GTM CORPORATION

ISSUED DATE :2004/09/20
REVISED DATE :

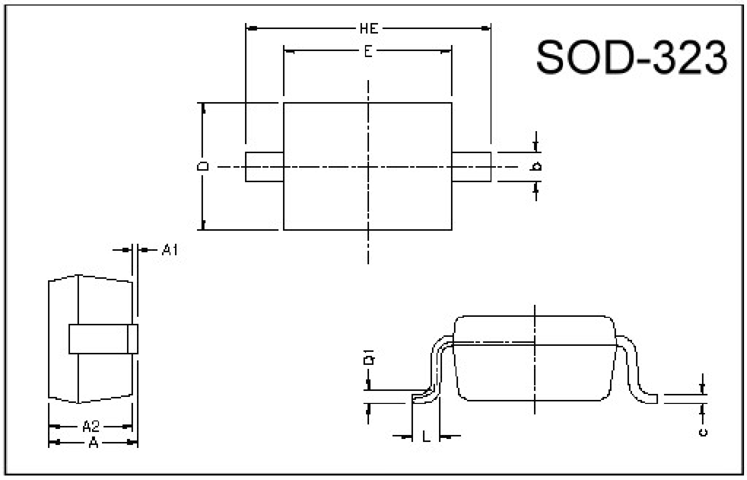
GD501SD

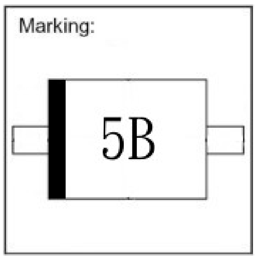
SURFACE MOUNT, SCHOTTKY BARRIER DIODE
VOLTAGE 45V, CURRENT 0.1A

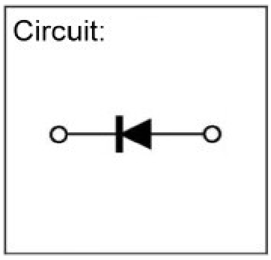
Description

The GD501SD is designed for low power rectification and high reliability.

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℃

Parameter	Symbol	Ratings	Unit
Junction Temperature	Tj	+125	℃
Storage Temperature	Tstg	-40 ~ +125	℃
Maximum Peak Repetitive Reverse Voltage	V_{RRM}	45	V
Maximum RMS Voltage	V_{RMS}	32	V
Maximum DC Blocking Voltage	V_{DC}	40	V
Peak Forward Surge Current at 8.3mSec single half sine-wave	I_{FSM}	1.0	A
Typical Junction Capacitance between Terminal (Note 1)	C_J	6.0	pF
Maximum Average Forward Rectified Current	Io	0.1	A
Total Power Dissipation	PD	225	mW

Characteristics at Ta = 25℃

Characteristics	Symbol	Max	Unit	Test Condition
Maximum Instantaneous Forward Voltage	$V_{F(1)}$	0.55	V	IF = 100mA
Maximum Instantaneous Forward Voltage	$V_{F(2)}$	0.34	V	IF = 10 mA
Maximum Average Reverse Current	IR	30.0	uA	VR = 10V

Notes: 1. Measured at 1.0 MHz and applied reverse voltage of 10.0 volt.
2. ESD sensitive product handling required.

Characteristics Curve

FIG. 1 - FORWARD CHARACTERISTICS

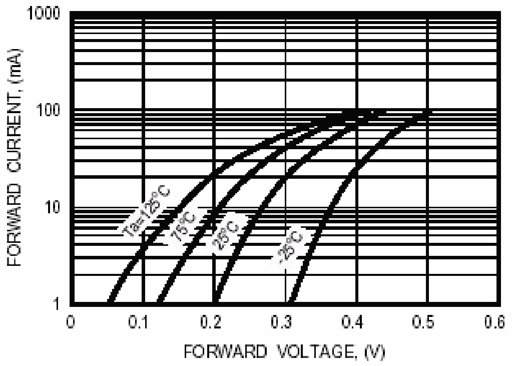


FIG. 2 - REVERSE CHARACTERISTICS

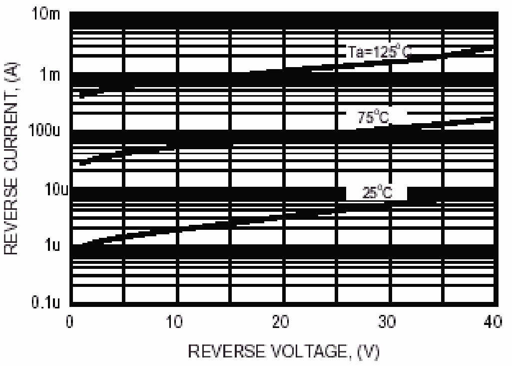


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

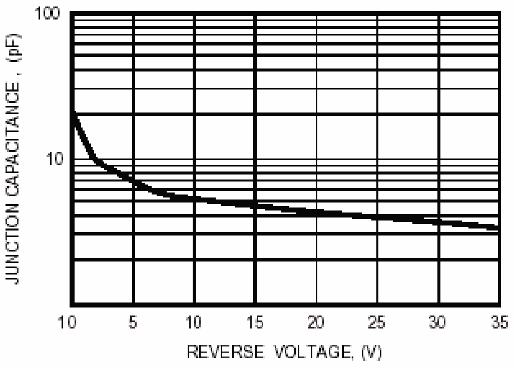
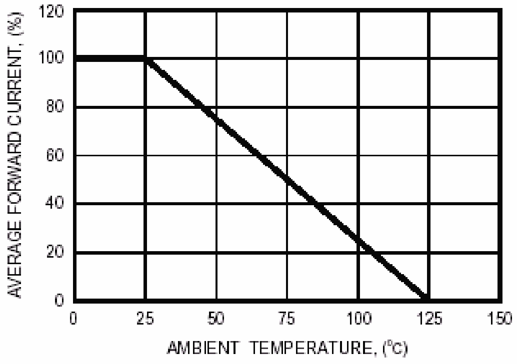


FIG. 4 - TYPICAL FORWARD CURRENT DERATING CURVE



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