

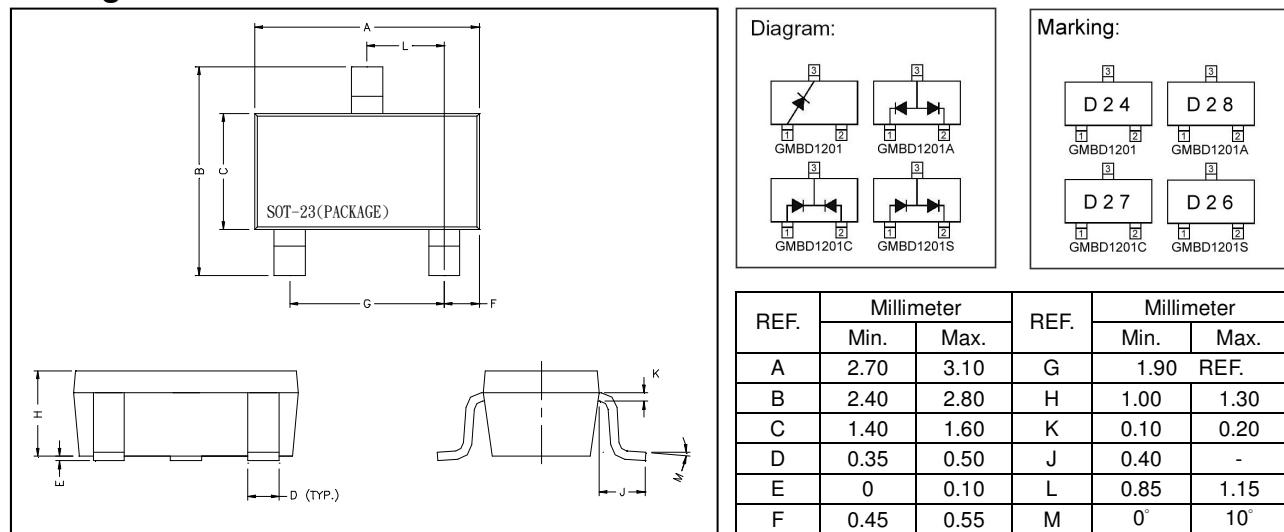
# GMBD1201\A\C\S

SURFACE MOUNT, SWITCHING DIODE  
VOLTAGE 100V, CURRENT 200mA

## Description

The GMBD1201\A\C\S are general purpose for small signal diodes.

## Package Dimensions

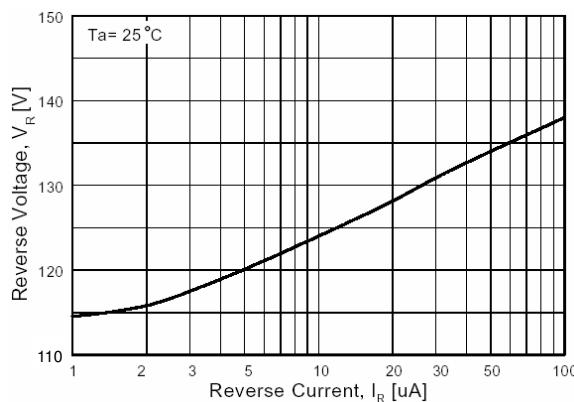


## Absolute Maximum Ratings (TA = 25°C)

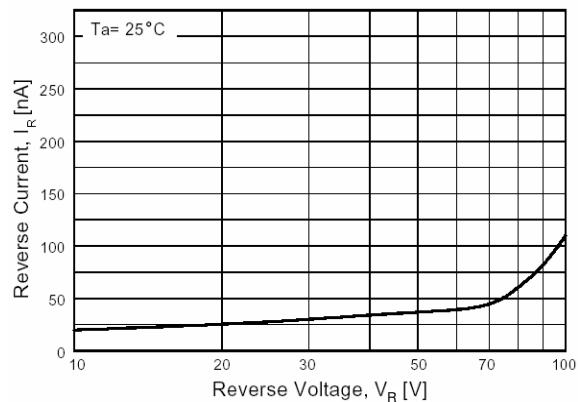
Parameter	Symbol	Ratings		Unit
Max. Repetitive Reverse Voltage	V <sub>RRM</sub>	100		V
Average Rectified Forward Current	I <sub>F(AV)</sub>	200		mA
Non-Repetitive Peak Forward surge Current @1s @1ms	I <sub>FSM</sub>	1		A
		2		
Power Dissipation	PD	350		mW
Thermal Resistance Junction to Ambient Air	R <sub>θJA</sub>	357		°C/W
Storage Temperature Range	T <sub>STG</sub>	-55 ~ +150		°C
Operating Junction Temperature	T <sub>J</sub>	+150		°C

