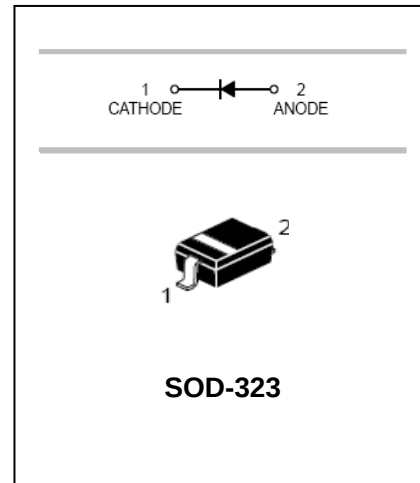


Schottky barrier diodes

BAS70WS

FEATURES

- Low turn-on voltage
- Fast switching
- PN junction guard for transient and ESD protection



APPLICATIONS

- Surface mount fast switching diode

ORDERING INFORMATION

Type No.	Marking	Package Code
BAS70WS	K73	SOD-323

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Peak repetitive peak reverse voltage	V_{RRM}	70	V
Working peak reverse voltage	V_{RWM}		
DC Reverse Voltage	V_R		
RMS reverse voltage	$V_R (RMS)$	49	V
Forward Continuous Current	I_F	70	mA
Peak forward surge current@<1.0s	I_{FSM}	100	mA
Power Dissipation	P_d	200	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	625	°C/W
Operating Junction Temperature Range	T_J	-55 to +125	°C
Storage Temperature Range	T_{STG}	-65 to +150	°C

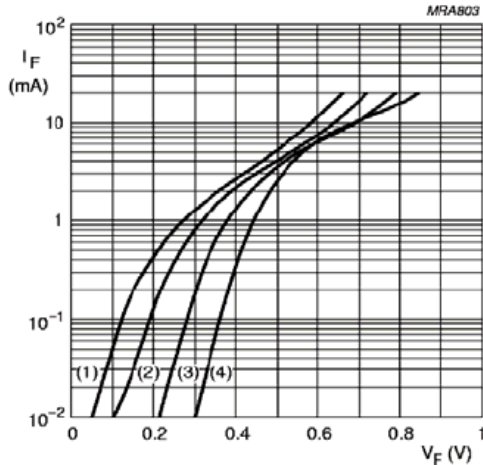
ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Min	Max	Unit	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	70	-	V	$I_R=10\mu A$
Forward Voltage	V_F	-	410 1000	mV	$I_F=1.0mA$ $I_F=15mA$
Reverse Current	I_R	-	100	nA	$V_R=50V$
Capacitance between terminals	C_T	-	2	pF	$V_R=0, f=1.0MHz$
Reverse Recovery Time	t_{rr}	-	5	ns	$I_F=I_R=10mA,$ $R_L=100\Omega$

Schottky barrier diodes

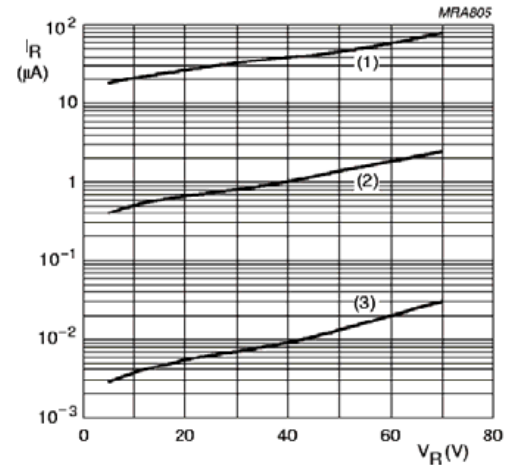
BAS70WS

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



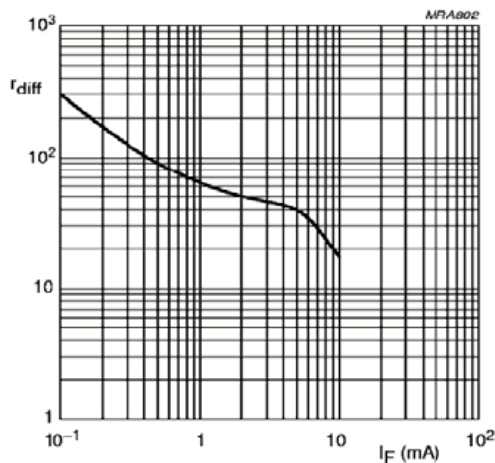
- (1) $T_{amb} = 125^\circ\text{C}$.
- (2) $T_{amb} = 85^\circ\text{C}$.
- (3) $T_{amb} = 25^\circ\text{C}$.
- (4) $T_{amb} = -40^\circ\text{C}$.

