

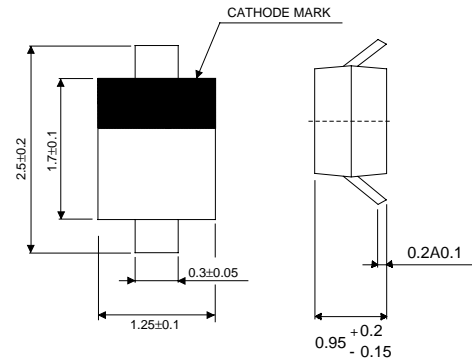
RoHS Compliant Product

A suffix of "-C" specifies halogen & lead-free

SOD-323

## FEATURES

- \* Fast Switching
- \* Low Turn-on Voltage
- \* Designed For Surface Mount Application
- \* PN Junction Guard For Transient And ESD Protection
- \* Plastic Material -- UL Recognition Flammability Classification 94V-O



Dimensions in millimeters

## MARKING: K73

### Maximum Ratings and Electrical Characteristics, Single Diode @T<sub>A</sub>=25°C

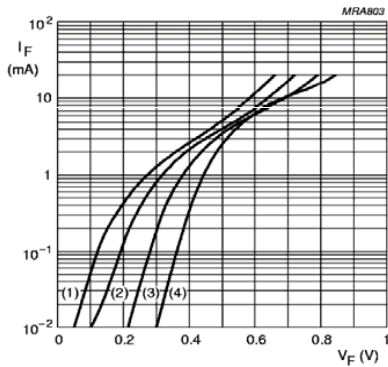
Parameter	Symbol	Limits	Unit
Peak Repetitive Peak reverse voltage	V <sub>RRM</sub>	70	V
Working Peak Reverse Voltage	V <sub>RWM</sub>		
DC Blocking Voltage	V <sub>R</sub>		
Forward Continuous Current	I <sub>F</sub>	70	mA
Peak forward surge current @<1.0s	I <sub>FSM</sub>	100	mA
Power Dissipation	P <sub>d</sub>	200	mW
Thermal Resistance Junction to Ambient	R <sub>θJA</sub>	625	K/W
Storage temperature	T <sub>STG</sub>	-55 to +150	°C

### Electrical Ratings @T<sub>A</sub>=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V <sub>F1</sub>			0.41	V	I <sub>F</sub> =1mA
	V <sub>F2</sub>			1	V	I <sub>F</sub> =15mA
Reverse current	I <sub>R</sub>			100	nA	V <sub>R</sub> =50V
Capacitance between terminals	C <sub>T</sub>			2	pF	V <sub>R</sub> =0V, f=1MHz
Reverse Recovery Time	t <sub>rr</sub>			5	ns	I <sub>F</sub> =I <sub>R</sub> =10mA I <sub>rr</sub> =0.1X I <sub>R</sub> , R <sub>L</sub> =100Ω

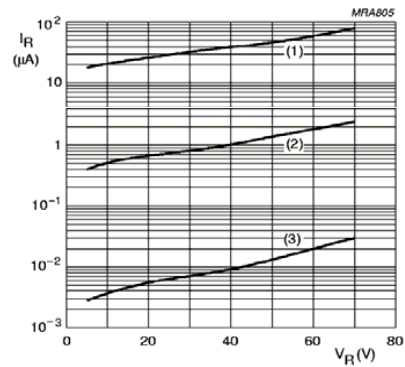
**Typical Characteristics**

**BAS70WS**



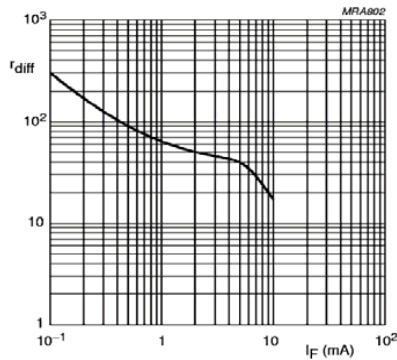
- (1)  $T_{amb} = 125\text{ }^{\circ}\text{C}$ .
- (2)  $T_{amb} = 85\text{ }^{\circ}\text{C}$ .
- (3)  $T_{amb} = 25\text{ }^{\circ}\text{C}$ .
- (4)  $T_{amb} = -40\text{ }^{\circ}\text{C}$ .

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



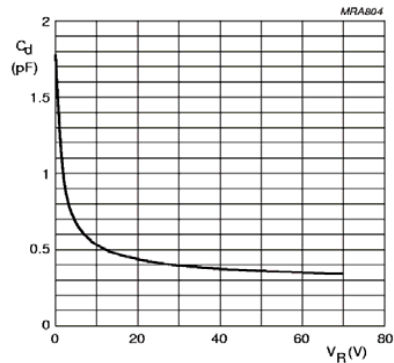
- (1)  $T_{amb} = 125\text{ }^{\circ}\text{C}$ .
- (2)  $T_{amb} = 85\text{ }^{\circ}\text{C}$ .
- (3)  $T_{amb} = 25\text{ }^{\circ}\text{C}$ .

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.



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

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