MSKSEMI 美森科
SEMICONDUCTOR

ESD TVS TSS MOV GDT PLED

1SS181-MS

Product specification

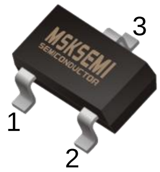
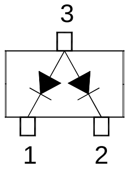
FEATURE

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

Applications

- Ultra high speed switching application

Reference News

SOT-23	Pin Configuration	MARKING
		A3

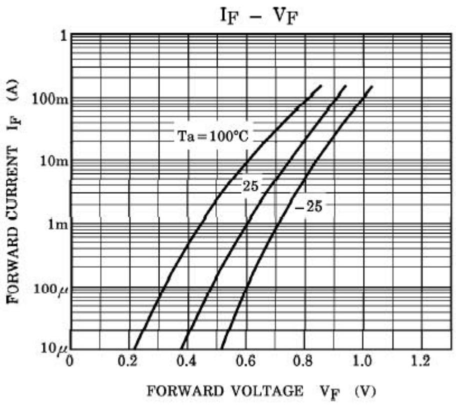
Absolute Maximum Ratings (T_a = 25 °C)

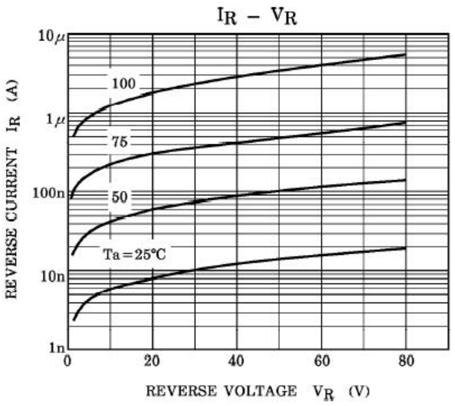
Parameter	Symbol	Value	Unit
Maximum Peak Reverse Voltage	V_{RM}	85	V
Reverse Voltage	V_R	80	V
Average Rectified Forward Current	$I_{F(AV)}$	100	mA
Maximum Peak Forward Current	I_{FM}	300	mA
Non-repetitive Peak Forward Surge Current (10 ms)	I_{FSM}	2	A
Power Dissipation	P_{tot}	350	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	- 55 to + 150	°C

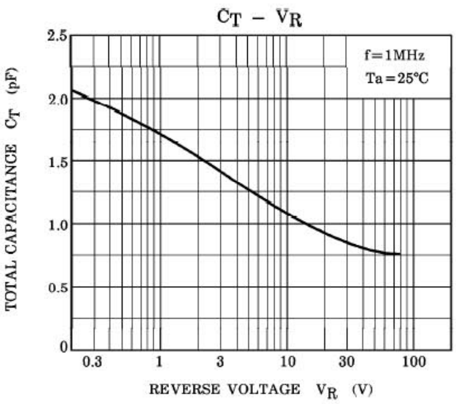
Characteristics at T_a = 25℃

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

Typical Characteristics







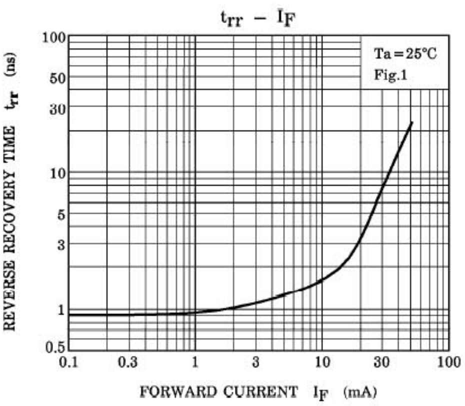
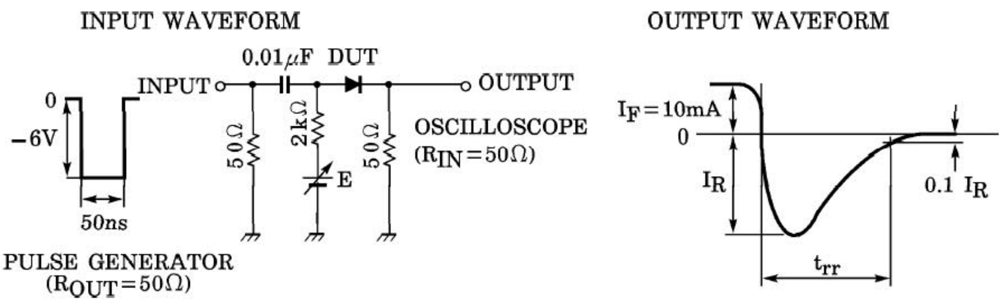
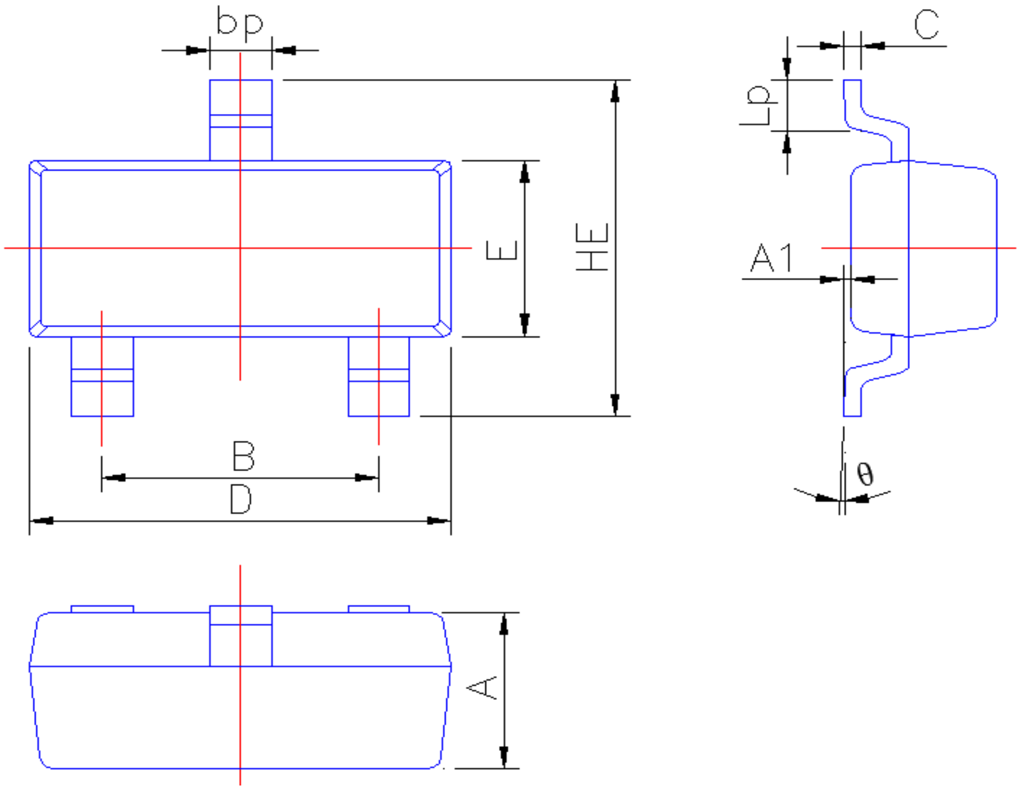


