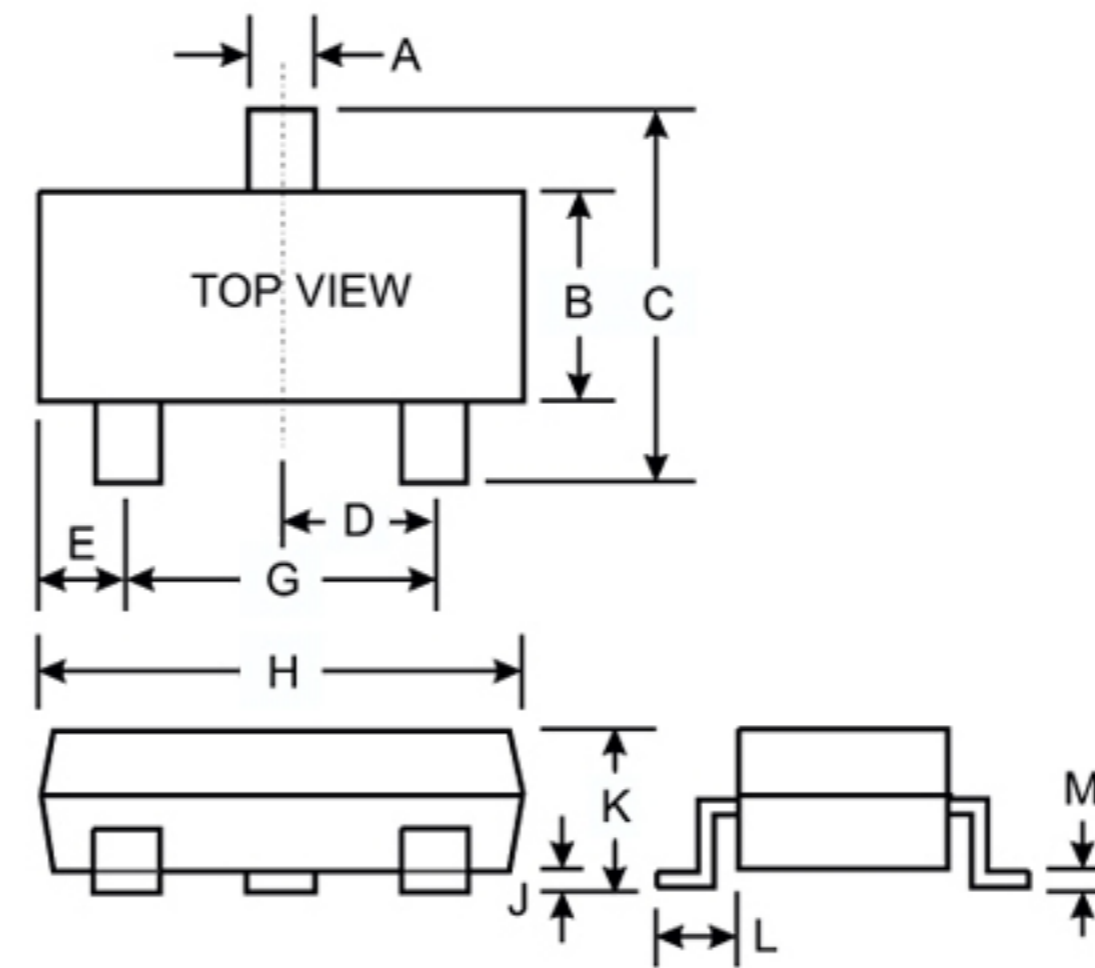


## ● Features

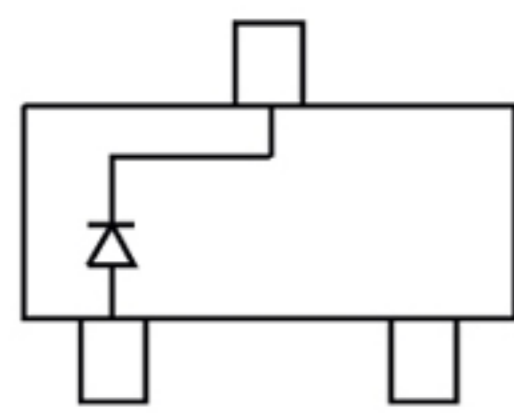
Low Turn-on Voltage  
Fast Switching  
PN Junction Guard Ring for Transient and ESD Protection

