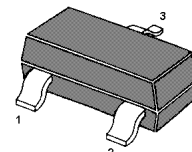
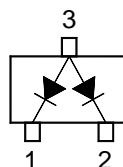


1SS181

SILICON EPITAXIAL PLANAR DIODE

Features

- Small package
- Low forward voltage
- Fast reverse recovery time
- Small total capacitance



Marking Code: **A1**
SOT-23 Plastic Package

Applications

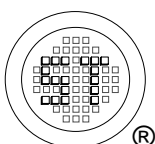
- Ultra high speed switching application

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

Parameter	Symbol	Value	Unit
Maximum Peak Reverse Voltage	V_{RM}	85	V
Reverse Voltage	V_R	80	V
Average Forward Current	I_O	100	mA
Maximum Peak Forward Current	I_{FM}	300	mA
Surge Current (10 ms)	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	$^{\circ}\text{C}$

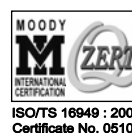
Characteristics at $T_a = 25\text{ }^{\circ}\text{C}$

Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 100\text{ mA}$	V_F	1.2	V
Reverse Current at $V_R = 30\text{ V}$ at $V_R = 80\text{ V}$	I_R	0.1 0.5	μA
Total Capacitance at $V_R = 0$, $f = 1\text{ MHz}$	C_T	4	pF
Reverse Recovery Time at $I_F = 10\text{ mA}$	t_{rr}	4	ns



SEMTECH ELECTRONICS LTD.

(Subsidiary of Sino-Tech International Holdings Limited, a company
listed on the Hong Kong Stock Exchange, Stock Code: 724)



Dated : 10/10/2008

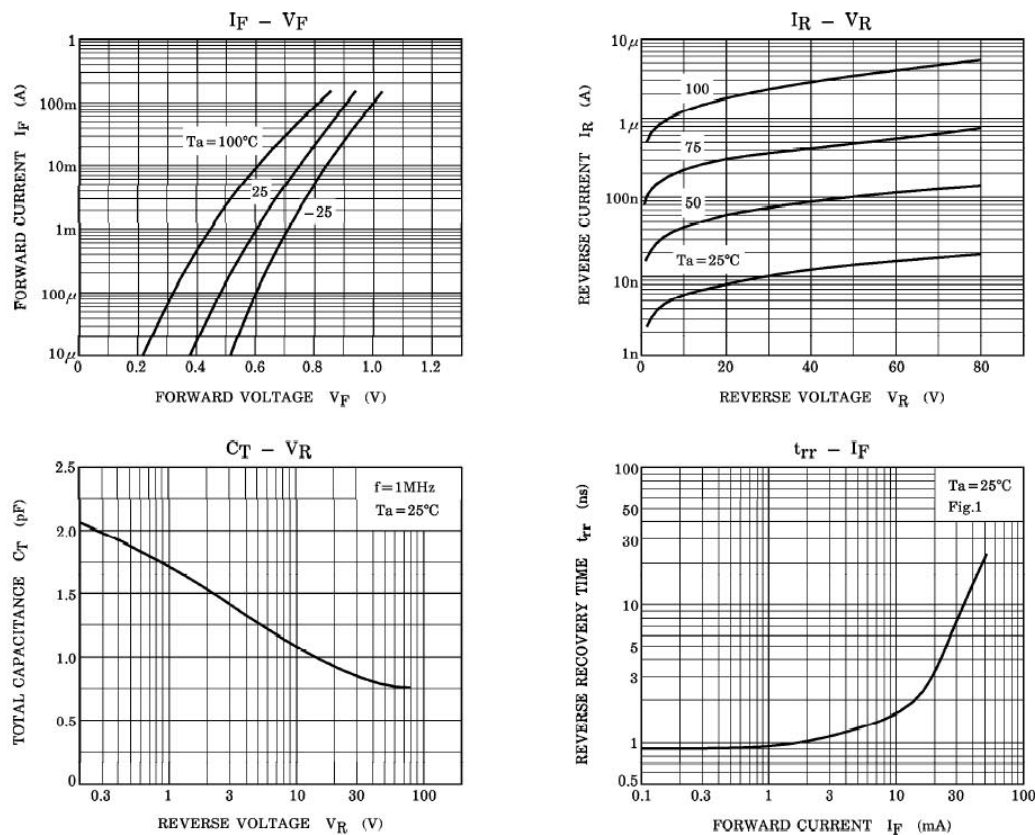
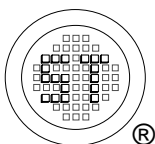
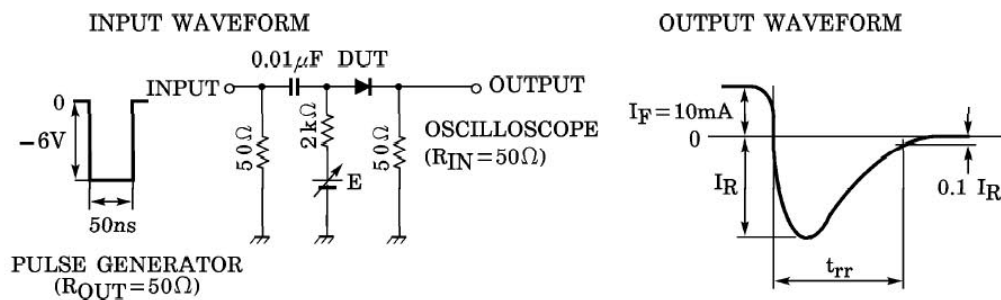


Fig.1 Reverse recovery time (t_{rr}) test circuit



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ISO/TS 16949:2002
Certificate No. 05103



ISO 14001:2004
Certificate No. 7116



ISO 9001:2000
Certificate No. 0506098

Dated : 10/10/2008