

SINLOON®

快速貼片開關二極管

SOT-23 BAV99

SURFACE MOUNT FAST SWITCHING DIODE (75V 0.15A)

**FEATURE:**

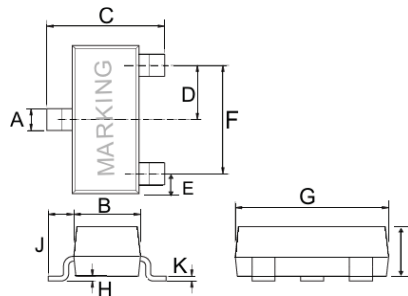
- ◆ Fast switching diode
- ◆ High Conductance
- ◆ Surface Mount Package Ideally Sited for Automatic Insertion
- ◆ For General Purpose and Switching
- ◆ Plastic Material - UL Recognition Flammability Classification 94V-0

**MECHANICAL CHARACTERISTICS:**

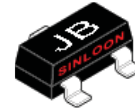
- ◆ Case: SOT-23 Molded Plastic
- ◆ Weight: 0.008 Grams (approx)
- ◆ Marking: Body top view
- ◆ Terminals: Plated leads solderable per MIL-STD-202, Method 208.
- ◆ Mounting: Position any
- ◆ Lead Free for **RoHS** / Lead free version and "LF" suffix to part number.

**DIMENSION:**

SOT-23		
Dim	Min	Max
A	0.37	0.51
B	1.19	1.4
C	2.1	2.5
D	0.89	1.05
E	0.45	0.61
F	1.78	2.05
G	2.65	3.05
H	0.013	0.15
I	0.89	1.1
J	0.45	0.61
K	0.076	0.178

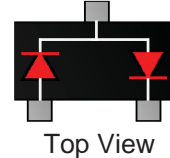


Figure

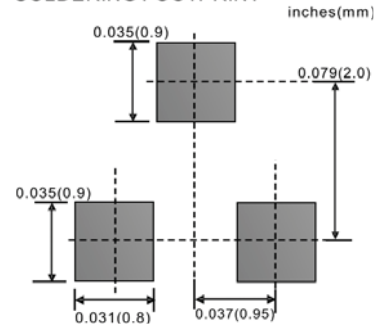


BAV99

Marking  
JB



SOLDERING FOOTPRINT



**Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$  unless otherwise specified**

Characteristics	Symbol	Value	Unit
Peak Repetitive Voltage	$V_{RM}$	100	V
Working Peak Reverse Voltage	$V_{RWM}$	75	V
Peak Repetitive Reverse Voltage	$V_{RRM}$	75	V
DC Blocking Voltage	$V_R$	75	V
Forward Continuous Current (Note <sup>1</sup> )	$I_F$	300	mA
Average Rectified Output Current (Note <sup>1</sup> )	$I_O$	150	mA
Peak Forward Surge Current (Note <sup>1</sup> ) @ $t < 1.0\mu\text{s}$	$I_{FSM}$	2.0	A
Power Dissipation (Note <sup>1</sup> )	$P_d$	350	mW
Typical Thermal Resistance, Junction to Ambient Air (Note <sup>1</sup> )	$R_{\theta JA}$	357	K/W
Operating and Storage Temperature Range	$T_J, T_{STG}$	-65+150	$^\circ\text{C}$

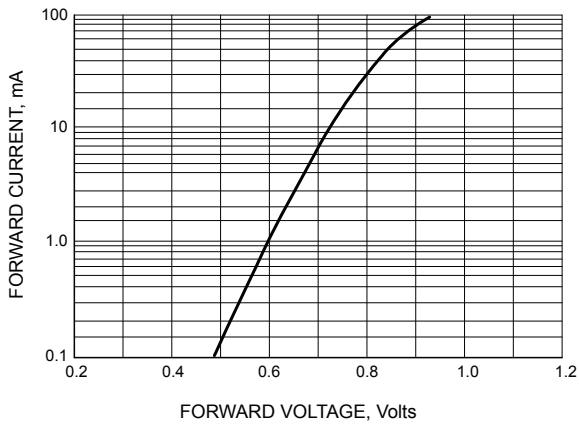
Note: <sup>1</sup> Device mounted on fiberglass substrate 40x40x1.5mm

