

BAS70W SERIES SCHOTTKY DIODE

FEATURES

Power dissipation

$$P_D: 200 \text{ mW (} T_{amb}=25 \text{)}$$

Collector current

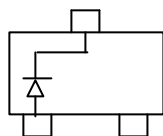
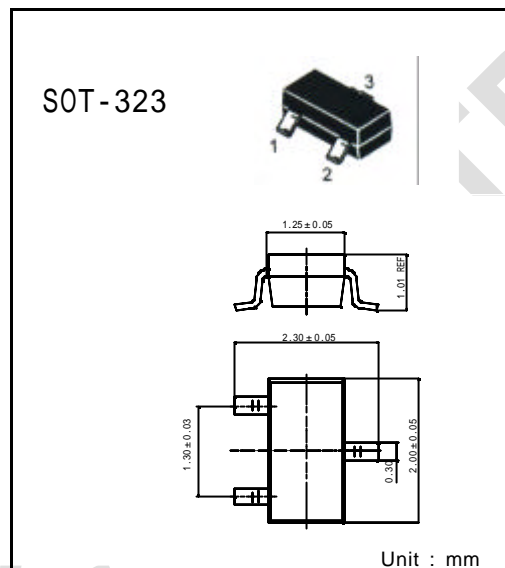
$$I_F: 70 \text{ mA}$$

Collector-base voltage

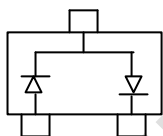
$$V_R: 70 \text{ V}$$

Operating and storage junction temperature range

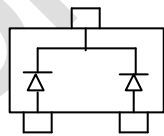
$$T_J, T_{stg}: -55 \text{ to } +150$$



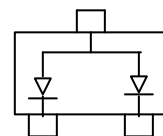
BAS70W Marking: K73



BAS70W-04 Marking: K74



BAS70W-05 Marking: K75



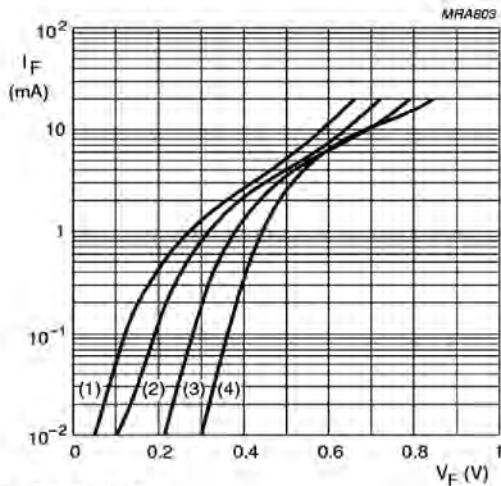
BAS70W-06 Marking: K76

ELECTRICAL CHARACTERISTICS ($T_{amb}=25$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	$V_{(BR)R}$	$I_R = 10\mu A$	70		V
Reverse voltage leakage current	I_R	$V_R = 50V$		100	nA
Forward voltage	V_F	$I_F = 1mA$ $I_F = 15mA$		410 1000	mV
Diode capacitance	C_D	$V_R = 0V$ $f = 1MHz$		2	pF
Revers recovery time	t_{rr}	$I_F = 10mA$ through $I_R = 10mA$ to $I_R = 1mA$		5	nS

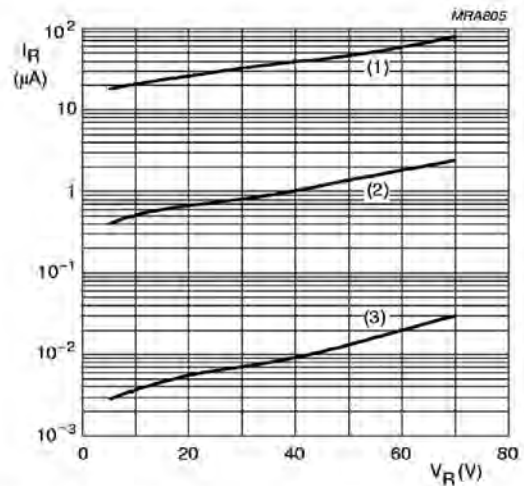
Typical Characteristics

BAS70W



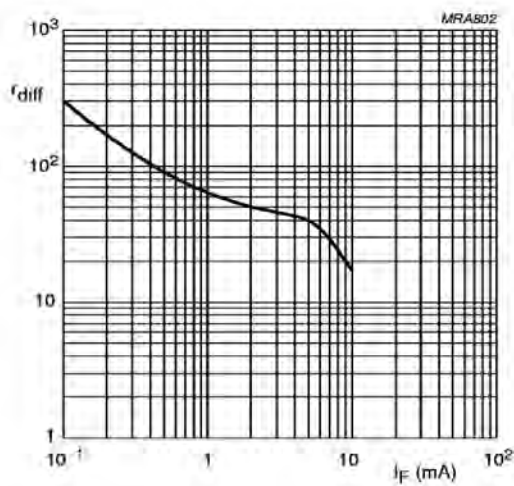
- (1) $T_{amb} = 125\text{ }^{\circ}\text{C}$.
- (2) $T_{amb} = 85\text{ }^{\circ}\text{C}$.
- (3) $T_{amb} = 25\text{ }^{\circ}\text{C}$.
- (4) $T_{amb} = -40\text{ }^{\circ}\text{C}$.

