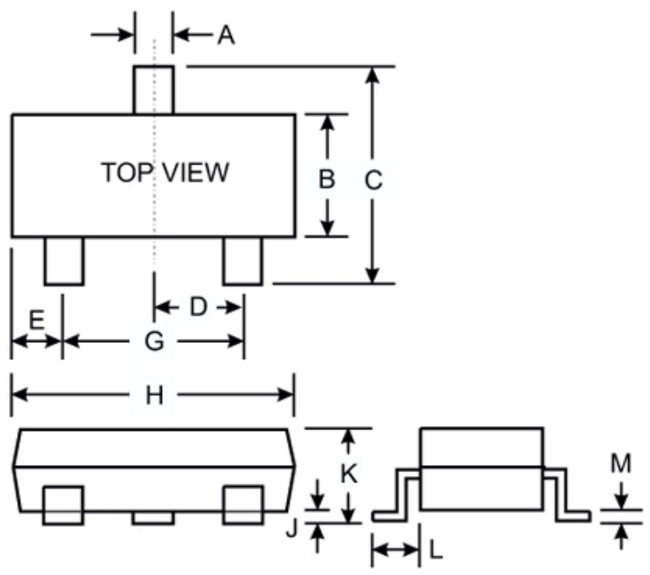
BAS70-04-05-06

● Features

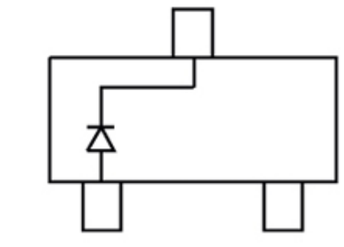
Low Turn-on Voltage
Fast Switching
PN Junction Guard Ring for Transient and ESD Protection

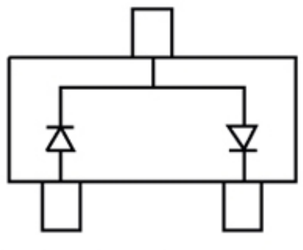
● Mechanical Data

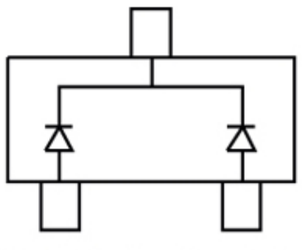
Case: SOT-23, Molded Plastic
Terminals: Solderable per MIL-STD-202, Method 208
Polarity: See Diagrams
Approx. Weight: 0.008 grams

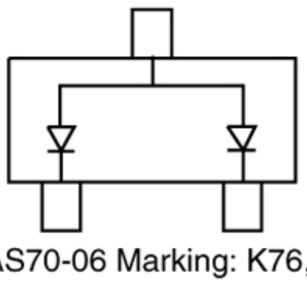


SOT-23		
Dim	**Min**	**Max**
A	0.37	0.51
B	1.19	1.40
C	2.10	2.50
D	0.89	1.05
E	0.45	0.61
G	1.78	2.05
H	2.65	3.05
J	0.013	0.15
K	0.89	1.10
L	0.45	0.61
M	0.076	0.178
All Dimensions in mm		


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_A = 25°C unless otherwise specified

Characteristic	Symbol	BAS70	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)	$R_{\theta JA}$	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)	$V_{(BR)R}$				
Forward Voltage	V_F	—	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, R_L =100Ω

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