

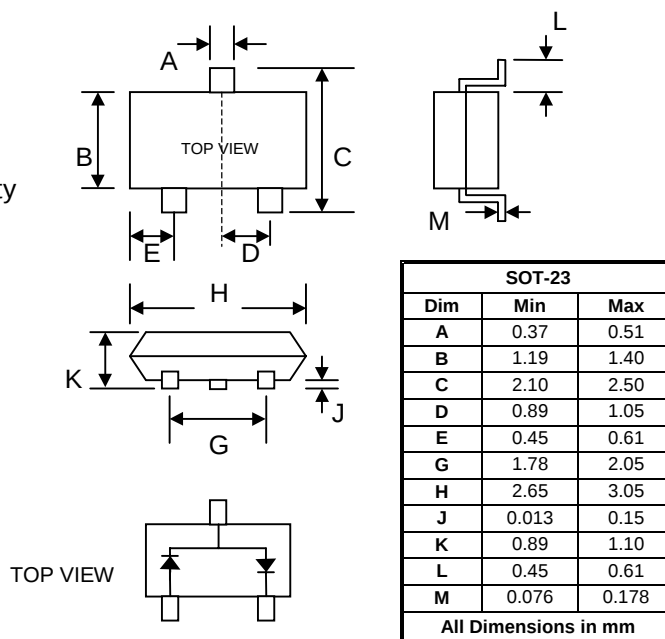
SURFACE MOUNT FAST SWITCHING DIODE

Features

- High Conductance
- Fast Switching
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose and Switching
- Plastic Material – UL Recognition Flammability Classification 94V-O

Mechanical Data

- Case: SOT-23, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: See Diagram
- Weight: 0.008 grams (approx.)
- Mounting Position: Any
- Marking: JG



Maximum Ratings @T_A=25°C unless otherwise specified

Characteristic	Symbol	Value	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
Forward Continuous Current (Note 1)	I _F	300	mA
Average Rectified Output Current (Note 1)	I _O	150	mA
Peak Forward Surge Current (Note 1) @ t < 1.0μs	I _{FSM}	2.0	A
Power Dissipation (Note 1)	P _d	350	mW
Typical Thermal Resistance, Junction to Ambient Air (Note 1)	R _{θJA}	357	K/W
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +150	°C

Electrical Characteristics @T_A=25°C unless otherwise specified

Characteristic	Symbol	Min	Max	Unit	Test Condition
Forward Voltage	V _F	—	0.855 1.0	V	@ I _F = 10mA @ I _F = 50mA
Reverse Leakage Current	I _R	—	2.5	μA	@ V _R = 75V
Junction Capacitance	C _j	—	2.0	pF	V _R = 0V, f = 1.0MHz
Reverse Recovery Time	t _{rr}	—	6.0	nS	I _F = I _R = 10mA, I _{RR} = 0.1 x I _R , R _L = 100Ω

Note: 1. Device mounted on fiberglass substrate 40 x 40 x 1.5mm.

