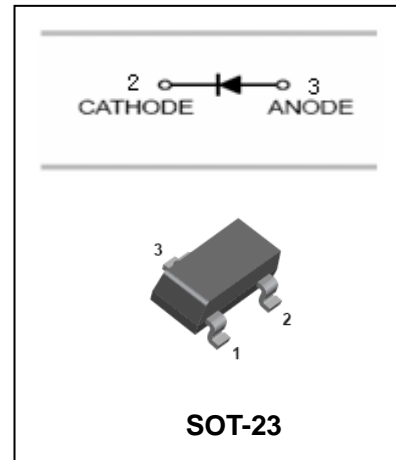


Surface mount switching diode

**BAL99**

## FEATURES

- Fast switching.



## APPLICATIONS

- High speed switching application.

## ORDERING INFORMATION

Type No.	Marking	Package Code
BAL99	JF	SOT-23

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

Characteristic	Symbol	Limits	Unit
Continuous Reverse Voltage	$V_R$	70	V
Peak Forward Current	$I_F$	100	mA
Power Dissipation	$P_d$	300	mW
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	417	°C/W
Operating Junction Temperature Range	$T_j$	125	°C
Storage Temperature Range	$T_{STG}$	-55 to +125	°C

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

Characteristic	Symbol	Min	MAX	UNIT	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	70	-	V	$I_R = 100\mu A$
Forward Voltage	$V_F$	-	715 855 1000 1250	mV	$I_F = 1mA$ $I_F = 10mA$ $I_F = 50mA$ $I_F = 150mA$
Reverse Leakage Current	$I_R$	-	2.5	$\mu A$	$V_R = 70V$
Diodes Capacitance	$C_d$	-	1.5	pF	$V_R = 0V, f = 1.0MHz$
Reverse Recovery Time	$t_{rr}$	-	6.0	ns	$I_F = I_R = 10mA, I_{rr} = 0.1 * I_R$ $R_L = 100\Omega$

