

1SS511WS

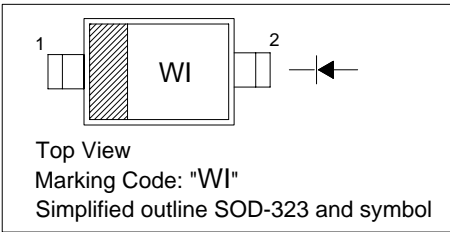
Switching Diode

Features

- Ultra high speed switching application
- Low forward voltage
- Fast reverse recovery time
- Small total capacitance

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

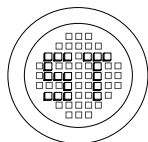


Absolute Maximum Ratings ($T_j = 25^{\circ}\text{C}$)

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	80	V
Peak Reverse Voltage	V_{RM}	85	V
Average Forward Current	I_O	100	mA
Peak Forward Current	I_{FM}	300	mA
Surge Current (10ms)	I_{FSM}	2	A
Power Dissipation	P_{tot}	150	mW
Junction Temperature	T_J	150	$^{\circ}\text{C}$
Storage Temperature Range	T_s	-55 to +150	$^{\circ}\text{C}$

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

Parameter	Test Conditions	Symbol	Min	Typ	Max	Unit
Forward Voltage	$I_F = 1\text{mA}$	V_F	-	0.6	-	V
	$I_F = 10\text{mA}$	V_F	-	0.7	-	V
	$I_F = 100\text{mA}$	V_F	-	0.9	1.2	V
Reverse Current	$V_R = 80\text{V}$	I_R	-	-	0.5	μA
Total Capacitance	$V_R = 0\text{V}$, $f = 1\text{MHz}$	C_{tot}	-	2.2	4.0	pF
Reverse Recovery Time	$I_F = 10\text{mA}$	t_{rr}	-	1.6	4.0	ns



®

РАДИОТЕХ

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Electrical Characteristic Curves

