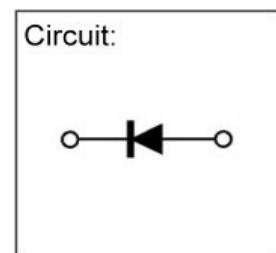
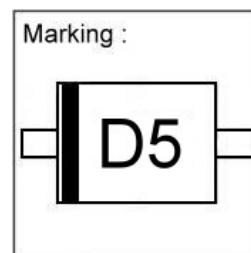
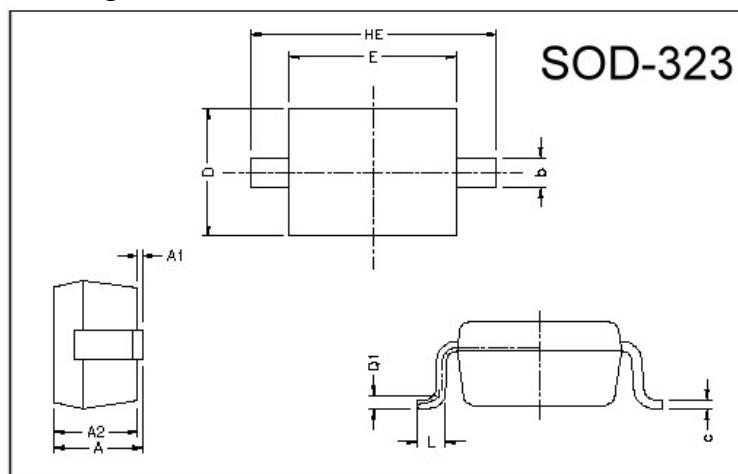


## GD511 SURFACE MOUNT, SWITCHING DIODE VOLTAGE 85V, CURRENT 0.1A

### Description

The GD511 is designed for ultra high speed switching application, low forward voltage and fast reverse recovery time.

### Package Dimensions



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	0.85	1.05			
A1	0	0.10	L	0.20	0.40
A2	0.80	1.00	b	0.25	0.40
D	1.15	1.45	c	0.10	0.18
E	1.60	1.80			
HE	2.30	2.70	Q1	0.15 BSC.	

### Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Ratings	Unit
Junction Temperature	T <sub>j</sub>	+150	°C
Storage Temperature	T <sub>stg</sub>	-55 ~ +150	°C
Maximum Peak Reverse Voltage	V <sub>RM</sub>	85	V
Maximum Reverse Voltage	V <sub>R</sub>	80	V
Maximum (Peak) Forward Current	I <sub>FM</sub>	300	mA
Average Forward Current	I <sub>O</sub>	100	mA
Surge Current(10ms)	I <sub>FSM</sub>	2	A
Total Power Dissipation	P <sub>D</sub>	150	mW

### Electrical Characteristics at Ta = 25°C

Characteristic	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Forward Voltage	V <sub>F</sub> (1)	-	0.6	-	V	I <sub>F</sub> =1mA
	V <sub>F</sub> (2)	-	0.7	-	V	I <sub>F</sub> =10mA
	V <sub>F</sub> (3)	-	0.9	1.2	V	I <sub>F</sub> =100mA
Reverse Current	I <sub>R</sub>	-	-	0.5	µA	V <sub>R</sub> =80V
Total Capacitance	C <sub>T</sub>	-	2.2	4.0	pF	V <sub>R</sub> =0, f=1MHz
Reverse Recovery Time	T <sub>rr</sub>	-	1.6	4.0	nS	I <sub>F</sub> =10mA

