

1SS5004WS

SILICON EPITAXIAL PLANAR DIODE

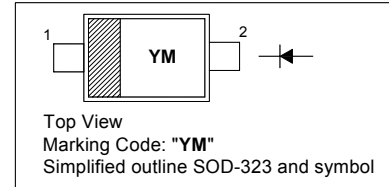
High Voltage Switching Diode

Features

- Fast switching speed
- High conductance
- High reverse breakdown voltage rating

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

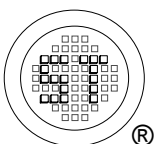


Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	400	V
Reverse Voltage	V_R	350	V
Continuous Forward Current	I_F	225	mA
Repetitive Peak Forward Current	I_{FRM}	625	mA
Non-Repetitive Peak Forward Surge Current (1 ms)	I_{FSM}	2	A
Power Dissipation	P_d	350	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_s	- 65 to + 150	$^\circ\text{C}$

Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 20\text{ mA}$ at $I_F = 100\text{ mA}$ at $I_F = 200\text{ mA}$	V_F	- - -	0.87 1 1.25	V
Reverse Current at $V_R = 240\text{ V}$	I_R	-	100	nA
Reverse Breakdown Voltage at $I_R = 150\text{ }\mu\text{A}$	$V_{(BR)R}$	400	-	V
Total Capacitance at $V_R = 0$, $f = 1\text{ MHz}$	C_T	-	5	pF
Reverse Recovery Time at $I_F = I_R = 30\text{ mA}$, $i_{tr} = 3\text{ mA}$, $R_L = 100\text{ }\Omega$	t_{rr}	-	100	ns



