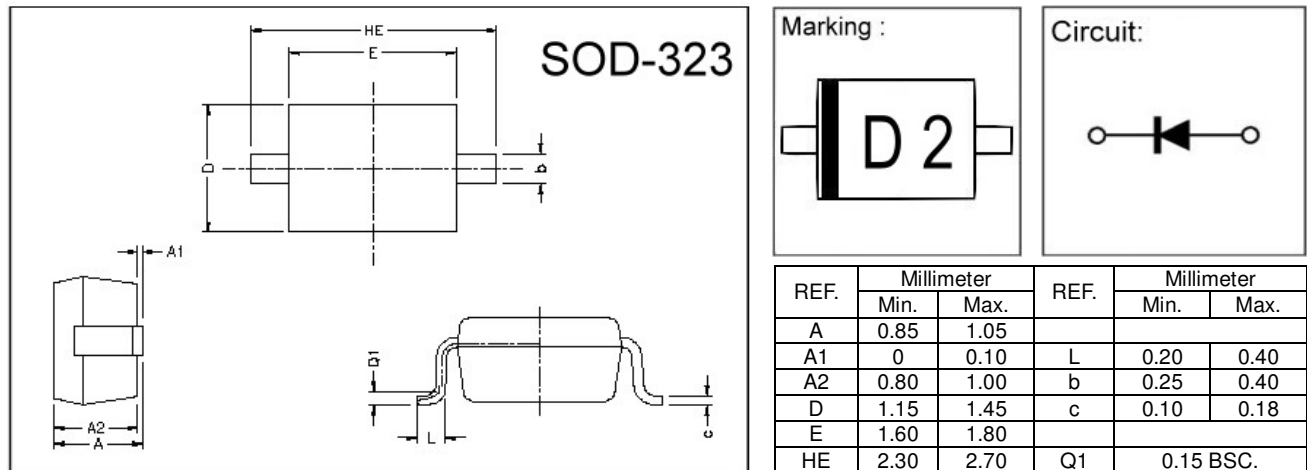


GDMBD2004**SURFACE MOUNT, SWITCHING DIODE****VOLTAGE 300V, CURRENT 0.225A****Description**

The GDMBD2004 is designed for ultra high speed switching.

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

Parameter	Symbol	Ratings	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	300	V
Continuous reverse voltage	$V_R(V_{RWM})$	240	V
RMS Reverse Voltage	$V_R(RMS)$	170	V
Forward Continuous Current	I_{FM}	225	mA
Non-Repetitive Peak Forward surge Current @ $T_p = 1.0\mu\text{s}$ @ $T_p = 1.0\text{s}$	I_{FSM}	4	A
		1	
Typical Junction Capacitance between Terminal (Note1)	C_J	5.0	pF
Max. Reverse Recovery Time (Note2)	T_{RR}	50	nSec
Power Dissipation	PD	350	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	357	$^\circ\text{C}/\text{W}$
Operation and Storage Temperature Range	T_J, T_{STG}	-65 ~ +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	BVR	300	-	V	$I_R = 100\mu\text{A}$
Forward Voltage	V_F		0.85	V	$I_F = 20\text{mA}$
		-	1	V	$I_F = 100\text{mA}$
		-	1.25	V	$I_F = 225\text{mA}$
Reverse Current	I_R	-	100	nA	$V_R = 240\text{V}, T_A = 25^\circ\text{C}$
			100	μA	$V_R = 240\text{V}, T_A = 150^\circ\text{C}$

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, $R_L = 100\Omega$ and recovery to $I_{RR} = -3\text{mA}$.

