

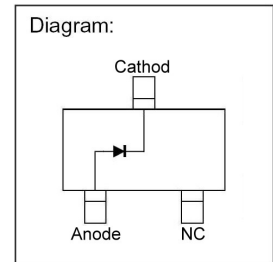
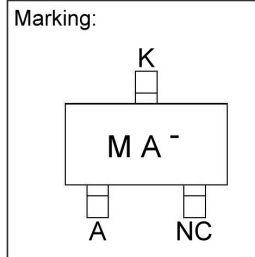
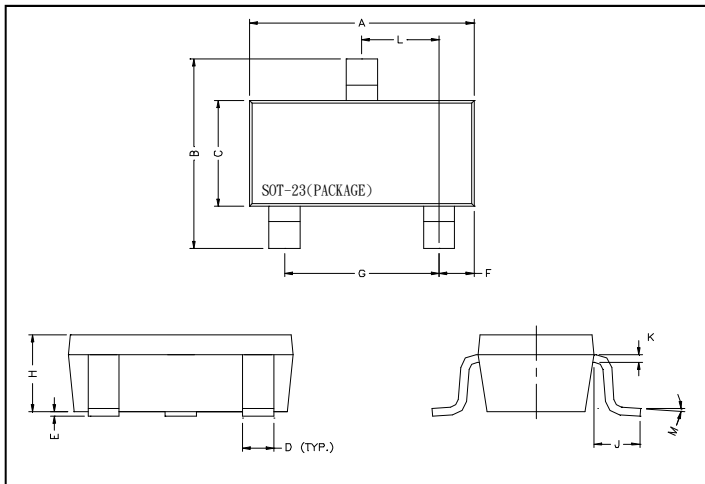
GBAV151

SURFACE MOUNT, SWITCHING DIODE VOLTAGE 40V, CURRENT 0.1A

Description

The GBAV151 is designed for ultra high speed switching application.

Package Dimensions



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.70	3.10	G	1.90	REF.
B	2.40	2.80	H	1.00	1.30
C	1.40	1.60	K	0.10	0.20
D	0.35	0.50	J	0.40	-
E	0	0.10	L	0.85	1.15
F	0.45	0.55	M	0°	10°

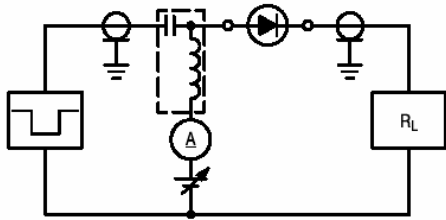
Absolute Maximum Ratings (At TA = 25°C unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Max. Peak Reverse Voltage	V_{RM}	40	V
Max. Reverse Voltage	V_R	40	V
Max. Average Forward Rectified Current	I_o	100	mA
Non-Repetitive Peak Forward surge Current @ $T_p = 1.0\mu s$ @ $T_p = 1.0s$	I_{FSM}	225	mA
		500	
Power Dissipation	PD	225	mW
Junction Temperature	T_J	150	°C
Storage Temperature	T_{STG}	-55 ~ +150	°C

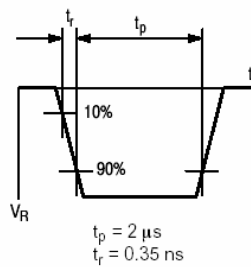
Electrical Characteristics (At TA = 25°C unless otherwise noted)

Characteristics	Symbol	Min.	Max.	Unit	Test Conditions
Reverse Breakdown Voltage	$V_{(BR)R}$	40	-	V	$I_R = 100\mu A$
Forward Voltage	V_F	-	1.2	V	$I_F = 100mA$
Reverse Voltage Leakage Current	I_R	-	100	nA	$V_R = 35V$
Diode Capacitance	C_D	-	2.0	pF	$V_R = 0V, f = 1.0MHz$
Reverse Recovery Time (Figure 1)	t_{rr}	-	3.0	ns	$I_F = 10mA, V_R = 6V, R_L = 100\Omega, I_{tr} = 0.1I_R$

RECOVERY TIME EQUIVALENT TEST CIRCUIT



INPUT PULSE



OUTPUT PULSE

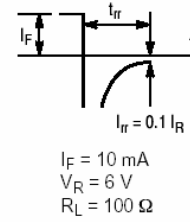


Figure 1. Reverse Recovery Time Equivalent Test Circuit

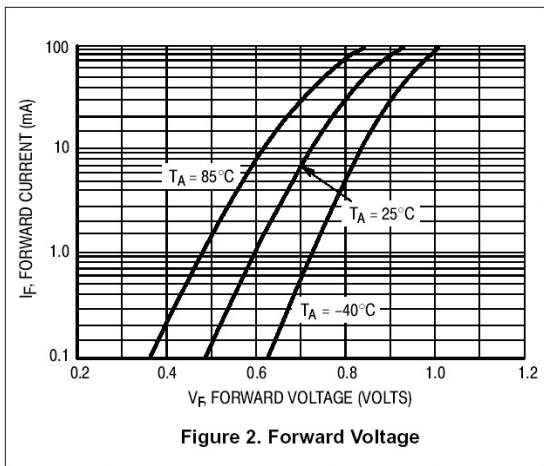


Figure 2. Forward Voltage

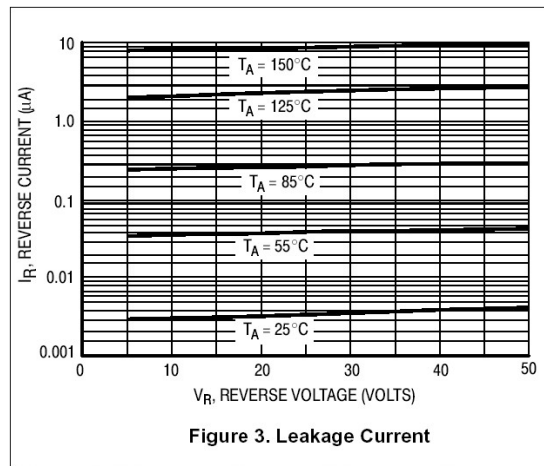


Figure 3. Leakage Current

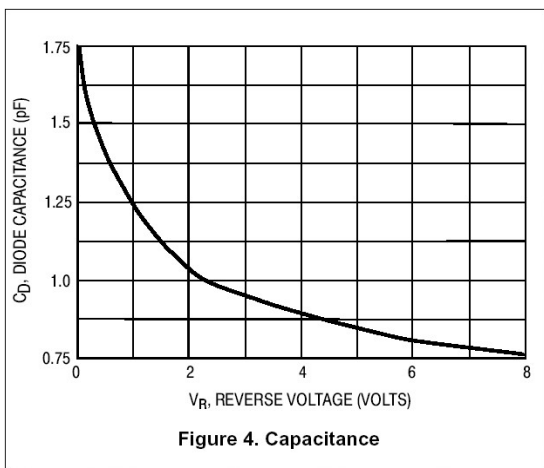


Figure 4. Capacitance

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