

Surface mount switching diode

BAL99

FEATURES

- Fast switching.

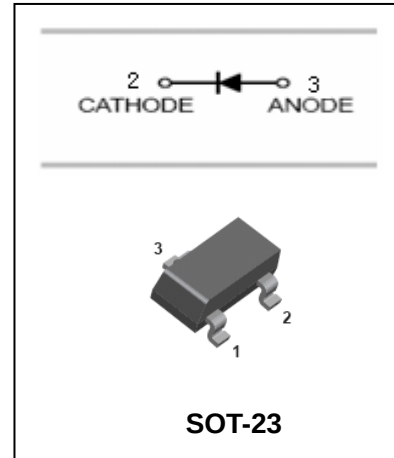


Lead-free

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	μA	$V_R = 70V$
Diodes Capacitance	C_d	-	1.5	pF	$V_R = 0V, f = 1.0MHz$
Reverse Recovery Time	t_{rr}	-	6.0	ns	$I_F = I_R = 10mA, I_{rr} = 0.1 \cdot I_R$ $R_L = 100\Omega$

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TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

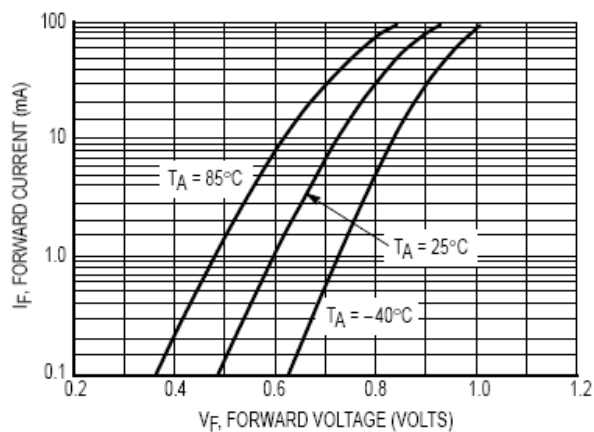


Figure 1. Forward Voltage

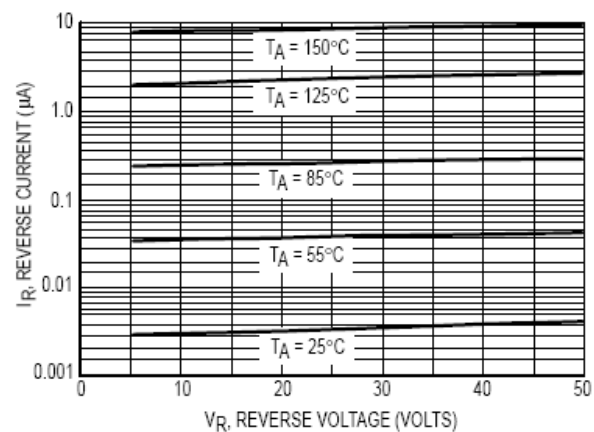


Figure 2. Leakage Current

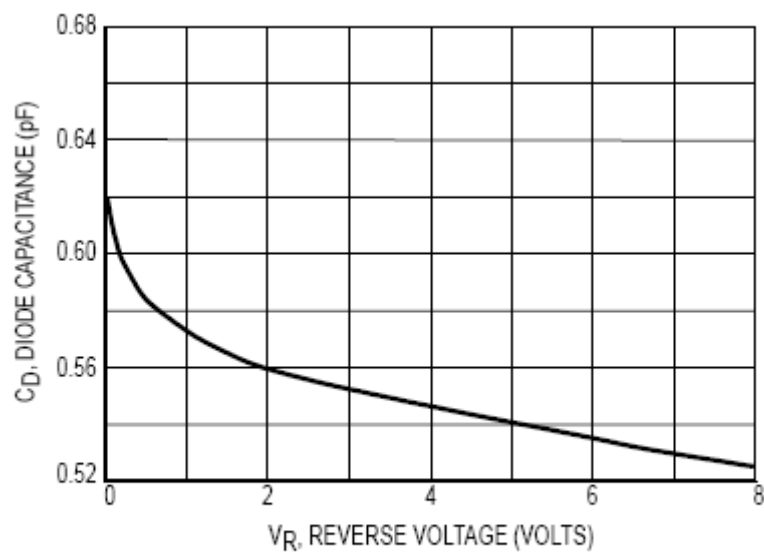


Figure 3. Capacitance

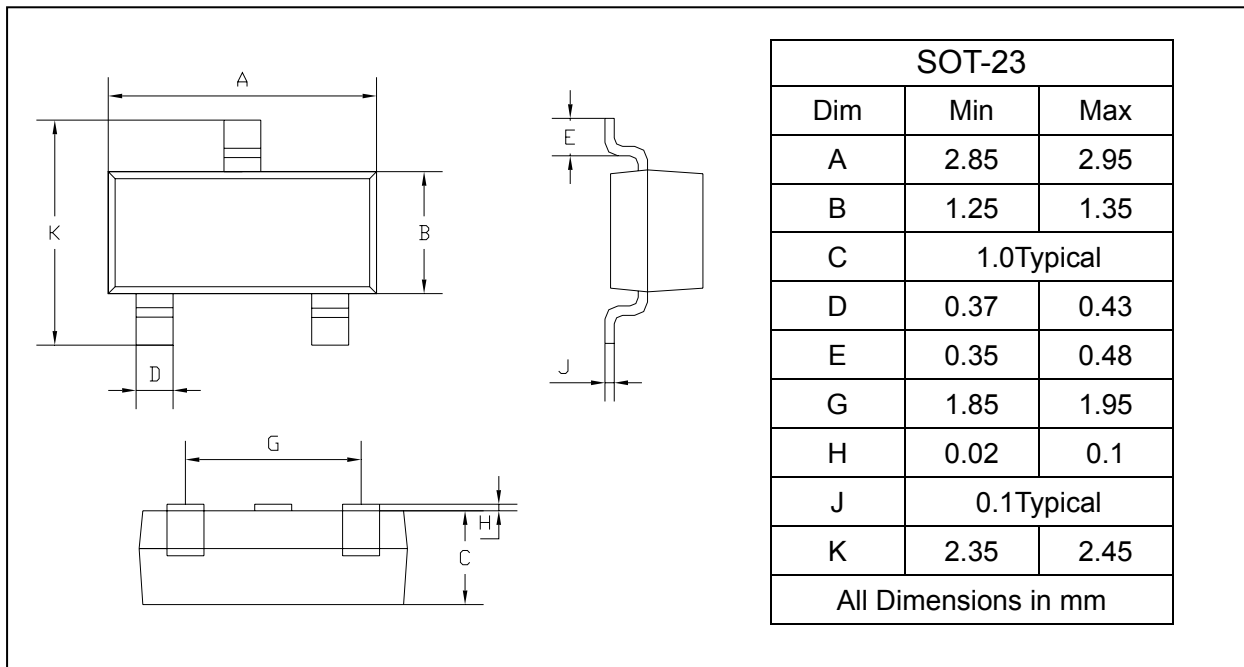
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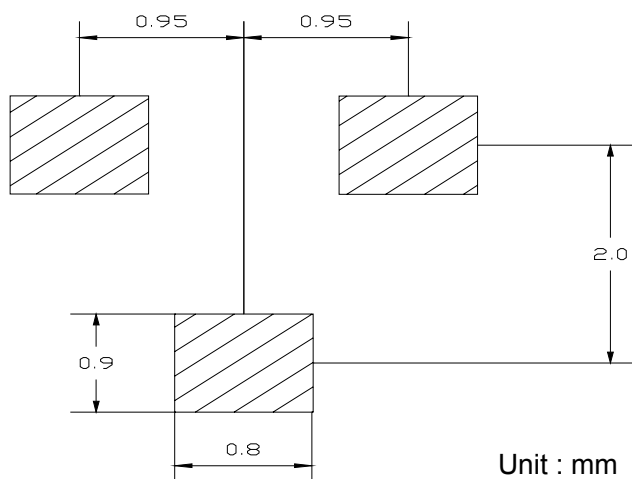
PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



SOLDERING FOOTPRINT



PACKAGE INFORMATION

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