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Dated : 15/03/2008

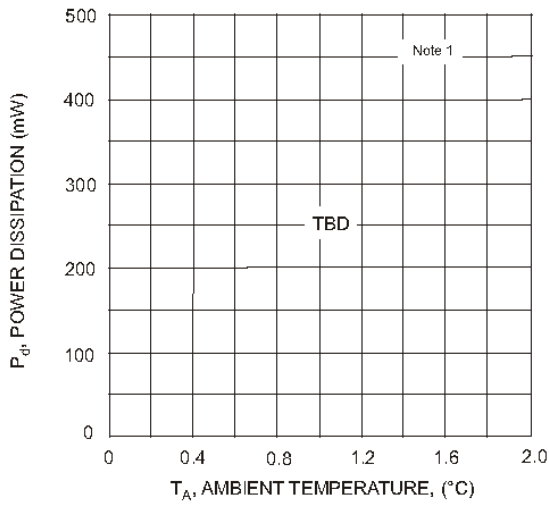


Fig. 1 Power Derating Curve, total package

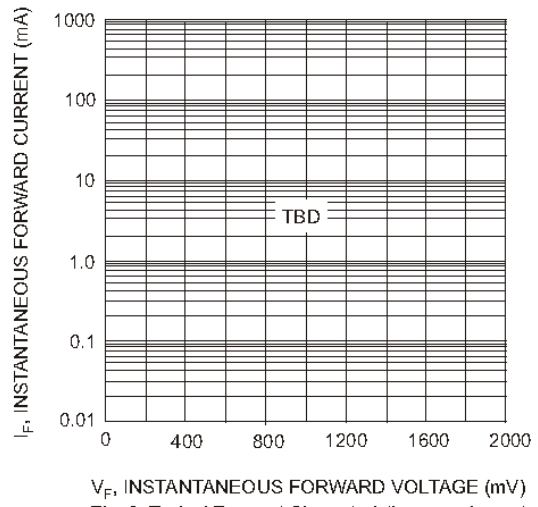


Fig. 2 Typical Forward Characteristics, per element

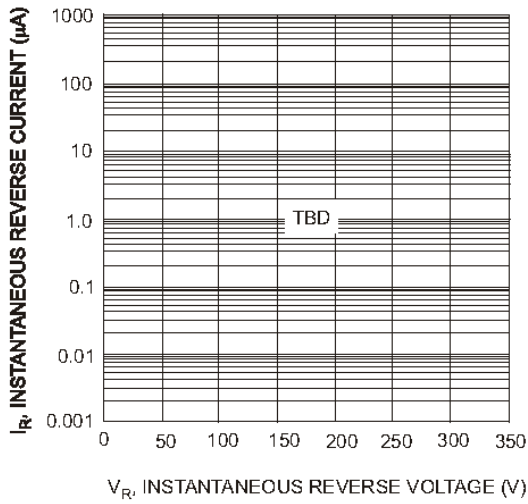


Fig. 3 Typical Reverse Characteristics, per element

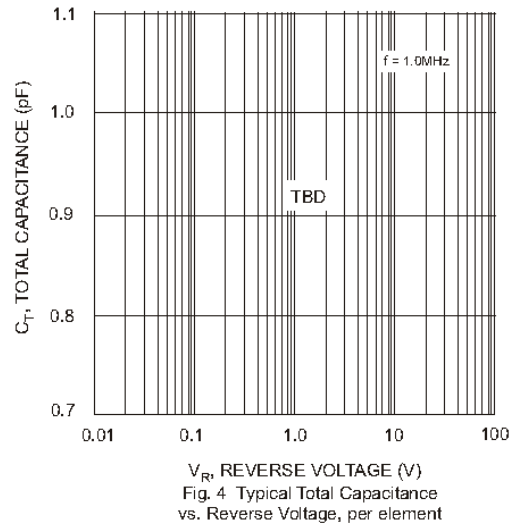
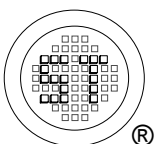


Fig. 4 Typical Total Capacitance vs. Reverse Voltage, per element



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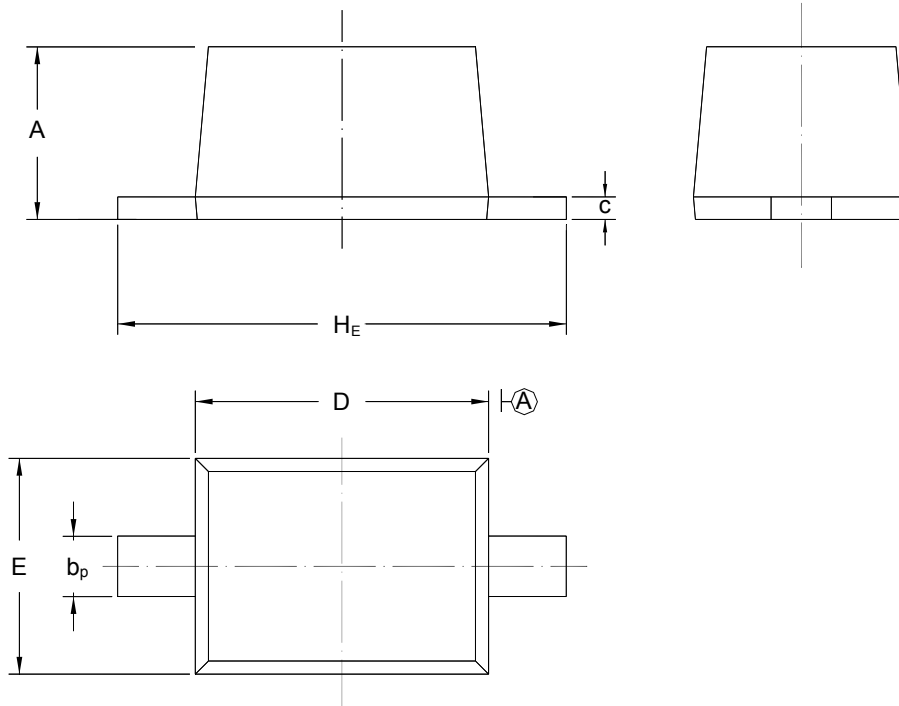


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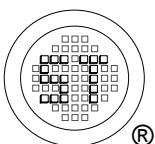
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323



UNIT	A	b_p	C	D	E	H_E
mm	1.10 0.80	0.40 0.25	0.15 0.00	1.80 1.60	1.35 1.15	2.80 2.30



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ISO/TS 16949 : 2002
 Certificate No. 05103



ISO 14001:2004
 Certificate No. 7116



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 Certificate No. 0506088

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