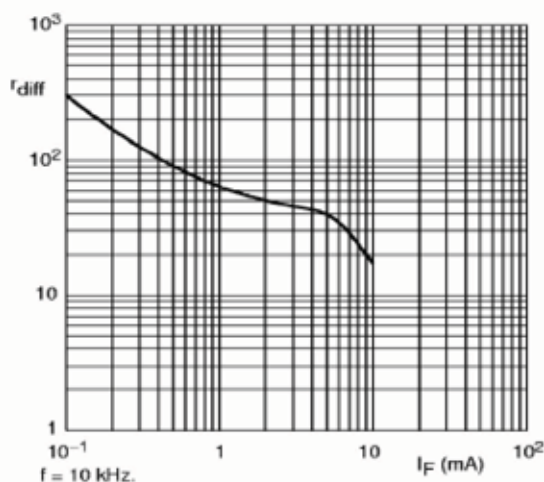


Fig.8 Differential forward resistance as a function of forward current; typical values.
Fig.3

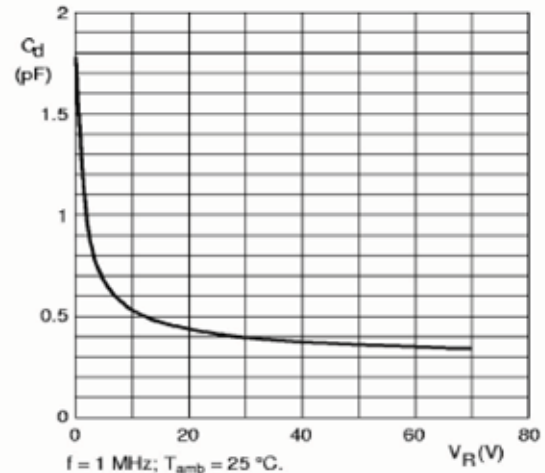


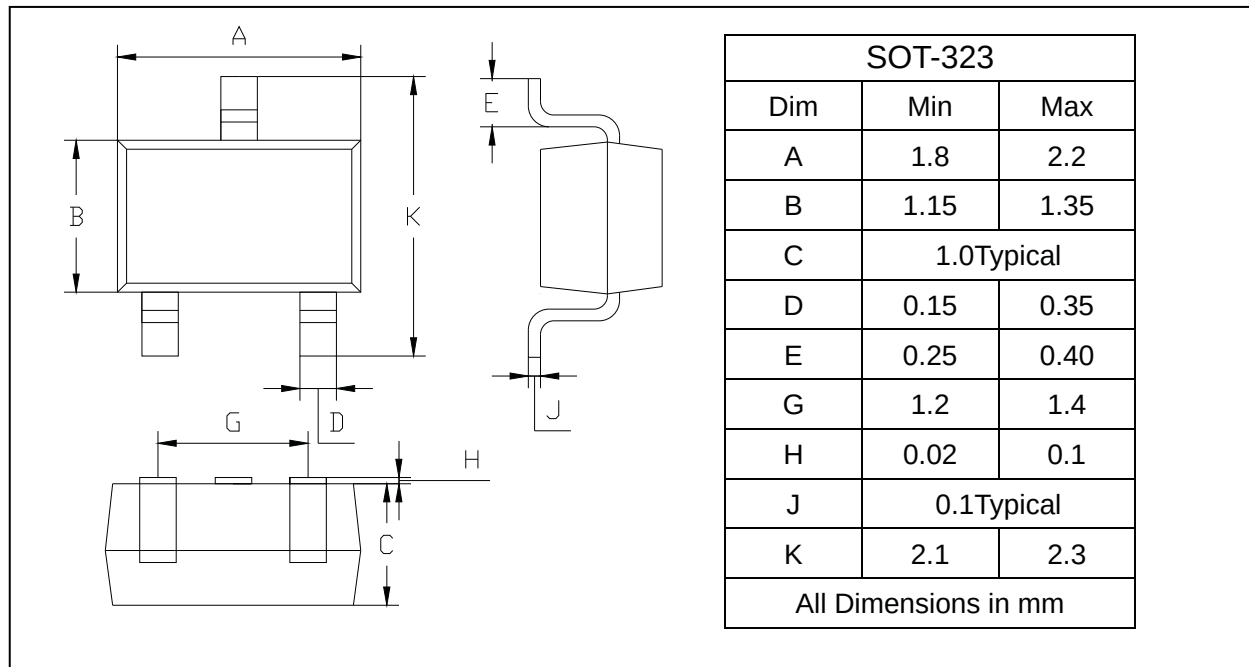
Fig.9 Diode capacitance as a function of reverse voltage; typical values.
Fig.4

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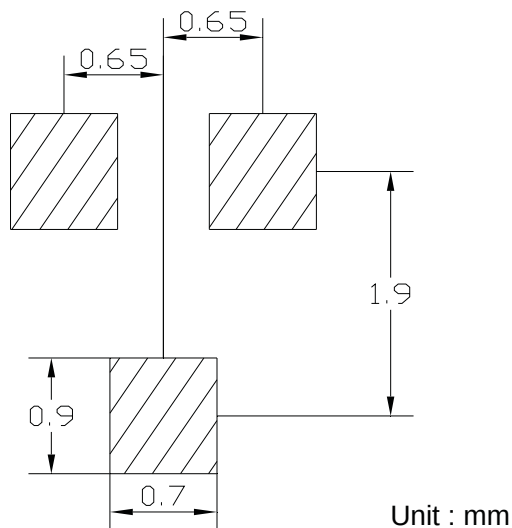
PACKAGE OUTLINE

Plastic surface mounted package

SOT-323



SOLDERING FOOTPRINT



PACKAGE INFORMATION

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