



**GAIA TECH**

Dual series switching diode **BAV 99**

**FEATURES**

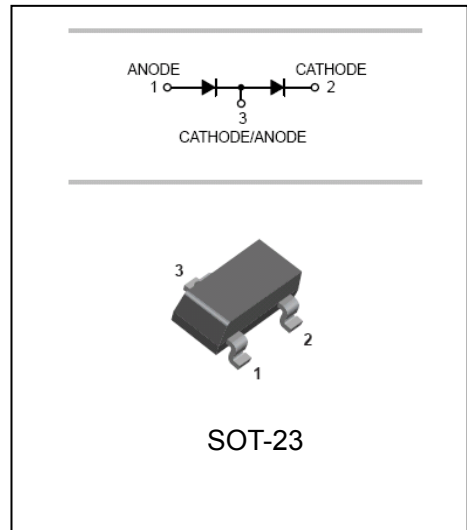
- Fast switching speed Max:6ns
- High conductance
- Connected in series
- Surface mount package ideally suited for automatic insertion



Lead-free

**APPLICATIONS**

- Small signal switching



**ORDERING INFORMATION**

Type No.	Marking	Package Code
BAV99	A7	SOT-23

**MAXIMUM RATING @ Ta=25°C unless otherwise specified**

Parameter	Symbol	Value	Unit
Non repetitive peak reverse voltage	$V_{RM}$	100	V
Repetitive peak reverse voltage	$V_{RRM}$	70	V
Working peak reverse voltage	$V_{RWM}$		
DC Reverse voltage	$V_R$		
Peak forward surge current @t=1.0s @t=1.0µs	$I_{FSM}$	1 4.5	mA
Forward current	$I_F$	250	mA
Power dissipation	$P_d$	300	mW

**ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified**

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	$V_{(BR)}$	$I_R=100\mu A$	70		V
Reverse voltage leakage current	$I_R$	$V_R=70V$		2.5	$\mu A$
Forward voltage	$V_F$	$I_F=1mA$ $I_F=10mA$ $I_F=50mA$ $I_F=150mA$		715 855 1000 1250	mV
Diode capacitance	$C_D$	$V_R=0V$ $f=1MHz$		1.5	pF
Reverse recovery time	$t_{rr}$	$I_F=I_R=10mA$ $V_R=5V$ $R_C=100\Omega$		6	nS

**TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified**

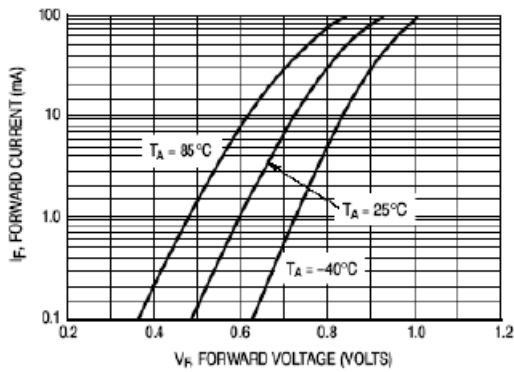


Figure 1. Forward Voltage

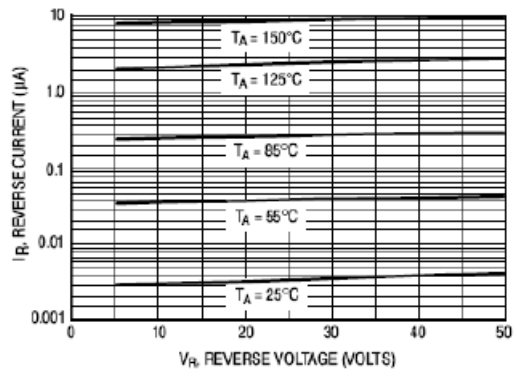


Figure 2. Leakage Current

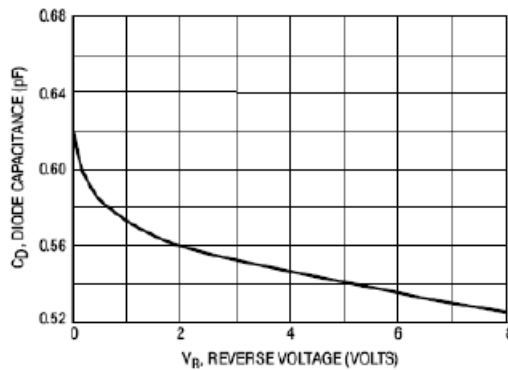
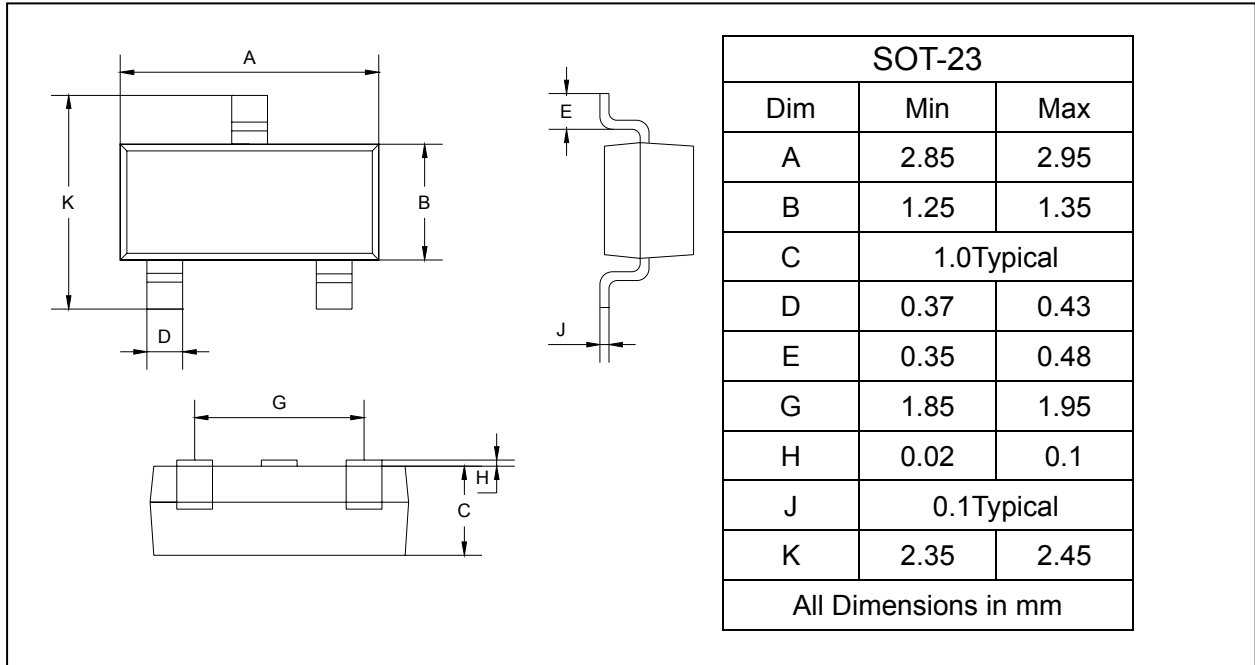


Figure 3. Capacitance

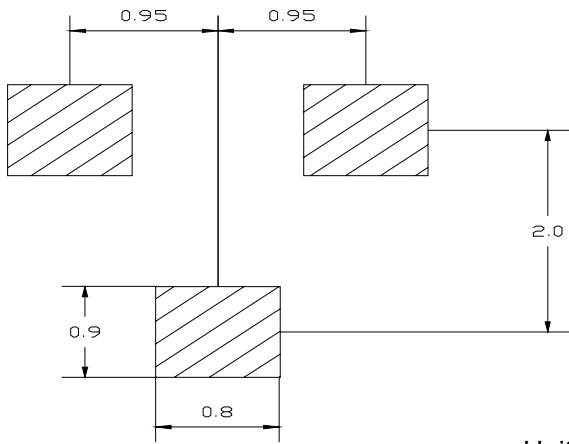
**PACKAGE OUTLINE**

Plastic surface mounted package

SOT-23



**SOLDERING FOOTPRINT**



Unit : mm

**PACKAGE INFORMATION**

Device	Package	Shipping
BAV99	SOT-23	3000/Tape&Reel