## ● Mechanical Data

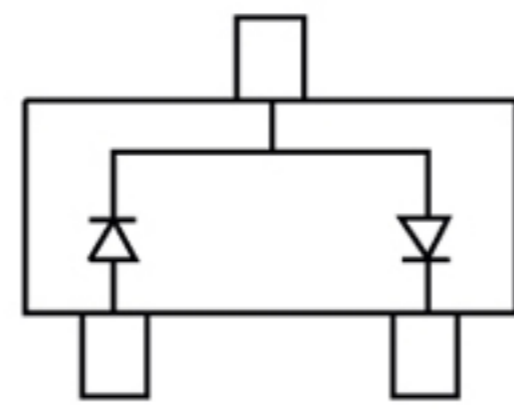
Case: SOT-23, Molded Plastic  
Terminals: Solderable per MIL-STD-202, Method 208  
Polarity: See Diagrams  
Approx. Weight: 0.008 grams



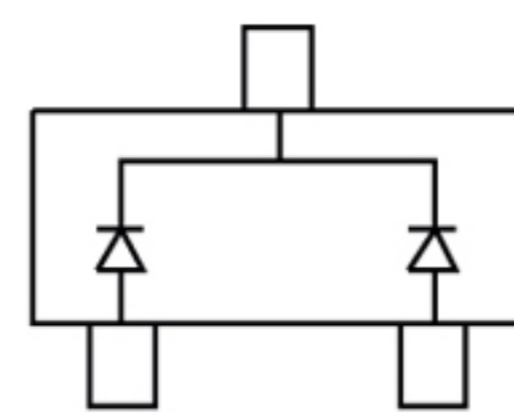
SOT-23		
Dim	Min	Max
A	0.37	0.51
B	1.19	1.40
C	2.10	2.50
D	0.89	1.05
E	0.45	0.61
G	1.78	2.05
H	2.65	3.05
J	0.013	0.15
K	0.89	1.10
L	0.45	0.61
M	0.076	0.178
All Dimensions in mm		



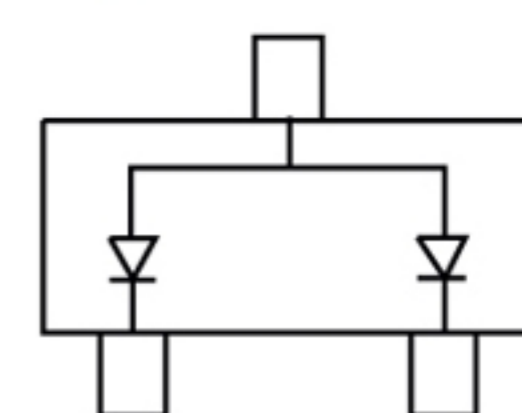
BAS70 Marking: K73, K7C



BAS70-04 Marking: K74, K7D



BAS70-05 Marking: K75, K7E



BAS70-06 Marking: K76, K7F

## ● Maximum Ratings and Electrical Characteristics Sin le Diode @ T<sub>A</sub> = 25°C unless otherwise specified

Characteristic	Symbol	BAS70	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	70	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	49	V
Forward Continuous Current (Note 1)	I <sub>F</sub>	70	mA
Non-Repetitive Peak Forward Surge Current @ t <sub>p</sub> < 1.0s	I <sub>FSM</sub>	100	mA
Power Dissipation (Note 1)	P <sub>d</sub>	200	mW
Thermal Resistance Junction to Ambient Air (Note 1)	R <sub>θJA</sub>	625	K/W
Operating Junction Temperature Range	T <sub>j</sub>	-55 to +125	°C
Storage Temperature Range	T <sub>STG</sub>	-65 to +150	°C

## ● Electrical Ratings @ T<sub>A</sub> = 25°C unless otherwise specified

Characteristic	Symbol	Min	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 2)	V <sub>(BR)R</sub>				
Forward Voltage	V <sub>F</sub>	—	410 1000	mV	t <sub>p</sub> < 300μs, I <sub>F</sub> = 1.0mA t <sub>p</sub> < 300μs, I <sub>F</sub> = 15mA
Peak Reverse Current	I <sub>RM</sub>	—	100	nA	t <sub>p</sub> < 300μs, V <sub>R</sub> = 50V
Junction Capacitance	C <sub>j</sub>	—	2.0	pF	V <sub>R</sub> = 0V, f = 1.0MHz
Reverse Recovery Time	t <sub>rr</sub>	—	5.0	ns	I <sub>F</sub> = I <sub>R</sub> = 10mA to I <sub>R</sub> = 1.0mA, R <sub>L</sub> = 100Ω

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