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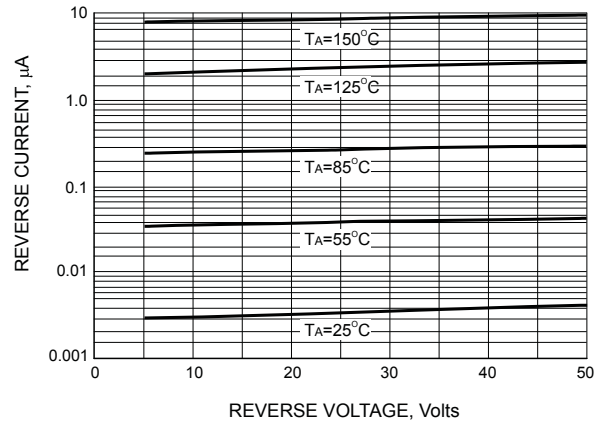


□ Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$  unless otherwise specified

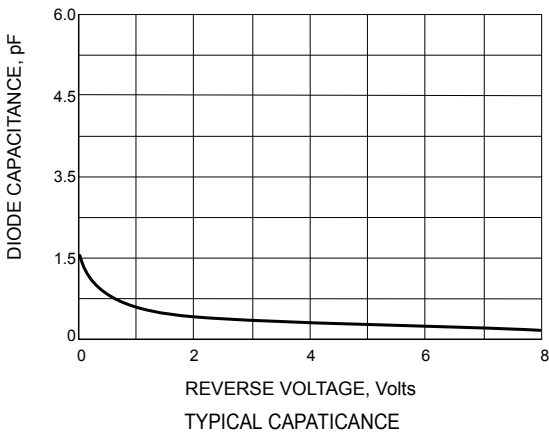
Characteristic	Symbol	Min.	Max.	Unit	Test Condition
Forward Voltage	$V_F$	----	0.855	V	@ $I_F = 10\text{mA}$
			1.0		@ $I_F = 50\text{mA}$
Reverse Leakage Current	$I_R$	----	2.5	$\mu\text{A}$	@ $V_R = 75\text{V}$
Junction Capacitance	$C_j$	----	2.0	pF	$V_R = 0\text{V}$ , $f = 1.0\text{MHz}$
Reverse Recovery Time	$t_{rr}$	----	6.0	nS	$I_F=I_R=10\text{mA}$ , $I_{RR}=0.1 \times I_R$ , $R_L=100\Omega$



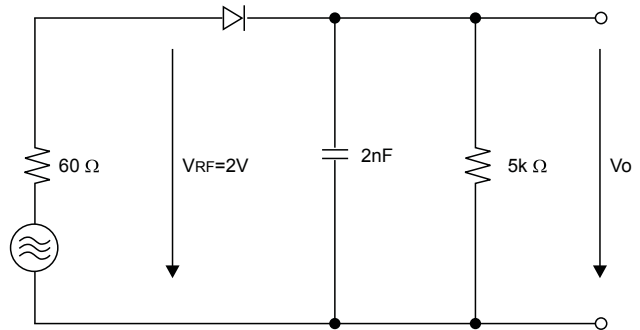
FORWARD VOLTAGE



LEAKAGE CURRENT



REVERSE VOLTAGE, Volts  
TYPICAL CAPACITANCE



RECTIFICATION EFFICIENCY MEASUREMENT CIRCUIT

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SOT-23 BAV99

**SURFACE MOUNT FAST SWITCHING DIODE (75V 0.15A)**

COMMON PACKING INFORMATION:

Product Number:	Package Type	Packing Quantity	Carton Quantity	Apporx Gross Weight
BAV99	SOT-23	3000 Tape & Reel	150,000 Ctn	10 Kg

Reel Diameter (mm)	Quantity (Pcs)	Inner Box Size (mm)	Carton Size (mm)
178	3000	L: 187 x W:187 x H: 65	L:390 x W:240 x H:420

PACKAGE

Fig-1



Q'ty: 3000/Reel

Fig-2



Q'ty: 30,000/Inner Box

Fig-3



Q'ty: 150,000 / Carton

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Mayloon characteristic parameters of electronic product specification changes or updates without prior notice.

