

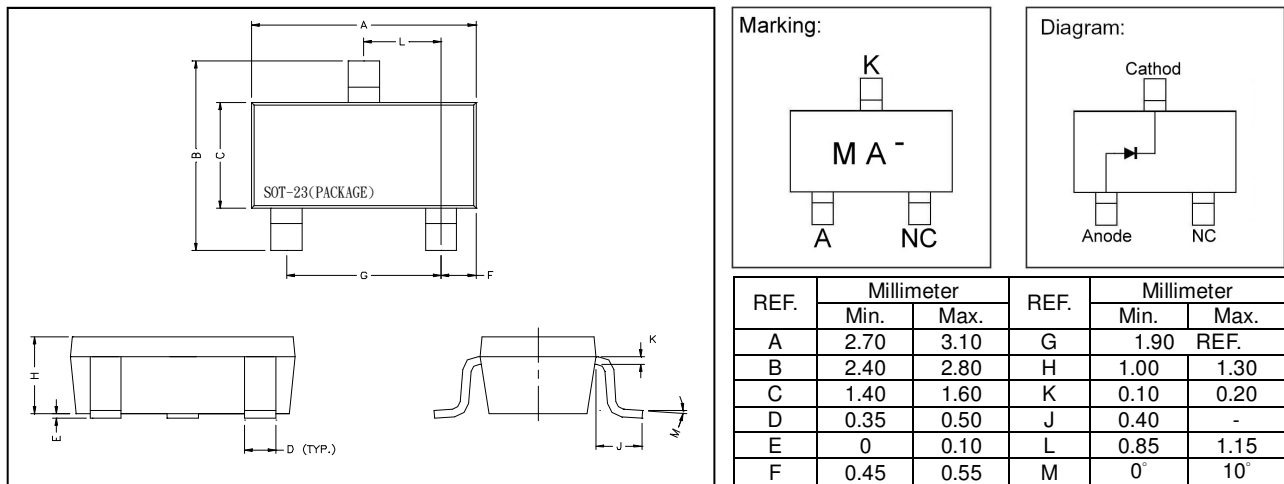
GBAV151

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

Description

The GBAV151 is designed for ultra high speed switching application.

Package Dimensions

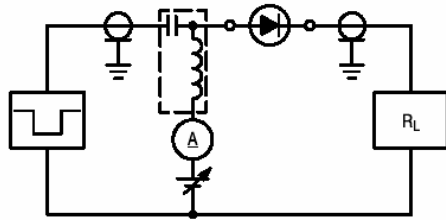
Absolute Maximum Ratings (At $T_A = 25^\circ\text{C}$ unless otherwise specified)

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 @ $T_p = 1.0\mu\text{s}$ @ $T_p = 1.0\text{s}$	I_{FSM}	225 500	mA
Power Dissipation	PD	225	mW
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55 ~ +150	$^\circ\text{C}$

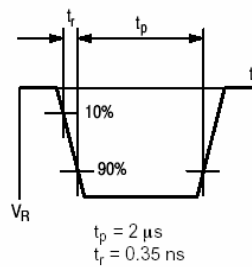
Electrical Characteristics (At $T_A = 25^\circ\text{C}$ unless otherwise noted)

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

RECOVERY TIME EQUIVALENT TEST CIRCUIT



INPUT PULSE



OUTPUT PULSE

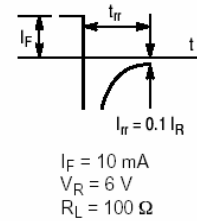
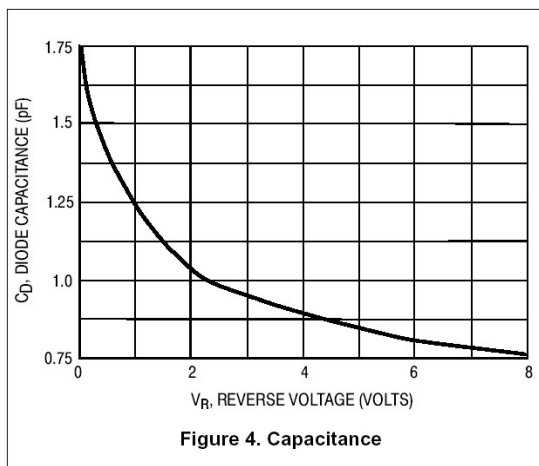
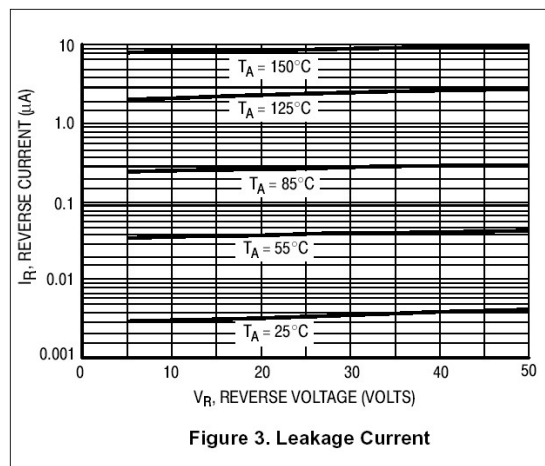
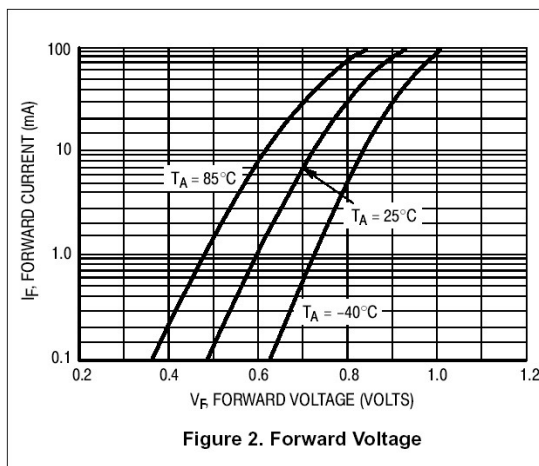


Figure 1. Reverse Recovery Time Equivalent Test Circuit



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Head Office And Factory:

- **Taiwan:** No. 17-1 Tatung Rd. Fu Kou Hsin-Chu Industrial Park, Hsin-Chu, Taiwan, R. O. C.
TEL : 886-3-597-7061 FAX : 886-3-597-9220, 597-0785
- **China:** (201203) No.255, Jang-Jiang Tsai-Lueng RD. , Pu-Dung-Hsin District, Shang-Hai City, China
TEL : 86-21-5895-7671 ~ 4 FAX : 86-21-38950165