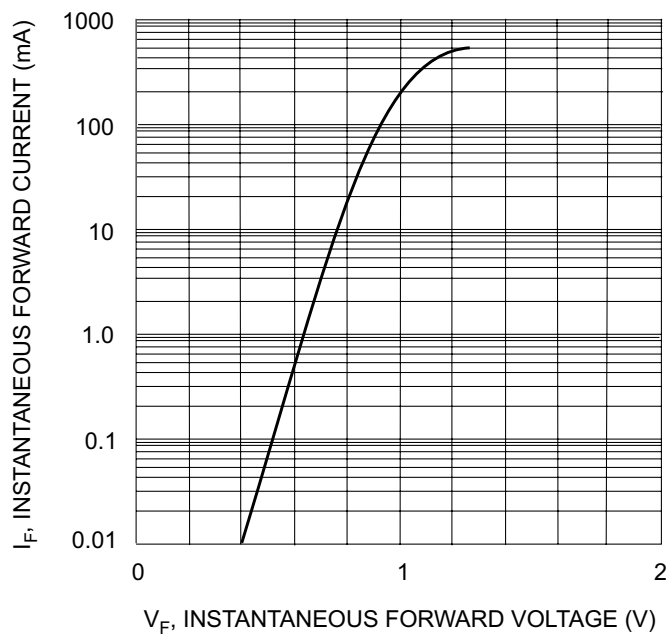


Fig. 1 Forward Characteristics

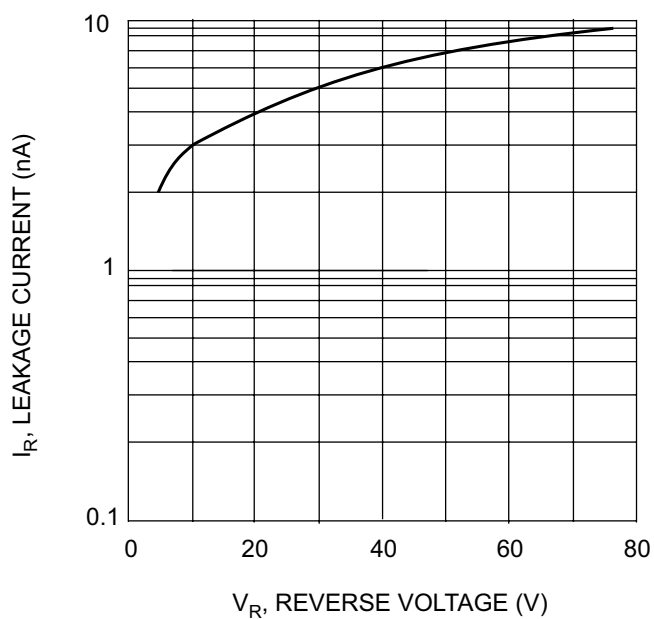


Fig. 2 Typical Leakage Current vs Reverse Voltage

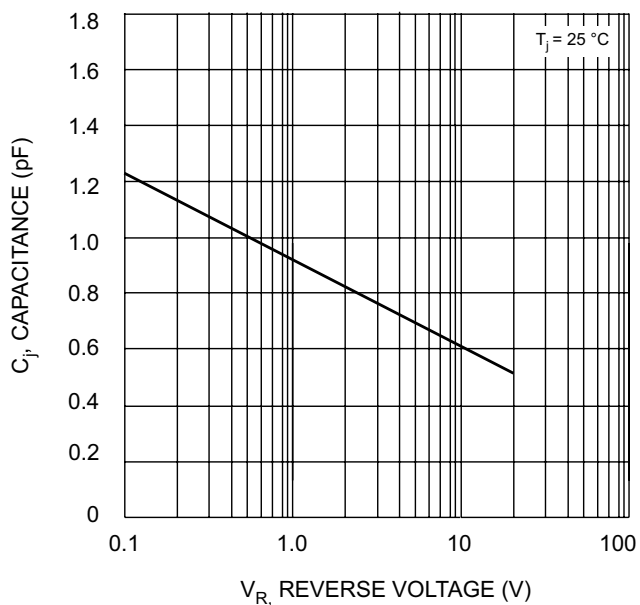


Fig. 3 Typical Junction Capacitance vs Reverse Voltage

ORDERING INFORMATION

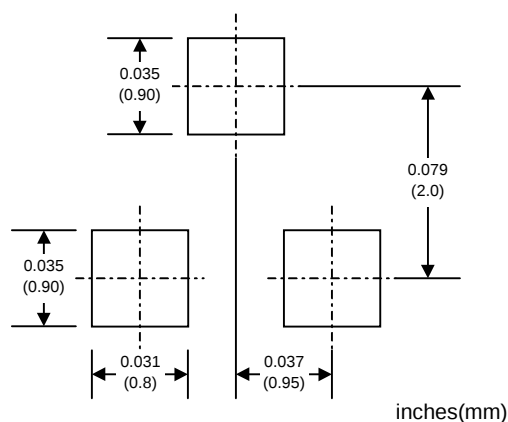
Product No. ♦	Package Type	Shipping Quantity
BAV99-T1	SOT-23	3000/Tape & Reel
BAV99-T3	SOT-23	10000/Tape & Reel

Products listed in **bold** are WTE **Preferred** devices.

♦T1 suffix refers to a 7" reel. T3 suffix refers to a 13" reel.

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

RECOMMENDED FOOTPRINT



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WARNING: DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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