

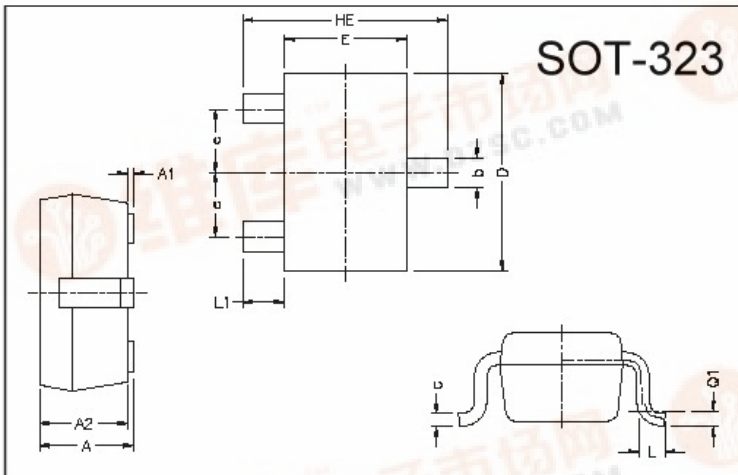
# GSMBD2004

**SURFACE MOUNT, SWITCHING DIODE**  
**VOLTAGE 300V, CURRENT 0.225A**

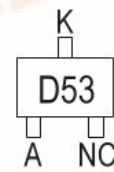
## Description

The GSMBD2004 is designed for ultra high speed switching.

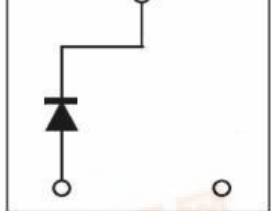
## Package Dimensions



Marking :



Circuit :



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	0.80	1.10	L1	0.42 REF.	
A1	0	0.10	L	0.15	0.35
A2	0.80	1.00	b	0.25	0.40
D	1.80	2.20	c	0.10	0.25
E	1.15	1.35	e	0.65 REF.	
HE	1.80	2.40	Q1	0.15 BSC.	

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

Parameter	Symbol	Ratings	Unit
Repetitive Peak Reverse Voltage	VRRM	300	V
Continuous reverse voltage	VR(VRWM)	240	V
RMS Reverse Voltage	VR(RMS)	170	V
Forward Continuous Current	IFM	225	mA
Non-Repetitive Peak Forward surge Current @Tp = 1.0us @Tp=1.0s	IFSM	4 1	A
Typical Junction Capacitance between Terminal (Note1)	CJ	5.0	pF
Max. Reverse Recovery Time (Note2)	TRR	50	nSec
Power Dissipation	PD	350	mW
Thermal Resistance Junction to Ambient Air	RθJA	357	°C/W
Operation and Storage Temperature Range	TJ, TSTG	-65 ~ +150	°C

