

1SS400

SILICON EPITAXIAL PL ANAR SWITCHING DIODE

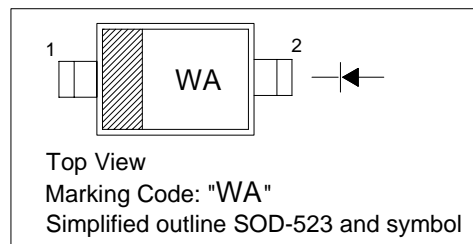
High Speed Switching Application

Features

- Extremely small surface mounting type.
- High speed. ($t_{rr}=1.2\text{ns Typ.}$)
- High reliability.

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

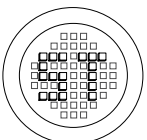


Absolute Maximum Ratings ($T_j = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V_{RM}	90	V
DC Reverse Voltage	V_R	80	V
Peak Forward Current	I_{FM}	225	mA
Mean Rectifying Current	I_O	100	mA
Surge Current (1s)	I_{FSM}	500	mA
Junction Temperature	T_J	125	°C
Storage Temperature	T_s	-55 to +125	°C

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

Parameter	Test Conditions	Symbol	Min	Typ	Max	Unit
Forward Voltage	$I_F = 100\text{mA}$	V_F	-	-	1.2	V
Reverse Current	$V_R = 80\text{V}$	I_R	-	-	0.1	μA
Capacitance Between Terminals	$V_R = 0.5\text{V}, f = 1\text{MHz}$	C_T	-	0.72	3.0	pF
Reverse Recovery Time	$V_R = 6\text{V}, I_F = 10\text{mA}, R_L = 100\Omega$	t_{rr}	-	-	4.0	ns



®

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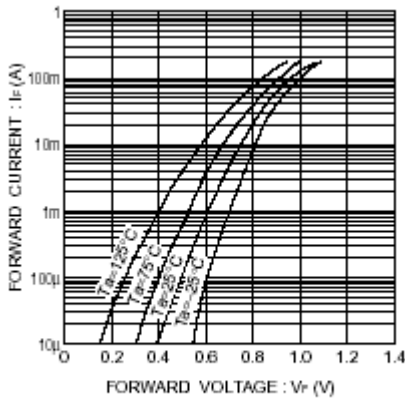