## Characteristics Curve

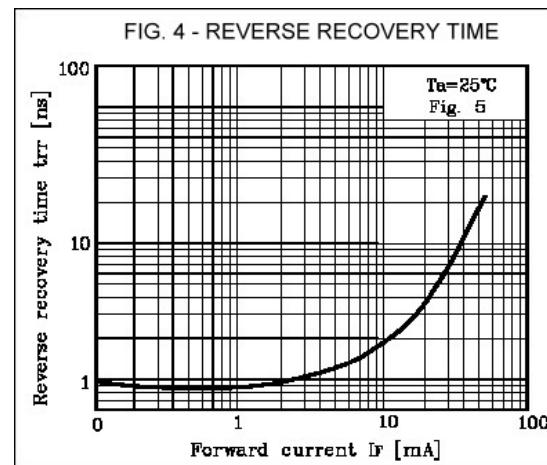
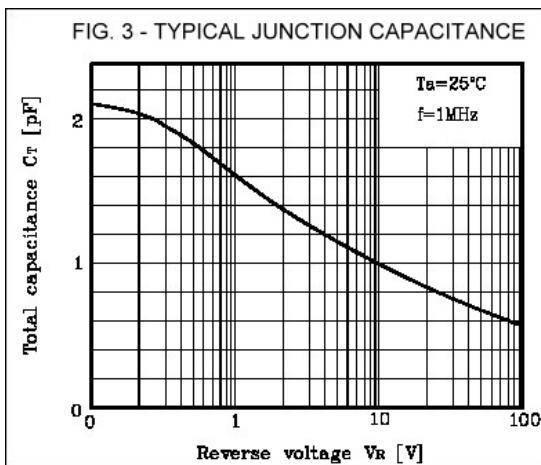
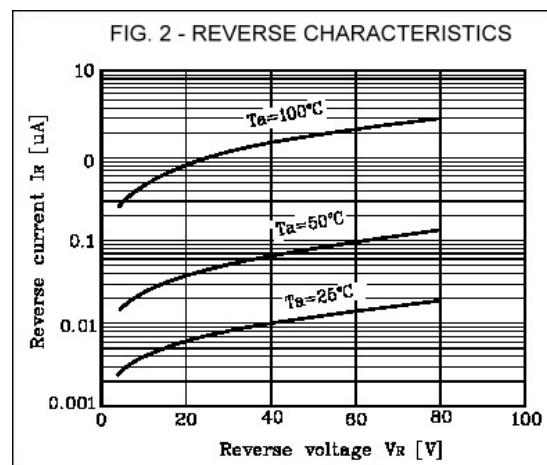
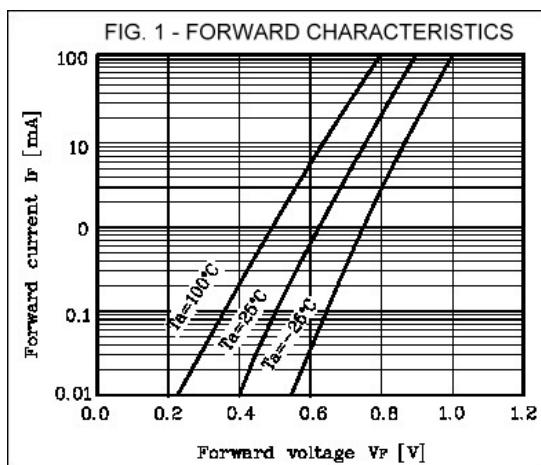
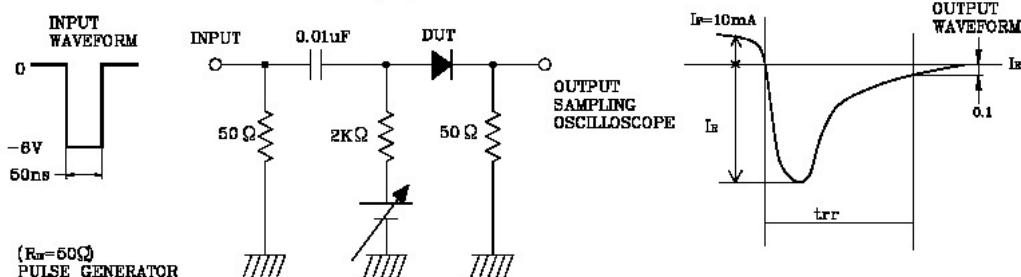


FIG. 5 - REVERSE RECOVERY TIME( $t_{rr}$ ) TEST CIRCUIT



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