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

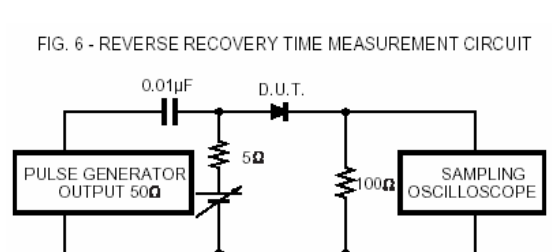
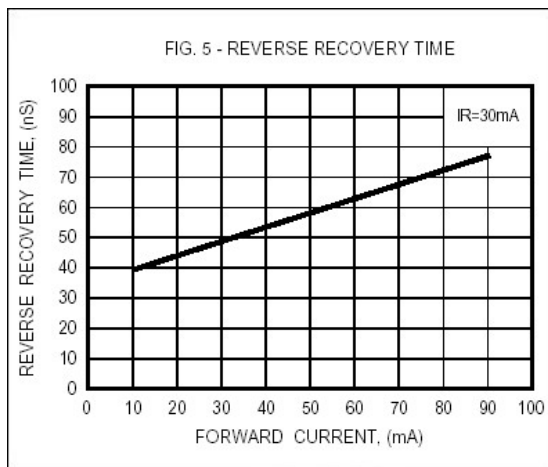
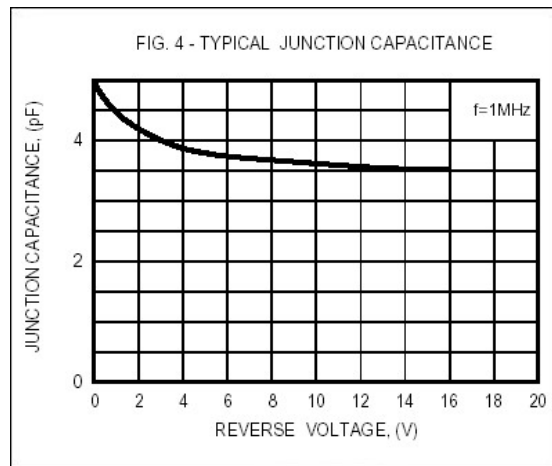
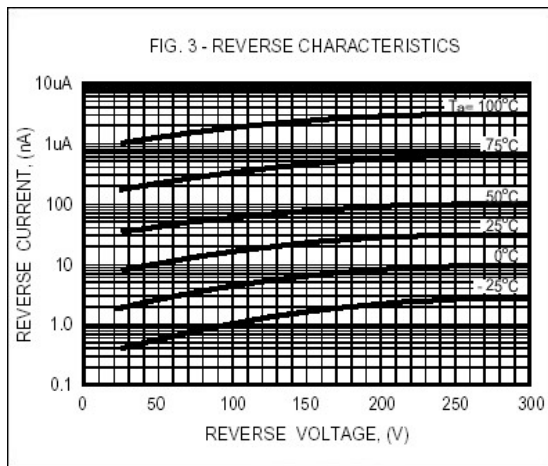
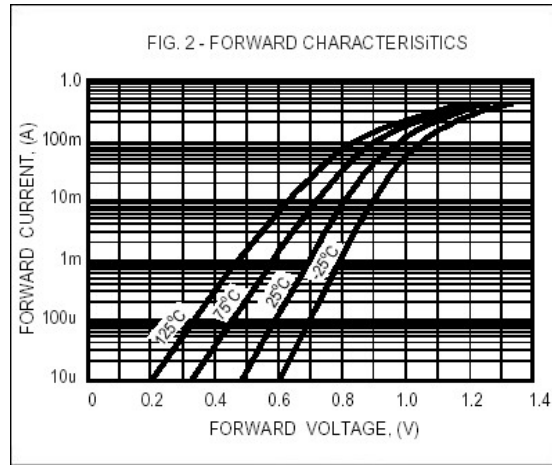
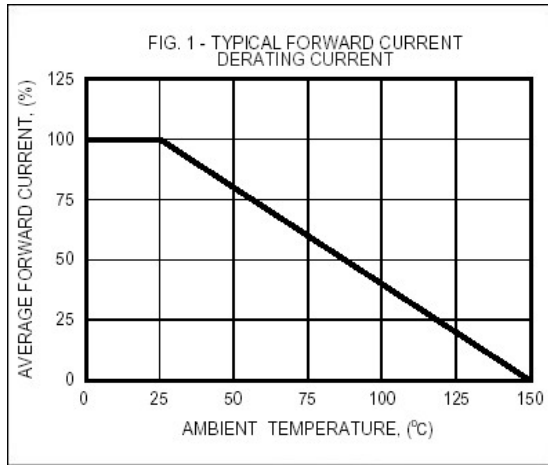
Characteristics	Symbol	Min.	Max.	Unit	Test Conditions
Reverse Breakdown Voltage	BVR	300	-	V	IR=100uA
Forward Voltage	VF	-	0.85	V	IF=20mA
		-	1	V	IF=100mA
		-	1.25	V	IF=225mA
Reverse Current	IR	-	100	nA	VR=240V, TA=25°C
		-	100	uA	VR=240V, TA=150°C

Notes: 1. Measured at 1.0 MHz and applied reverse voltage of 0 volts.

2. Measured at applied forward current of 30mA, reverse current of 30mA, RL=100Ω and recovery to IRR=-3mA.

3. ESD sensitive product handling required.

## Characteristics Curve



**Important Notice:**

- All rights are reserved. Reproduction in whole or in part is prohibited without the prior written approval of GTM.
- GTM reserves the right to make changes to its products without notice.
- GTM semiconductor products are not warranted to be suitable for use in life-support Applications, or systems.
- GTM assumes no liability for any consequence of customer product design, infringement of patents, or application assistance.

**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 : 86-21-36950165