Fig.1 Forward characteristics

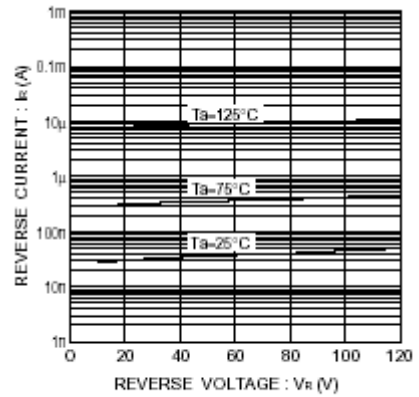


Fig.2 Reverse characteristics

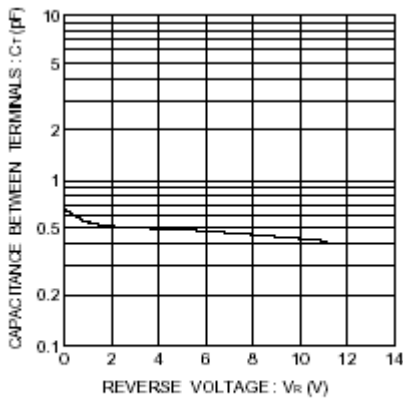


Fig.3 Capacitance between terminals

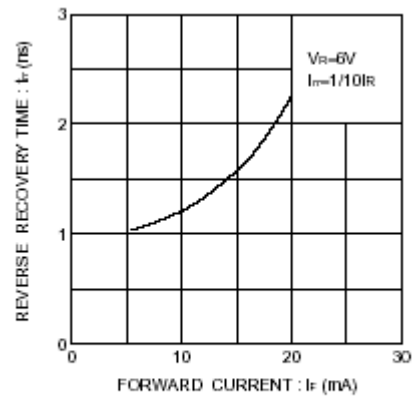


Fig.4 Reverse recovery time characteristics

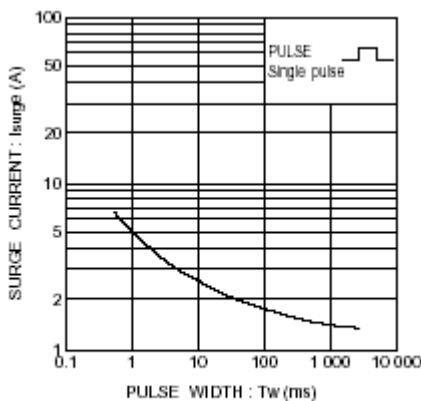


Fig.5 Surge current characteristics

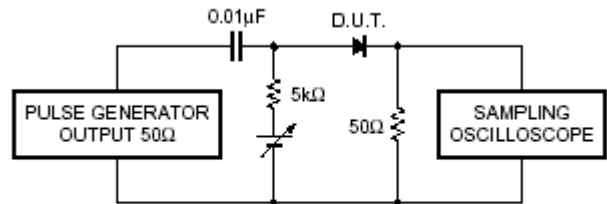
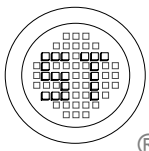


Fig.6 Reverse recovery time (t_r) measurement circuit



SEMTECH ELECTRONICS LTD.

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ISO/TS 16949 : 2002
Certificate No. 05103



ISO 14001
Certificate No. 7116



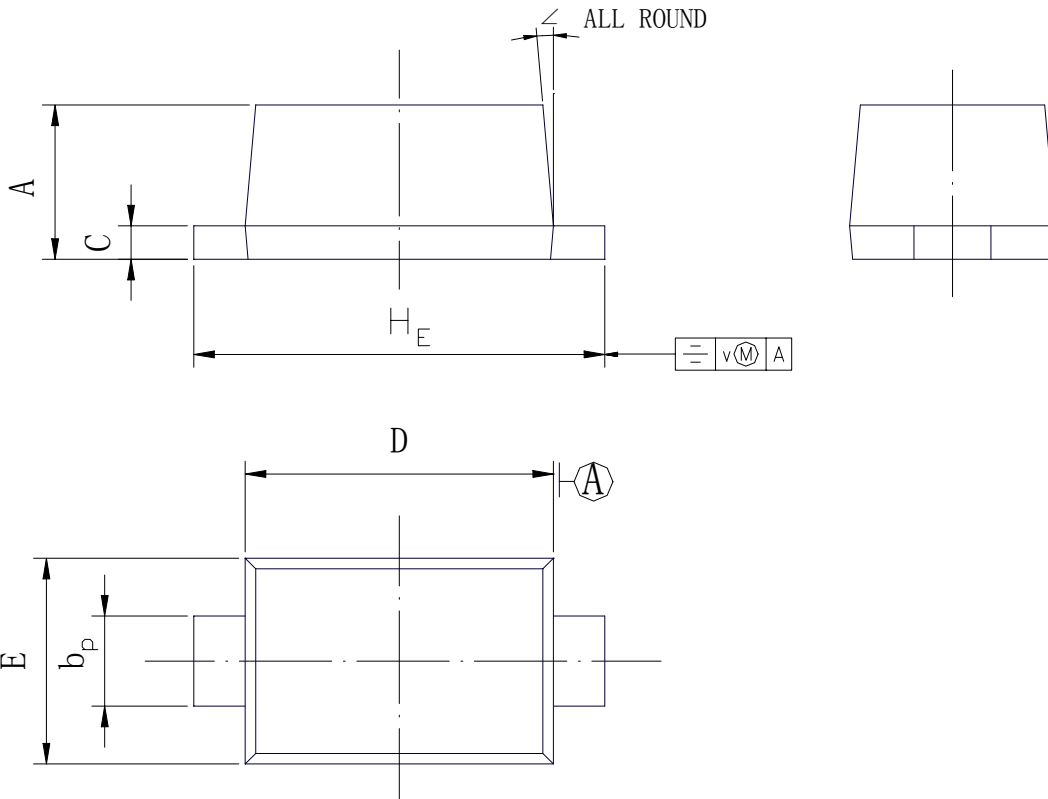
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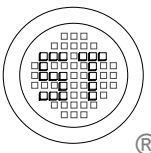
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-523

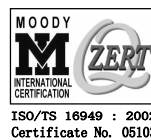


UNIT	A	b _P	C	D	E	H _E	v	∠
mm	0.70 0.60	0.4 0.3	0.135 0.127	1.25 1.15	0.85 0.75	1.65 1.55	0.1	5°



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