Fig.1 Reverse recovery time (t_{rr}) test circuit



PACKAGE MECHANICAL DATA



SOT-23

Symbol	Dimension in Millimeters	
	Min	**Max**
A	0.90	1.10
A1	0.013	0.100
B	1.80	2.00
bp	0.35	0.50
C	0.09	0.150
D	2.80	3.00
E	1.20	1.40
HE	2.20	2.80
Lp	0.20	0.50
θ	0°	5°

REELSPECIFICATION

P/N	PKG	QTY
1SS181-MS	SOT-23	3000

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SOT-23
1SS181

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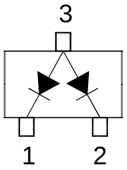
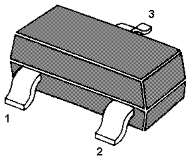
Silicon Epitaxial Planar Switching Diode

Features

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





Marking Code: **A3**
SOT-23 Plastic Package

Applications

- Ultra high speed switching application

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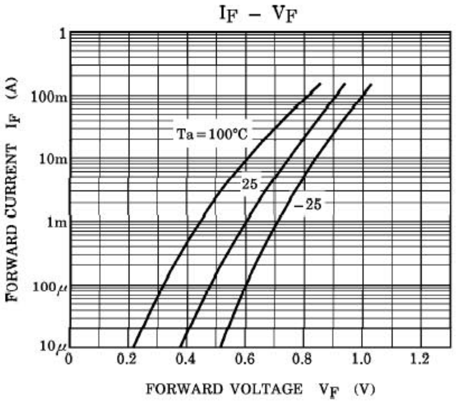

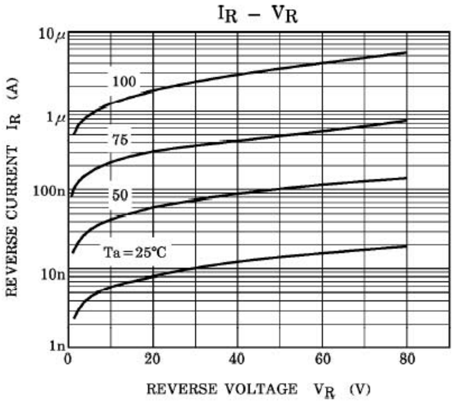

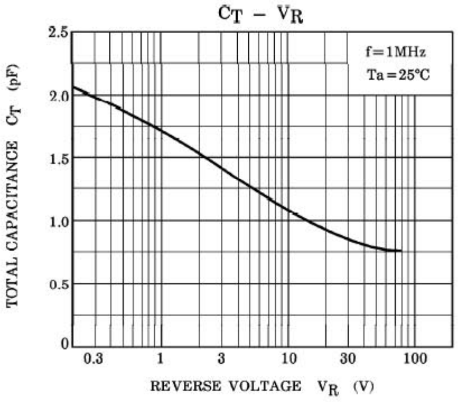

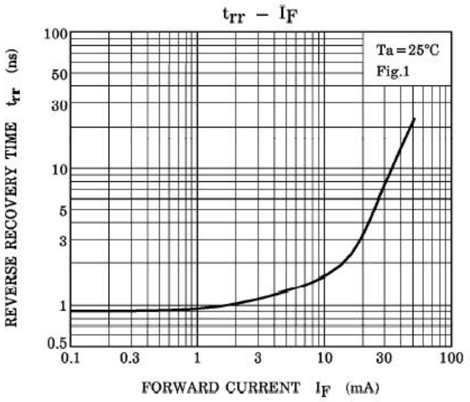

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