



BAS70W-04-05-06

Schottky Barrier Diode

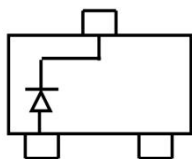
Features

- Low turn-on voltage
- Fast switching
- Also available in lead free version

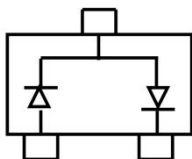


Marking:

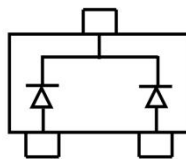
SOT-323



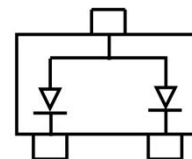
BAS70W Marking: K73



BAS70W-04 Marking: K74



BAS70W-05 Marking: K75



BAS70W-06 Marking: K76

Maximum Ratings($T_A=25^{\circ}\text{C}$ unless otherwise specified)

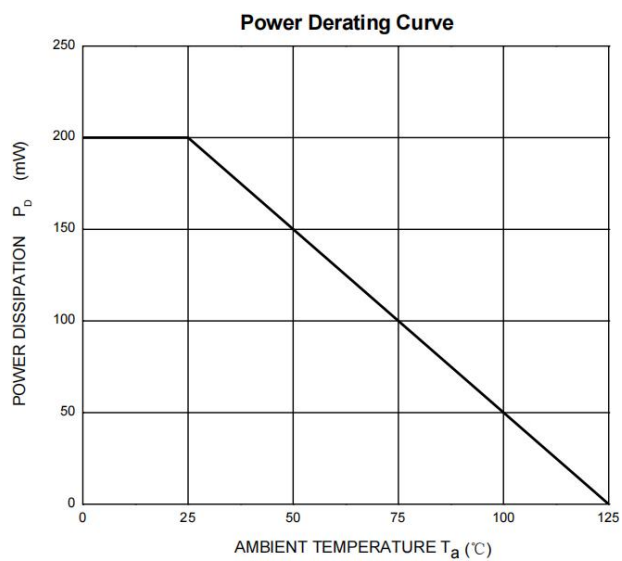
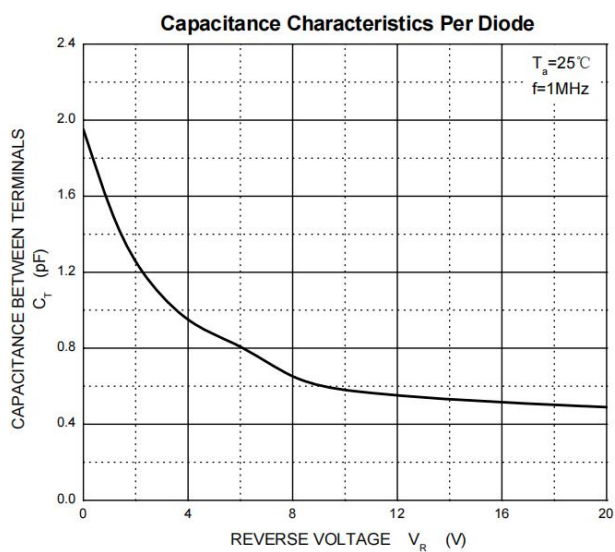
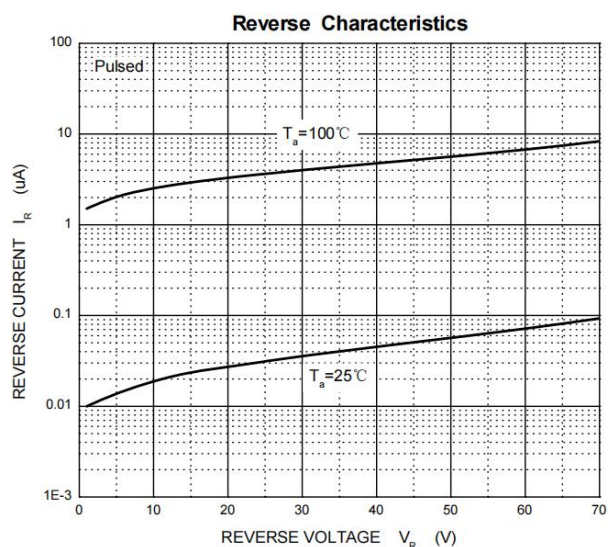
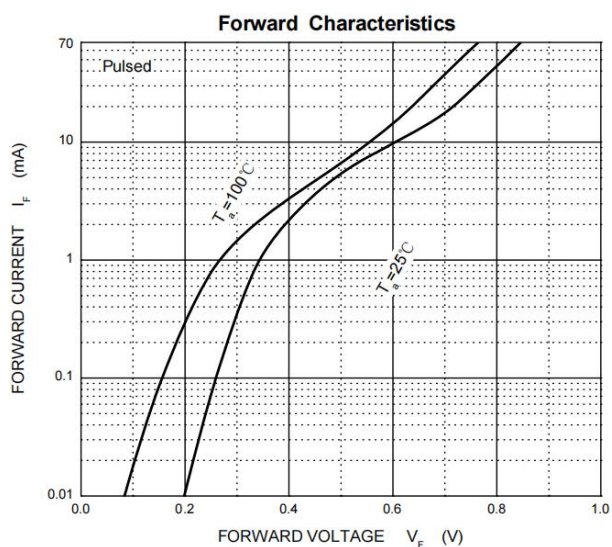
Parameter	Symbol	Value	Unit
DC Voltage	V_R	70	V
Continuous Forward Current	I_F	70	mA
Surge Non-Repetitive Forward Current@8.3ms	I_{FSM}	100	mA
Power Dissipation	P_D	200	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	500	$^{\circ}\text{C}/\text{W}$
Junction Temperature	T_J	125	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55~+150	$^{\circ}\text{C}$