## Electrical Characteristics (TA = 25°C)

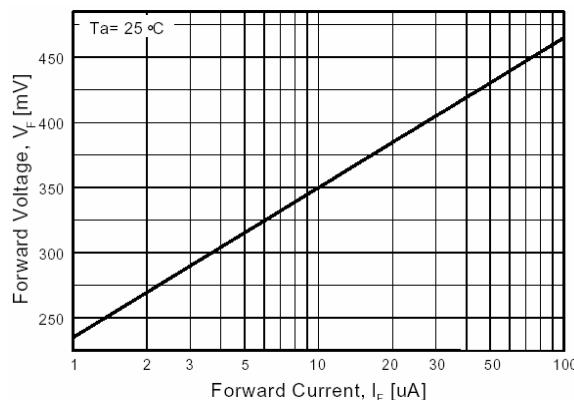
Characteristics	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Breakdown Voltage	V <sub>R</sub>	100	-	-	V	I <sub>R</sub> =100uA
Forward Voltage	V <sub>F</sub>	-	700	800	mV	I <sub>F</sub> =1mA
		-	800	900	mV	I <sub>F</sub> =10mA
		-	1.1	1.2	V	I <sub>F</sub> =100mA
		-	1.2	1.3	V	I <sub>F</sub> =200mA
		-	1.3	1.4	V	I <sub>F</sub> =300mA
Reverse Current	I <sub>R</sub>	-	-	25	nA	V <sub>R</sub> =20V
		-	-	50	nA	V <sub>R</sub> =50V
		-	-	5.0	uA	V <sub>R</sub> =50V, T <sub>A</sub> =150°C
Total Capacitance	C <sub>T</sub>	-	-	2.0	pF	V <sub>R</sub> =0, f=1.0MHz
Reverse Recovery Time	trr	-	-	4.0	ns	I <sub>F</sub> =I <sub>R</sub> =10mA, I <sub>RR</sub> =1mA, R <sub>L</sub> =100Ω

**Characteristics Curve**

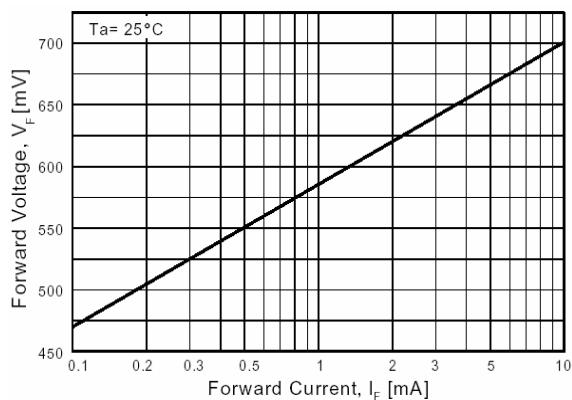
**Fig 1. Reverse Voltage vs. Reverse Current**  
**BV - 1.0 to 100 $\mu$ A**



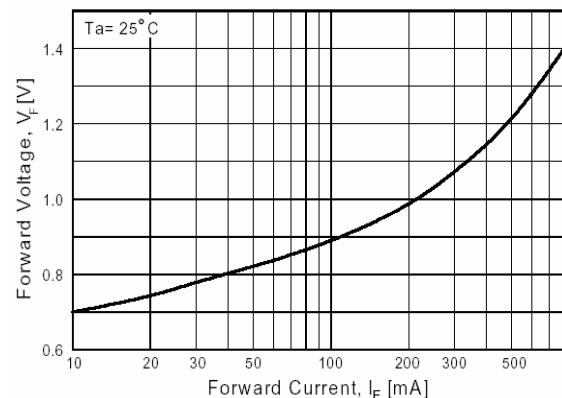
**Fig 2. Reverse Current vs. Reverse Voltage**  
**IR - 10 to 100V**



