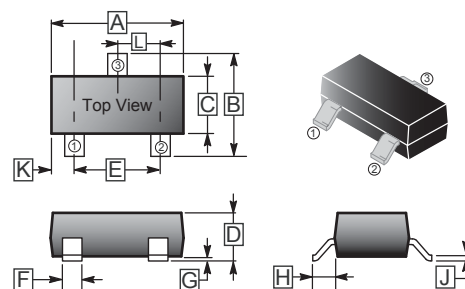


RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

SOT-23

FEATURES

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



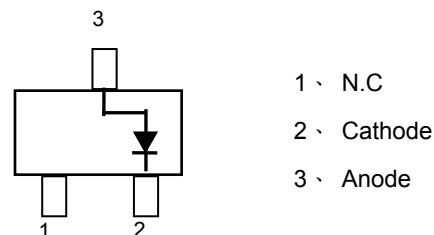
MARKING

	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	μA	$V_R = 70\text{V}$
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

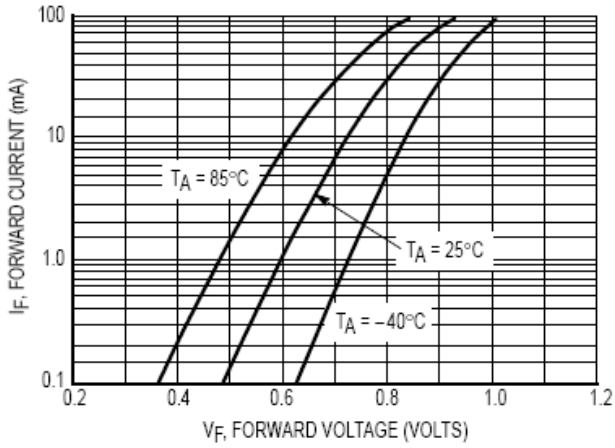


Figure 1. Forward Voltage

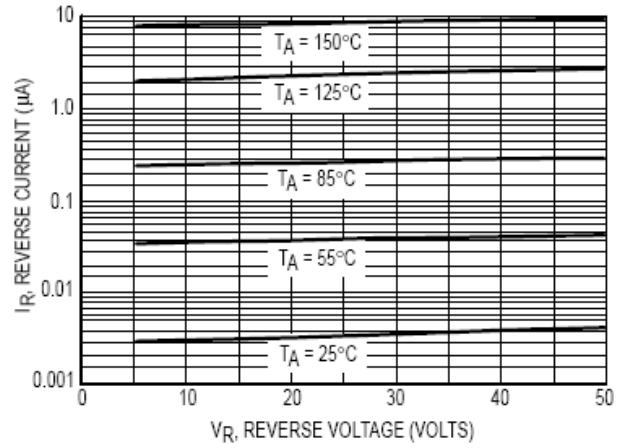


Figure 2. Leakage Current

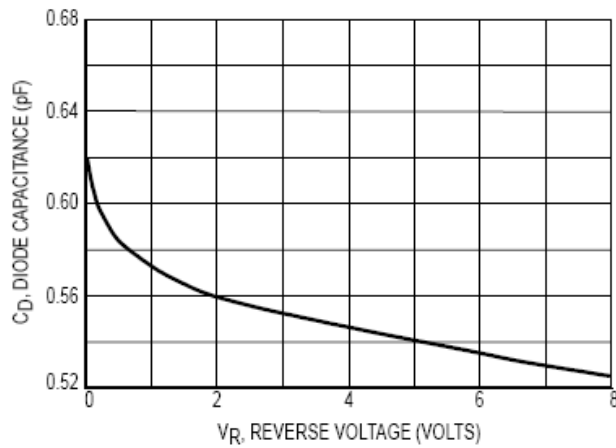


Figure 3. Capacitance