

BAV70

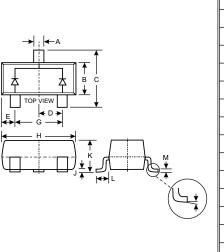
DUAL SURFACE MOUNT SWITCHING DIODE

Features

- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance

Mechanical Data

- Case: SOT-23, Molded Plastic
- Case material UL Flammability Rating Classification 94V-0
- Moisture sensitivity: Level 1 per J-STD-020A
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: See Diagram
- Marking: KJJ (See Page 2)
- Weight: 0.008 grams (approx.)



SOT-23							
Dim	Min	Max					
Α	0.37	0.51					
В	1.20	1.40					
С	2.30	2.50					
D	0.89	1.03					
E	0.45	0.60					
G	1.78	2.05					
н	2.80	3.00					
J	0.013	0.10					
к	0.903	1.10					
L	0.45	0.61					
м	0.85	0.80					
α	0 °	8°					
All Dimensions in mm							

Maximum Ratings @ T_A = 25°C unless otherwise specified

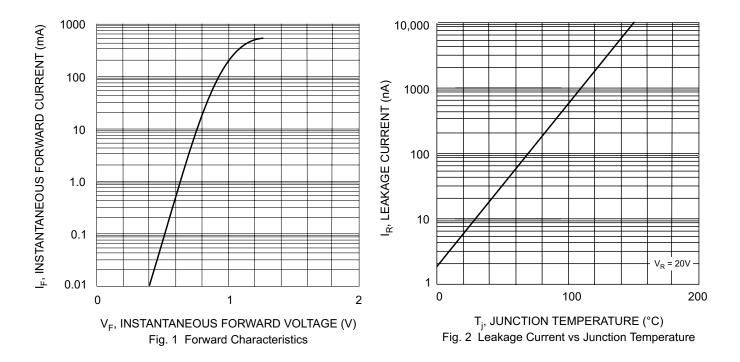
Characteristic	Symbol	BAV70	Unit		
Non-Repetitive Peak Reverse Voltage	V _{RM}	100	V		
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	75	V		
RMS Reverse Voltage	V _{R(RMS)}	53	V		
Forward Continuous Current (Note 1)	I _{FM}	300	mA		
Average Rectified Output Current (Note 1)	Ι _Ο	l _O 150			
Repetitive Peak Forward Current	I _{FRM}	mA			
Non-Repetitive Peak Forward Surge Current $@ t = 1.0 \mu s$ @ t = 1.0s	I _{FSM}	2.0 1.0	А		
Power Dissipation (Note 1)	Pd	350	mW		
Thermal Resistance Junction to Ambient Air (Note 1)	R _{0JA}	357	°C/W		
Operating and Storage Temperature Range	T _j , T _{STG}	-65 to +150	°C		

Electrical Characteristics @ T_A = 25°C unless otherwise specified

Characteristic		Min	Max	Unit	Test Condition		
Forward Voltage (Note 2)	V _{FM}	_	0.715 0.855 1.0 1.25	V	I _F = 1.0mA I _F = 10mA I _F = 50mA I _F = 150mA		
Reverse Current (Note 2)	I _{RM}		2.5 50 30 25	μΑ μΑ μΑ nA	$ \begin{array}{l} V_{R} = 75V \\ V_{R} = 75V, T_{j} = 150^{\circ}C \\ V_{R} = 25V, T_{j} = 150^{\circ}C \\ V_{R} = 20V \end{array} $		
Total Capacitance	CT	_	2.0	pF	V _R = 0, f = 1.0MHz		
Reverse Recovery Time	t _{rr}	_	4.0	ns	$\label{eq:lf} \begin{array}{l} I_F = I_R = 10 m A, \\ I_{rr} = 0.1 \ x \ I_R, \ R_L = 100 \Omega \end{array}$		

Notes: 1. Part mounted on FR-4 board with recommended pad layout, which can be found on our website at http://www.diodes.com/datasheets/ap02001.pdf.

2. Short duration test pulse used to minimize self-heating effect.

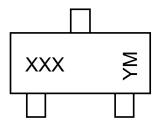


Ordering Information (Note 3)

Device	Packaging	Shipping
BAV70-7	SOT-23	3000/Tape & Reel

Notes: 3. For Packaging Details, go to our website at http://www.diodes.com/datasheets/ap02007.pdf.

Marking Information



 $\begin{array}{l} XXX = Product \ Type \ Marking \ Code \ (See \ Page \ 1) \\ YM = Date \ Code \ Marking \\ Y = Year \ ex: \ N = 2002 \\ M = Month \ ex: \ 9 = September \end{array}$

Date Code Key

Year	1998		1999	2000	2	001	20	02	2003	3	2004	4
Code	J		К	L	L M		Ν		Р		R	
Month	Jan	Feb	March	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Code	1	2	3	4	5	6	7	8	9	0	N	D