

**SURFACE MOUNT
FAST SWITCHING DIODE**

**REVERSE VOLTAGE – 70 Volts
FORWARD CURRENT – 0.2 Ampere**

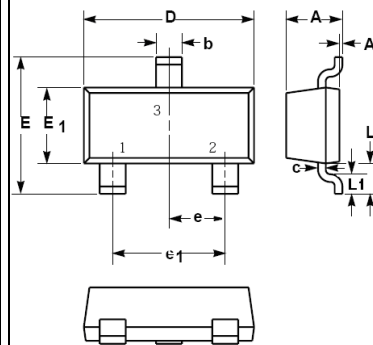
FEATURES

- Fast switching speed
- Ideally suited for automatic insertion
- For general purpose switching applications

MECHANICAL DATA

- Case: SOT-23 Plastic
- Case material: “Green” molding compound, UL flammability classification 94V-0, (No Br. Sb. Cl)
- Moisture sensitivity: Level 1 per J-STD-020D
- Lead free in RoHS 2002/95/EC compliant

SOT-23



SOT-23		
Dim.	Min.	Max.
A	0.90	1.15
A1	0.00	0.10
b	0.30	0.50
c	0.08	0.15
D	2.80	3.00
E	2.25	2.55
E1	1.20	1.40
e	0.95 Typ.	
e1	1.80	2.00
L	0.55 Ref.	
L1	0.30	0.50
Dimensions in millimeter		

Maximum Ratings & Thermal Characteristics @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	BAV74	Units
Non-Repetitive Peak Reverse Voltage	V _{RRM}	50	V
DC Blocking Voltage	V _R	50	V
Average Rectified Output Current	I _O	200	mA
Non-Repetitive Peak Forward Surge Current @t=1.0us	I _{FSM}	4.5	A
Power Dissipation	P _D	225	mW
Thermal Resistance, Junction to Ambient	R _{θJA}	556	°C/W
Operating Temperature Range	T _J	150	°C
Storage Temperature Range	T _{STG}	-55~+150	°C

Electrical Characteristics @ T_A = 25°C unless otherwise specified

Characteristic	Test Condition	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	I _R = 5uA	V _{BR}	50	--	--	V
Maximum Forward Voltage	I _F = 100mA	V _F	--	--	1	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	V _R = 70V	I _R	--	--	5	nA
Typical Diode Capacitance	V _R = 0V, f=1MHz	C _D	--	--	2	pF
Reverse Recovery time	I _{rr} =1mA, I _R =I _F =10mA R _L =100Ω	trr	--	--	4	ns

RATING AND CHARACTERISTIC CURVES BAV74



Fig.1 Typical Forward Characteristics

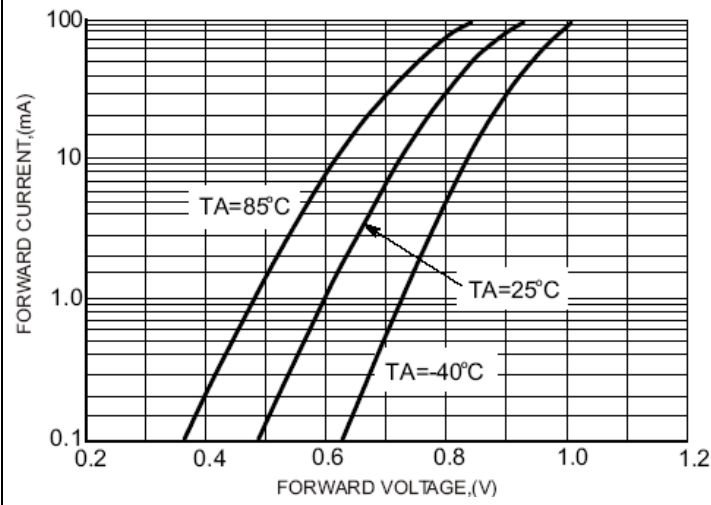


Fig.2 Typical Reverse Characteristics

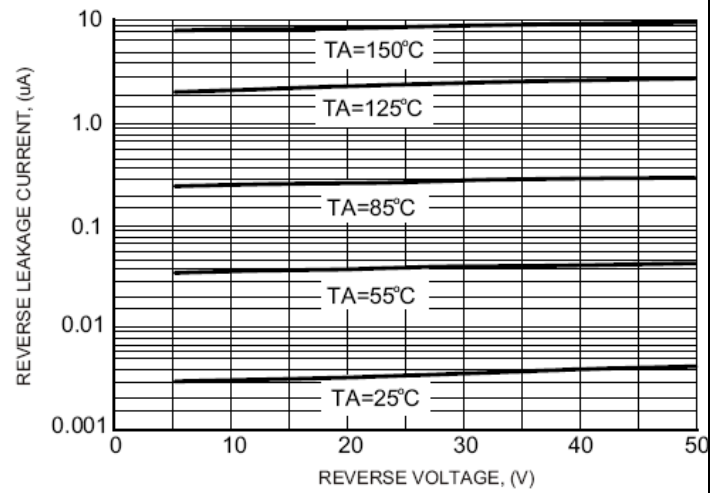
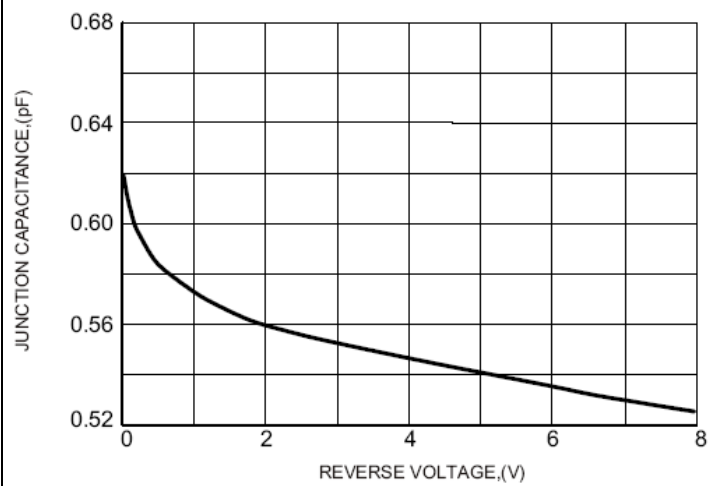


Fig.3 Total Capacitance vs. Reverse Voltage



Device Marking :

Device P/N	Marking code	Equivalent Circuit Diagram
BAV74	JA	

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