3. ESD sensitive product handling required.

Characteristics Curve

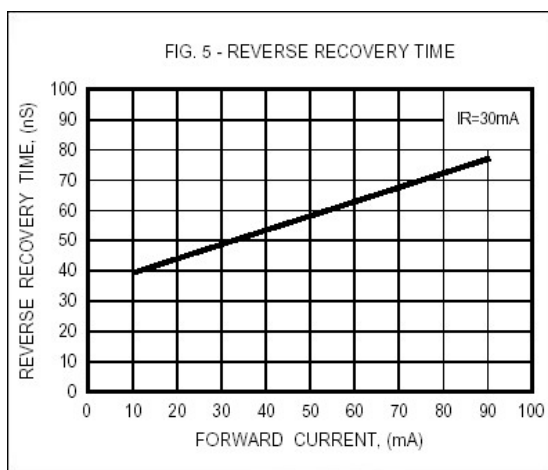
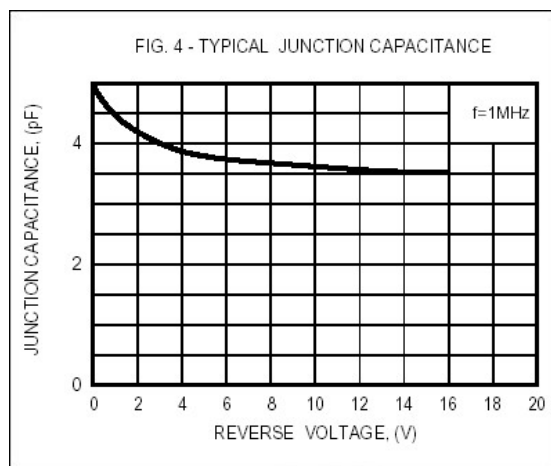
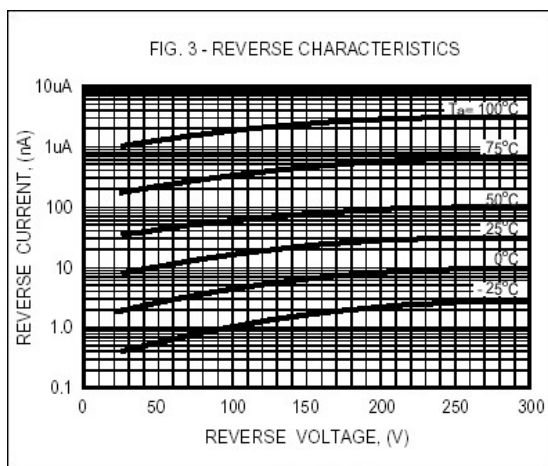
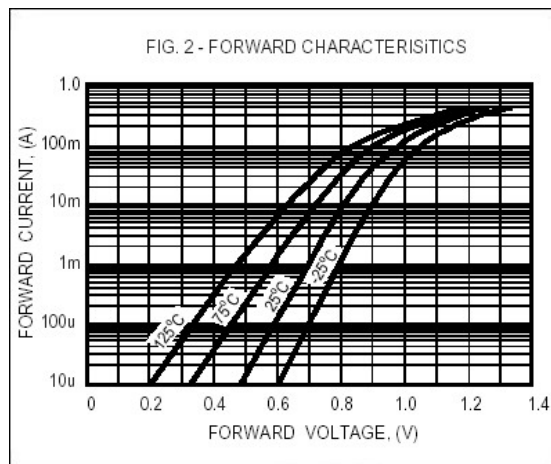
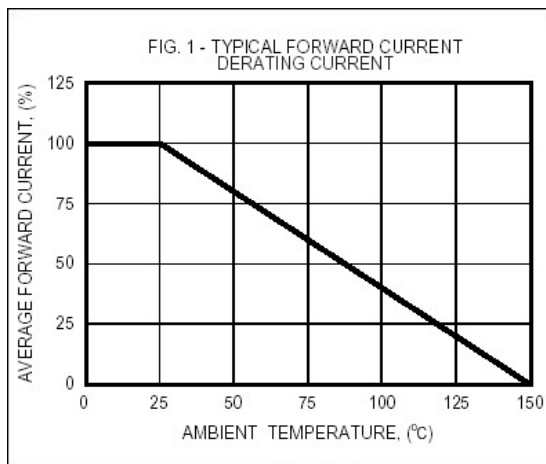
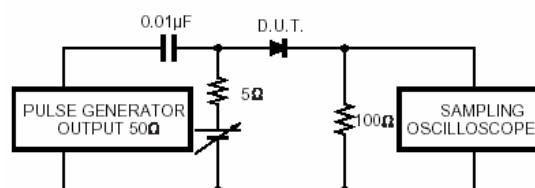


FIG. 6 - REVERSE RECOVERY TIME MEASUREMENT CIRCUIT



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