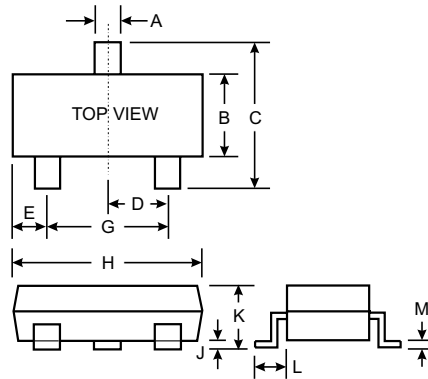


Features

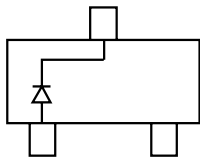
- Low Turn-on Voltage
- Fast Switching
- PN Junction Guard Ring for Transient and ESD Protection
- Ultra-Small Surface Mount Package

Mechanical Data

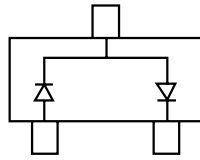
- Case: SOT-323, Molded Plastic
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: See Diagrams
- Marking: See Diagrams
- Mounting Position: Any
- Approx. Weight: 0.006 grams



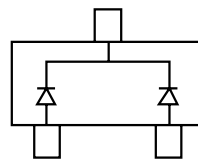
SOT-323		
Dim	Min	Max
A	0.30	0.40
B	1.15	1.35
C	2.00	2.20
D	0.65 Nominal	
E	0.30	0.40
G	1.20	1.40
H	1.80	2.20
J	0.0	0.10
K	0.90	1.00
L	0.25	0.40
M	0.10	0.25
All Dimensions in mm		



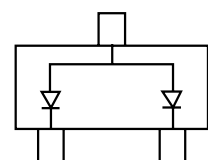
BAS70W Marking: K73



BAS70W-04 Marking: K74



BAS70W-05 Marking: K75



BAS70W-06 Marking: K76

Maximum Ratings and Electrical Characteristics, Single Diode @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	BAS70W	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	70	V
RMS Reverse Voltage	V _{R(RMS)}	49	V
Forward Continuous Current (Note 1)	I _F	70	mA
Non-Repetitive Peak Forward Surge Current @ t _p < 1.0s	I _{FSM}	100	mA
Power Dissipation (Note 1)	P _d	200	mW
Thermal Resistance Junction to Ambient Air (Note 1)	R _{θJA}	625	K/W
Operating Junction Temperature Range	T _j	-55 to +125	°C
Storage Temperature Range	T _{STG}	-65 to +150	°C

Electrical Ratings @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	Min	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 2)	V _{(BR)R}	70	—	—	I _R = 10μA
Forward Voltage	V _{FM}	—	410 1000	mV	t _p < 300μs, I _F = 1.0mA t _p < 300μs, I _F = 15mA
Peak Reverse Current	I _{RM}	—	100	nA	t _p < 300μs, V _R = 50V
Junction Capacitance	C _j	—	2.0	pF	V _R = 0V, f = 1.0MHz
Reverse Recovery Time	t _{rr}	—	5.0	ns	I _F = I _R = 10mA to I _R = 1.0mA, I _{rr} = 0.1 x I _R , R _L = 100Ω

- Notes: 1. Valid provided that terminals are kept at ambient temperature.
2. Test period < 3000μs.