TYPICAL CHARACTERISTICS @  $T_a=25^\circ\text{C}$  unless otherwise specified

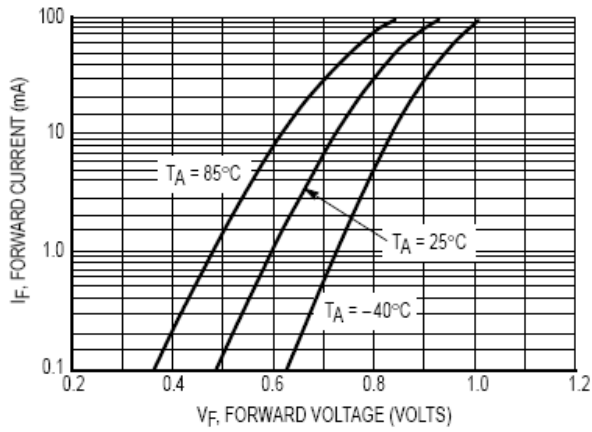


Figure 1. Forward Voltage

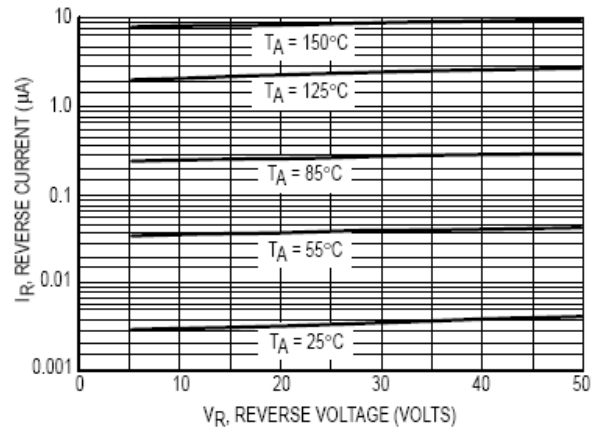


Figure 2. Leakage Current

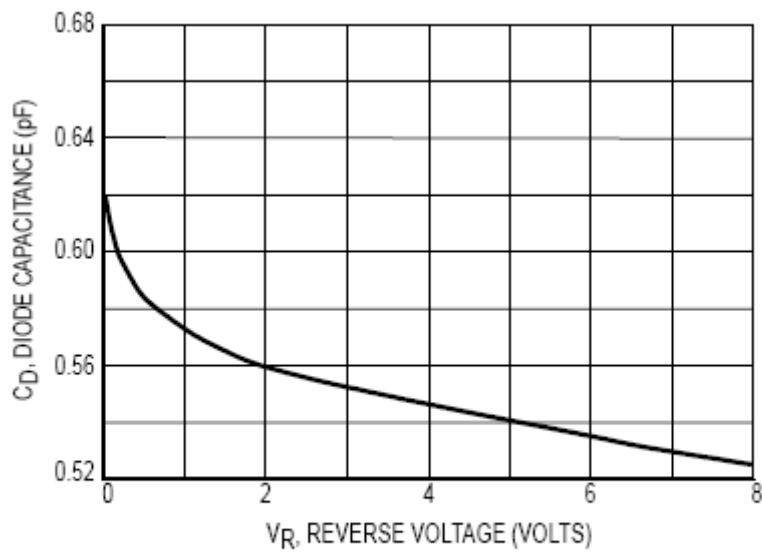


Figure 3. Capacitance

# Diode Semiconductor Korea

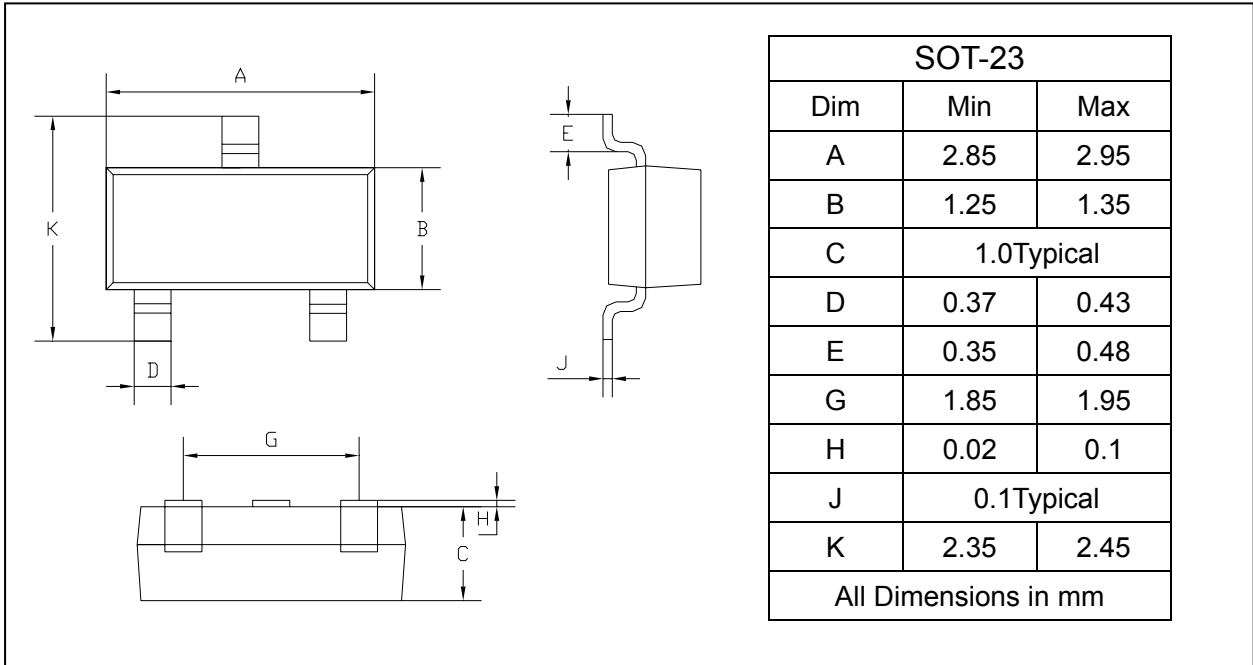
Surface mount switching diode

**BAL99**

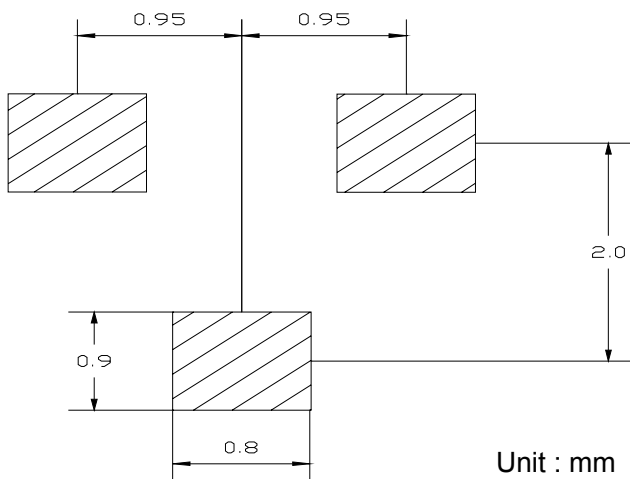
## PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



## SOLDERING FOOTPRINT



## PACKAGE INFORMATION

Device	Package	Shipping
BAL99	SOT-23	3000/Tape&Reel