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



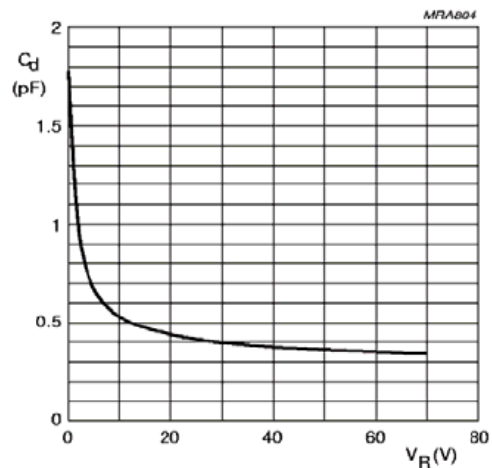
- (1) $T_{amb} = 125^\circ\text{C}$.
- (2) $T_{amb} = 85^\circ\text{C}$.
- (3) $T_{amb} = 25^\circ\text{C}$.

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



$f = 10\text{ kHz}$.

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



$f = 1\text{ MHz}$; $T_{amb} = 25^\circ\text{C}$.

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

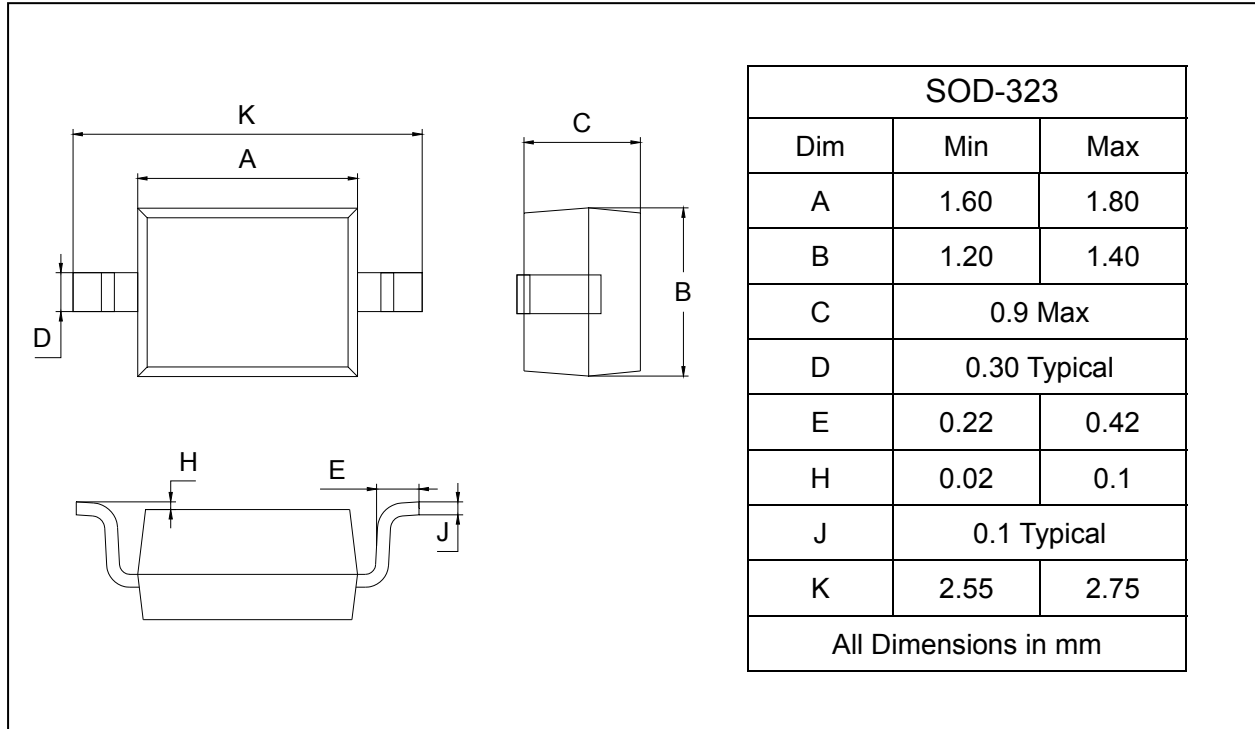
Schottky barrier diodes

BAS70WS

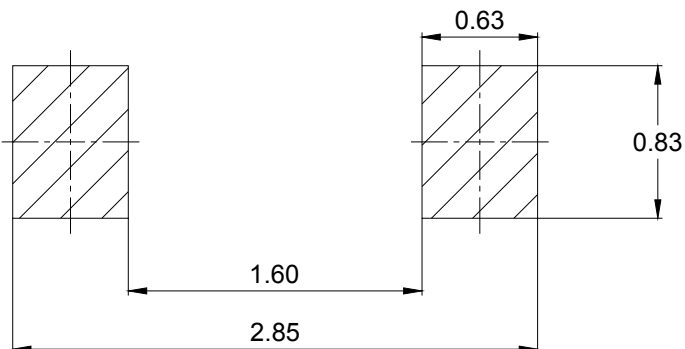
PACKAGE OUTLINE

Plastic surface mounted package

SOD-323



SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

Device	Package	Shipping
BAS70WS	SOD-323	3000/Tape&Reel