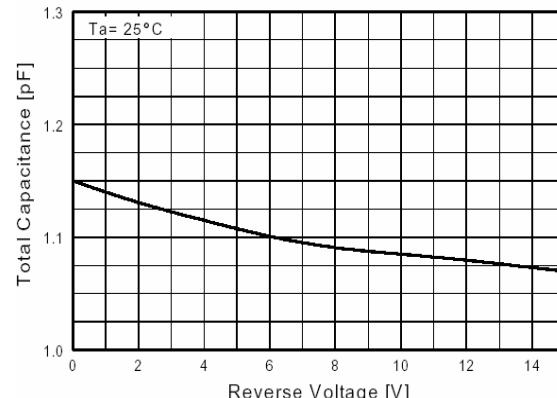
**Fig 3. Forward Voltage vs. Forward Current**  
**VF - 1.0 to 100 $\mu$ A**



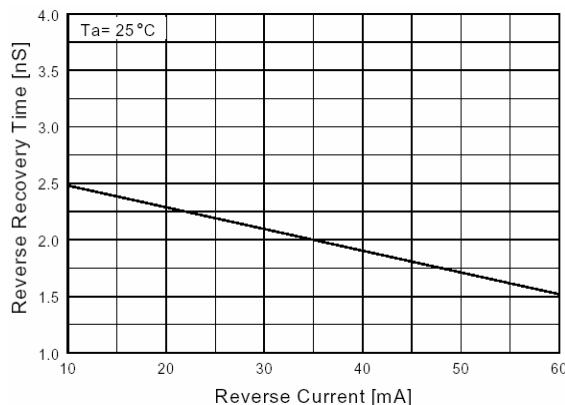
**Fig 4. Forward Voltage vs. Forward Current**  
**VF - 0.1 to 10mA**



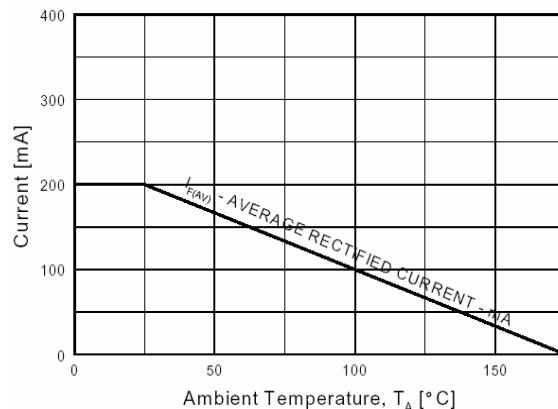
**Fig 5. Forward Voltage vs. Forward Current**  
**VF - 10 to 800mA**



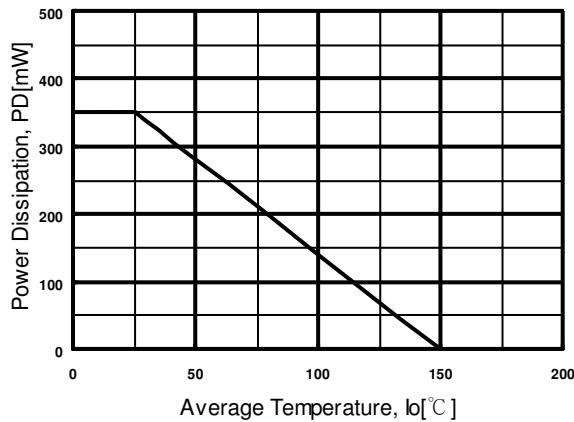
**Fig 6. Total Capacitance vs. Reverse Voltage**



**Fig 7. Reverse Recovery Time vs. Reverse Current**  
**TRR - IR 10 to 60mA**



**Fig 8. Average Rectified Current ( $I_{F(AV)}$ )**  
**vs. Ambient Temperature( $T_A$ )**



**Fig 9. Power Derating Curve**

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