Electrical Characteristics($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Conditions	Min	Max	Unit
Reverse Breakdown Voltage	V_{BR}	$I_R=10\mu\text{A}$	70	-	V
Forward Voltage	V_F	$I_F=1\text{mA}$	-	410	mV
		$I_F=15\text{mA}$		1000	
Reverse Current	I_R	$V_R=50\text{V}$	-	100	nA
Diode Capacitance	C_D	$V_R=0\text{V}, f=1\text{MHz}$	-	2	pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=10\text{mA}, I_{rr}=0.1 \times I_R,$ $R_L=100\Omega$	-	5	ns



Typical Characteristic



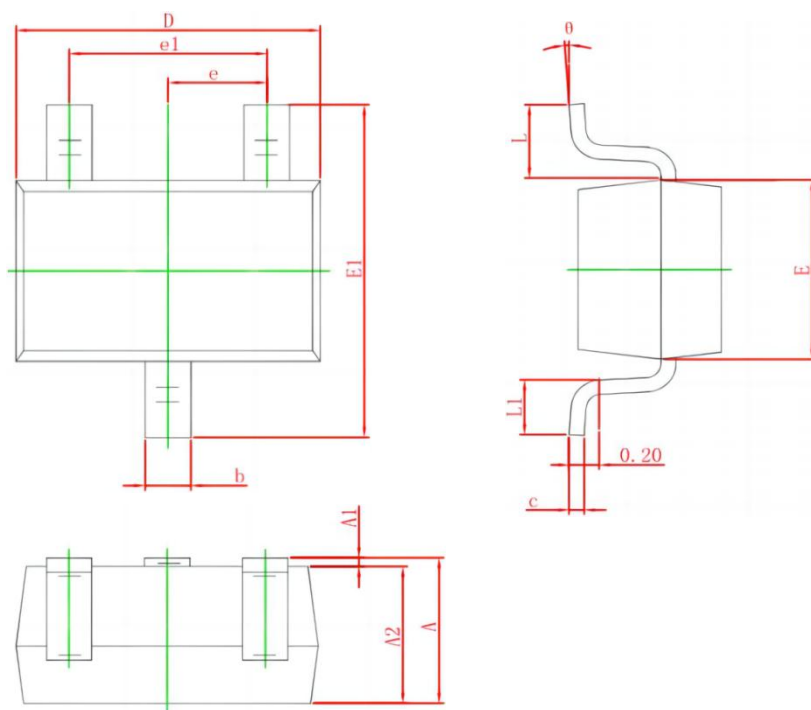


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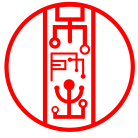
Package Information

SOT-323

Dimensions in mm



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	0.650 TYP.		0.026 TYP.	
e1	1.200	1.400	0.047	0.055
L	0.525 REF.		0.021 REF.	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°



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