

**SURFACE MOUNT
FAST SWITCHING DIODE**

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

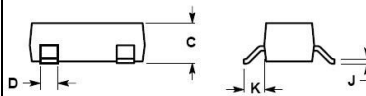
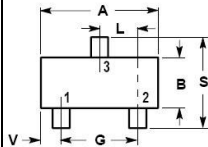
FEATURES

- 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	2.80	3.04
B	1.20	1.40
C	0.89	1.11
D	0.37	0.50
G	1.78	2.04
J	0.085	0.177
K	0.35	0.69
L	0.89	1.02
S	2.10	2.64
V	0.45	0.60
Dimensions in millimeter		

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

Characteristic	Symbol	BAV70	Units
Non-Repetitive Peak Reverse Voltage DC Blocking Voltage	V _{RM} V _R	70	V
Forward Current	I _F	200	mA
Peak Forward Surge Current @t=10ms	I _{FSM}	500	mA
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 = 100uA	V _{BR}	70	--	--	V
Maximum Forward Voltage	I _F = 1mA I _F = 10mA I _F = 50mA I _F = 150mA	V _F	--	--	715 855 1000 1250	mV
Maximum DC Reverse Current at Rated DC Blocking Voltage	V _R = 75V	I _R	--	--	2.5	uA
Typical Diode Capacitance	V _R = 1V, f = 1MHz	C _D	--	--	1.5	pF
Reverse Recovery time	I _{rr} = 1mA, I _F = I _R = 10mA, R _L = 100Ω	t _{rr}	--	--	6	nS

**RATING AND CHARACTERISTIC CURVES
BAV70**



Fig.1 Typical Forward Characteristics

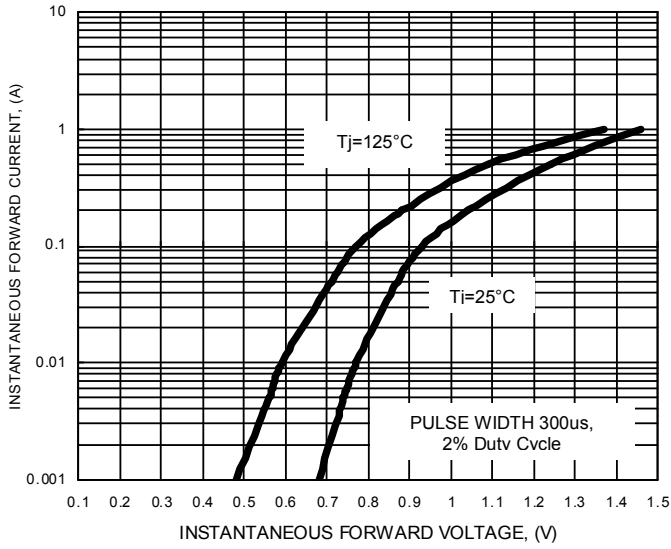


Fig.2 Typical Reverse Characteristics

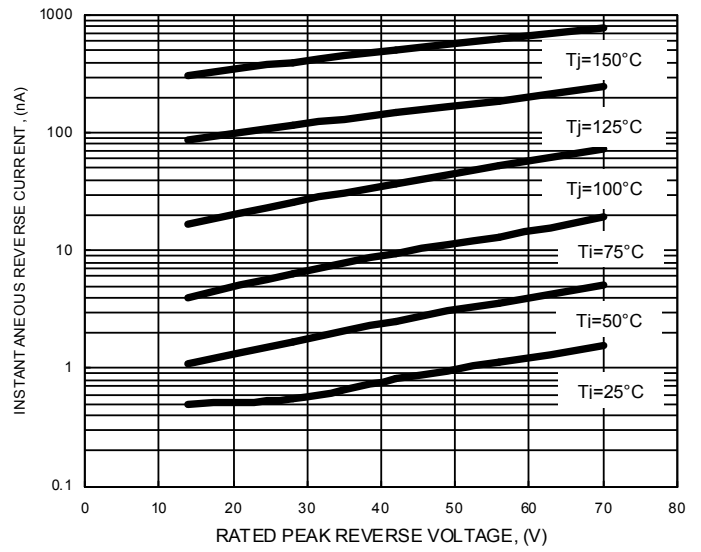
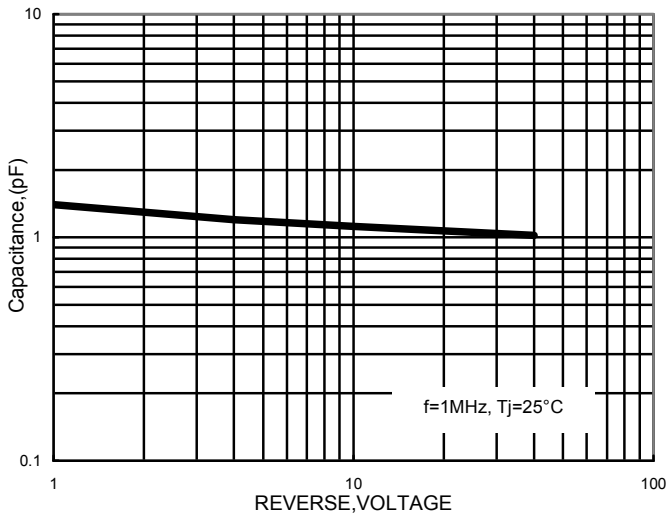


Fig.3 Total Capacitance vs. Reverse Voltage



Device Marking :

Device P/N	Marking	Equivalent Circuit Diagram
BAV70	A4	

Important Notice and Disclaimer

LSC reserves the right to make changes to this document and its products and specifications at any time without notice. Customers should obtain and confirm the latest product information and specifications before final design, purchase or use.

LSC makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does LSC assume any liability for application assistance or customer product design. LSC does not warrant or accept any liability with products which are purchased or used for any unintended or unauthorized application.

No license is granted by implication or otherwise under any intellectual property rights of LSC.

LSC products are not authorized for use as critical components in life support devices or systems without express written approval of LSC.