Fig. 1 I_F - V_F

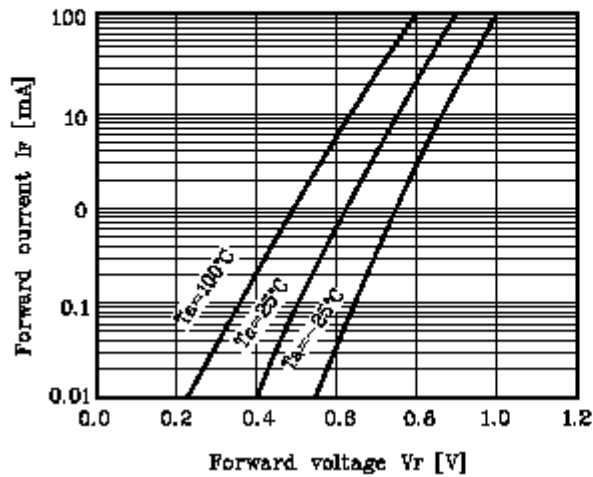


Fig. 2 I_R - V_R

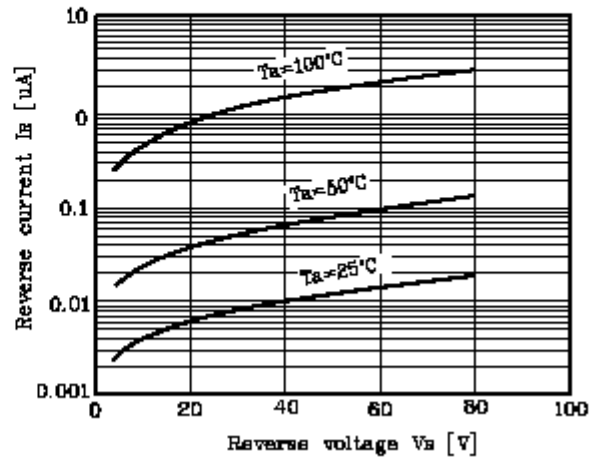


Fig. 3 C_T - V_R

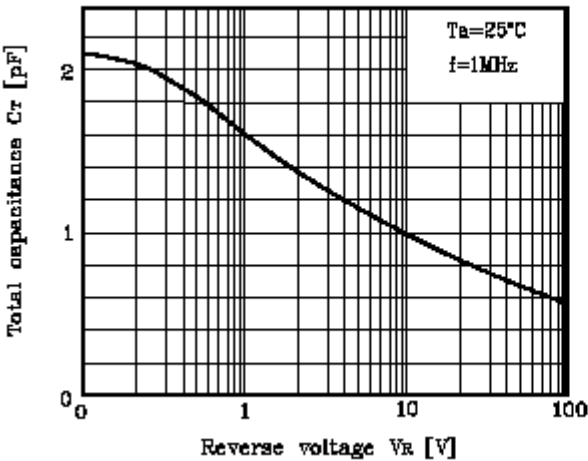


Fig. 4 t_{rr} - I_F

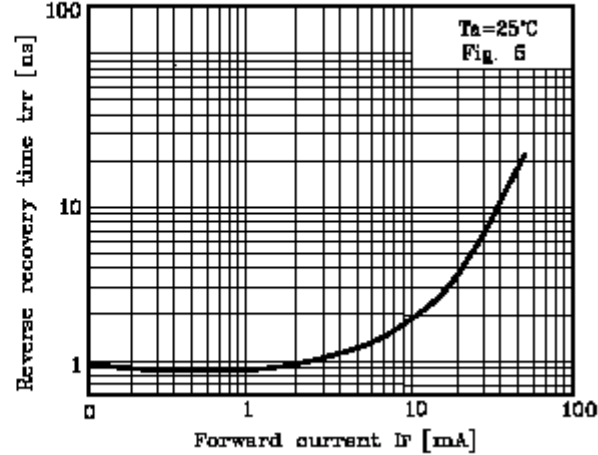
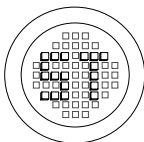
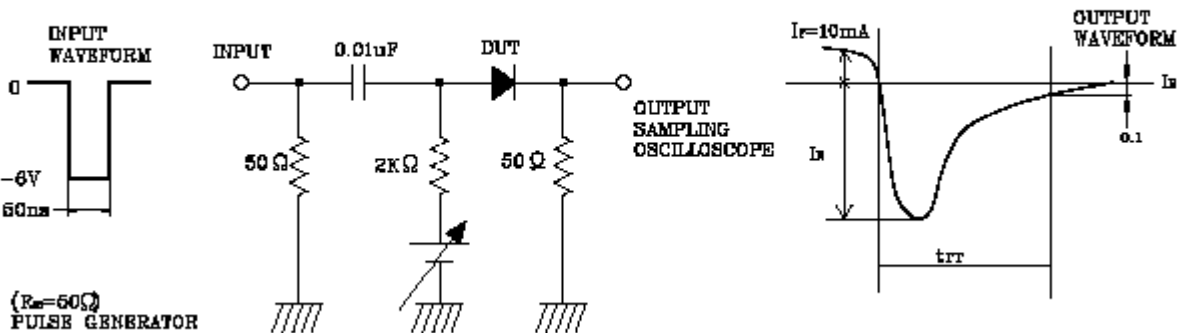
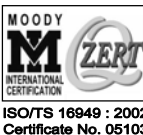


Fig. 5 Reverse recovery time(t_{rr}) test circuit



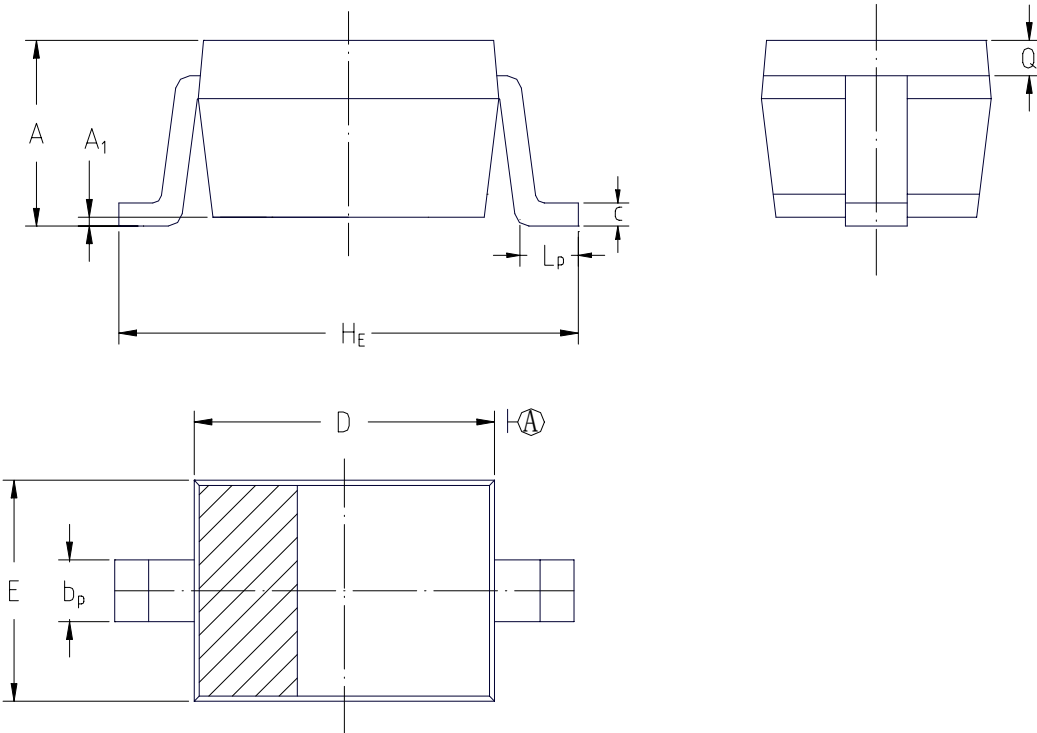
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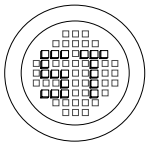
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PACKAGE OUTLINE

SOD-323



UNIT	A	A ₁	b _p	c	D	E	H _E	L _p	Q
mm	1.10 0.80	0.1 0	0.40 0.25	0.15 0.00	1.80 1.60	1.35 1.15	2.80 2.30	0.50 0.10	0.15 REF.



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