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



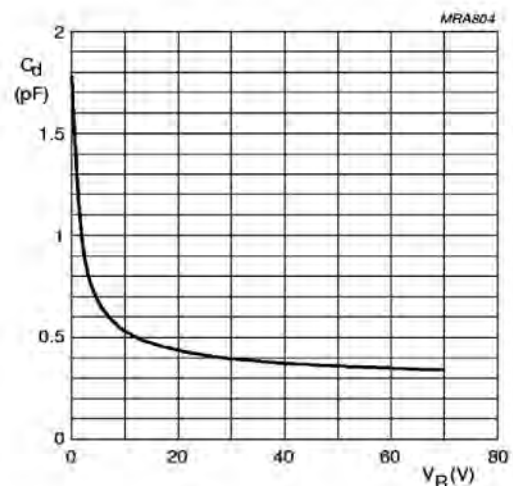
- (1) $T_{amb} = 125\text{ }^{\circ}\text{C}$.
- (2) $T_{amb} = 85\text{ }^{\circ}\text{C}$.
- (3) $T_{amb} = 25\text{ }^{\circ}\text{C}$.

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



$f = 10\text{ kHz}$.

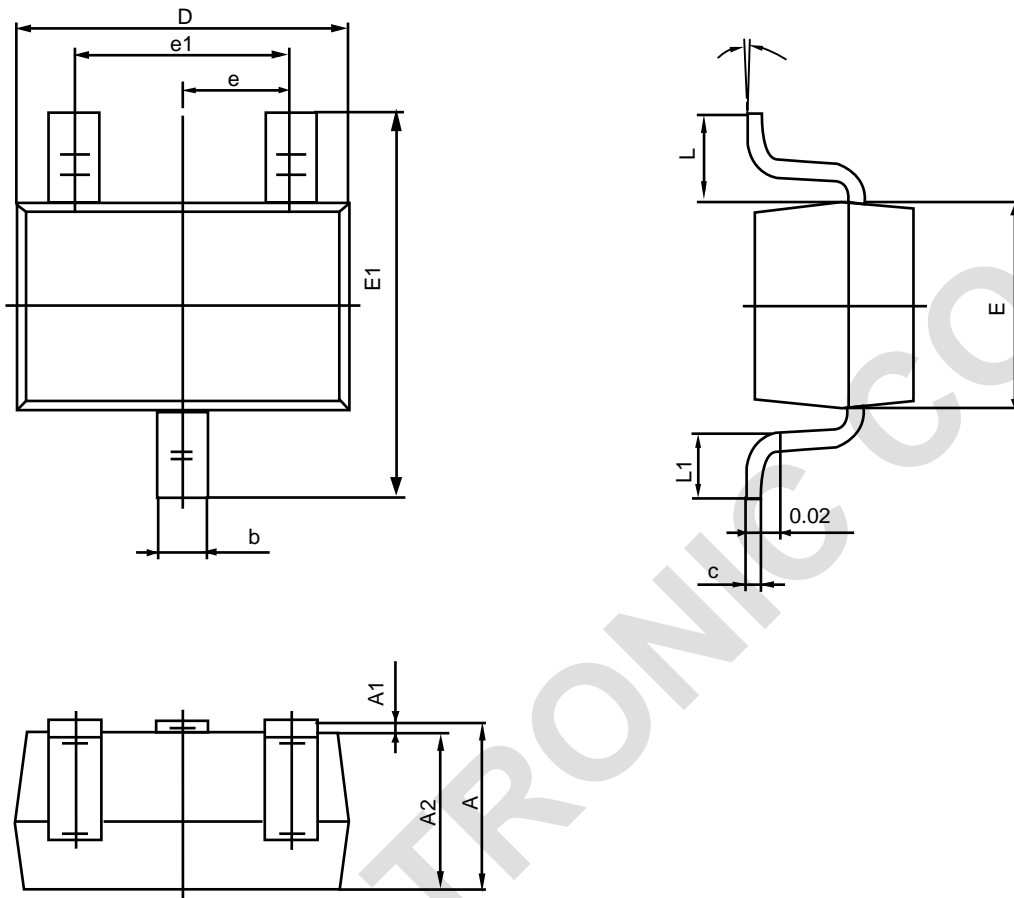
Differential forward resistance as a function of forward current; typical values.



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

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

SOT-323 PACKAGE OUTLINE DIMENSIONS



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.200	0.400	0.008	0.016
c	0.080	0.150	0.003	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.450	0.085	0.096
e	0.650TYP		0.026TYP	
e1	1.200	1.400	0.047	0.055
L	0.525REF		0.021REF	
L1	0.260	0.460	0.010	0.018
0	0°	8°	0°	8°