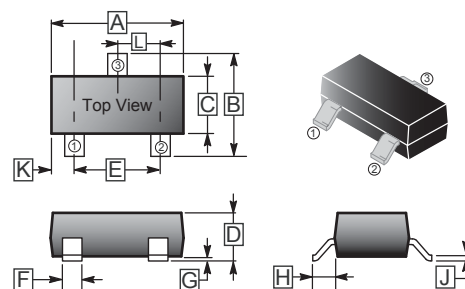


RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

**SOT-23**

**FEATURES**

- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance



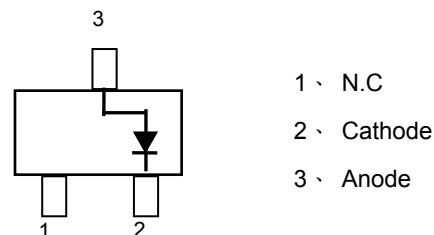
**MARKING**

	MarkingCode
BAL99	JF

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.70	3.04	G	-	0.18
B	2.10	2.80	H	0.40	0.60
C	1.20	1.60	J	0.08	0.20
D	0.89	1.40	K	0.6 REF.	
E	1.78	2.04	L	0.85	1.15
F	0.30	0.50			

**PACKAGE INFORMATION**

Package	MPQ	LeaderSize
SOT-23	3K	7' inch



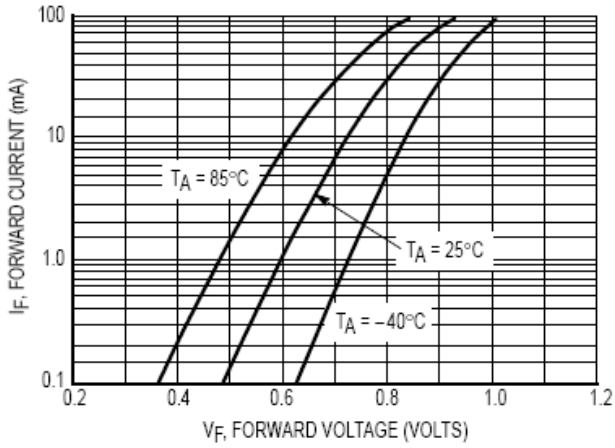
**ABSOLUTE MAXIMUM RATINGS** ( $T_A = 25^\circ\text{C}$  unless otherwise specified)

PARAMETER	SYMBOL	VALUE	UNIT
Non-Repetitive Peak Reverse Voltage	$V_{RM}$	70	V
DC Blocking Voltage	$V_R$	70	V
Average Rectified Output Current	$I_O$	100	mA
Power Dissipation	$P_D$	225	mW
Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	556	$^\circ\text{C} / \text{W}$
Junction & Storage Temperature	$T_J, T_{STG}$	150, -55~150	$^\circ\text{C}$

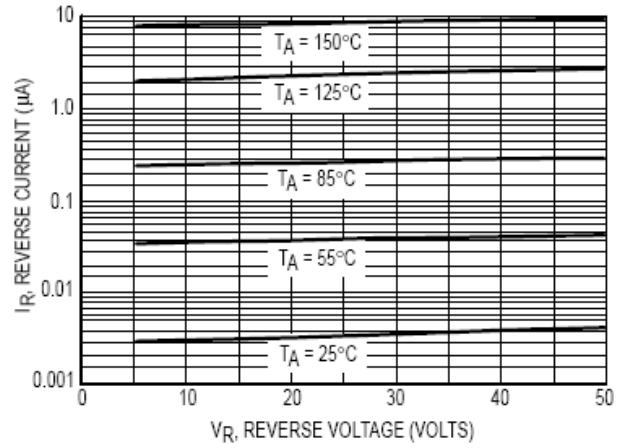
**ELECTRICAL CHARACTERISTICS** ( $T_A = 25^\circ\text{C}$  unless otherwise specified)

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Reverse Breakdown Voltage	$V_{(BR)R}$	70	-	-	V	$I_R = 100\mu\text{A}$
Forward Voltage	$V_{F1}$	-	-	0.715	V	$I_F = 1\text{mA}$
	$V_{F2}$	-	-	0.855		$I_F = 10\text{mA}$
	$V_{F3}$	-	-	1		$I_F = 50\text{mA}$
	$V_{F4}$	-	-	1.25		$I_F = 150\text{mA}$
Reverse Voltage Leakage Current	$I_R$	-	-	2.5	$\mu\text{A}$	$V_R = 70\text{V}$
Diode Capacitance	$C_D$	-	-	1.5	pF	$V_R = 0\text{V}, f = 1\text{MHz}$
Reverse Recovery Time	$t_{RR}$	-	-	6	nS	$I_F = I_R = 10\text{mA}, I_{tr} = 0.1 \times I_R$ $R_L = 100\Omega$

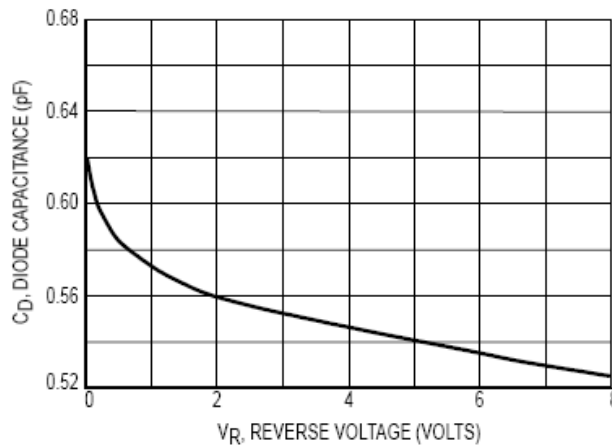
**RATINGS AND CHARACTERISTIC CURVES**



**Figure 1. Forward Voltage**



**Figure 2. Leakage Current**



**Figure 3. Capacitance**