## **GTM**

## **CORPORATION**

ISSUED DATE :2004/12/13 REVISED DATE :

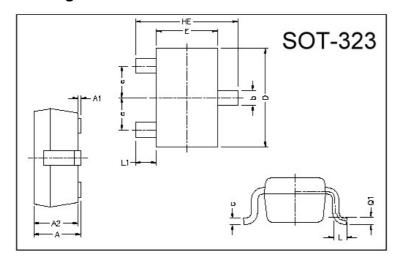
### **GSMBD4148**

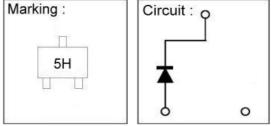
# SURFACE MOUNT, SWITCHING DIODE VOLTAGE 75V, CURRENT 0.2A

#### **Description**

The GSMBD4148 is designed for high-speed switching application in hybrid thick and thin-film circuits. The devices is manufactured by the silicon epitaxial planar process and packed in plastic surface mount package.

#### **Package Dimensions**





REF.	Millimeter		REF.	Millimeter	
	Min.	Max.	nΔi.	Min.	Max.
Α	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	С	0.10	0.25
Е	1.15	1.35	е	0.65 REF.	
HE	1.80	2.40	Q1	0.15	BSC.

#### Absolute Maximum Ratings at Ta = 25℃

Parameter	Symbol	Ratings	Unit
Junction Temperature	Tj	+150	$^{\circ}\mathbb{C}$
Storage Temperature	Tstg	-65 ~ +150	°C
Maximum Peak Reverse Voltage	V <sub>RM</sub>	100	V
Maximum Reverse Voltage	V <sub>R</sub>	75	V
Average Forward Current	$I_{O}$	200	mA
Surge Current(1us)	$I_{FSM}$	2	Α
Typical Junction Capacitance between Terminal (Note 1)	CJ	4.0	pF
Maximum Reverse Recovery Time (Note2)	T <sub>RR</sub>	4.0	nSec
Total Power Dissipation	P <sub>D</sub>	225	mW

#### Electrical Characteristics at Ta = 25°C

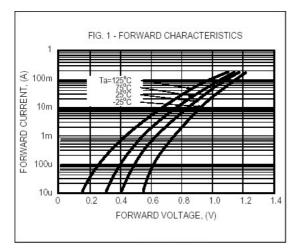
Characteristic	Symbol	Min.	Max.	Unit	Test Conditions
Forward Voltage	VF		1	٧	IF=10mA
Reverse Breakdown	VR	100	-	V	IR=100uA
Reverse Current	IR	-	5	uA	VR=75V

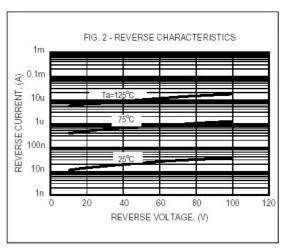
Notes: 1. Measured at 1.0 MHz and applied reverse voltage of 0 volt.

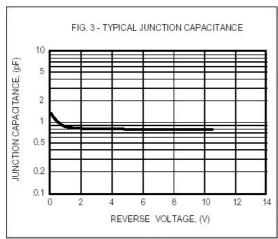
- 2. Measured at applied forward current of 10mA, reverse current of 1.0mA, Reverse voltage of 6.0volt and RL=100 ohms.
- 3. ESD sensitive product handling required.

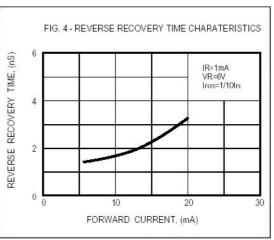
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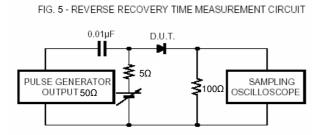
#### **Characteristics Curve**











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