

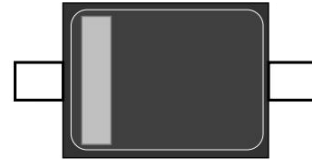
## 1N4148WS, 1N4448WS, 1N914BWS

### Switching Diode

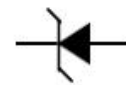
#### FEATURE

- General purpose diodes
- Fast switching devices
- SOD323 Thin SMD package
- RoHS compliant / Green EMC
- Matte Tin (Sn) Lead finish
- Cathode Band / Device marking

SOD-323F



Schematic diagram



#### MARKING:

Device Marking Code	
1N4148WS	T4
1N4448WS	S2
1N914BWS	S3

#### ABSOLUTE MAXIMUM RATINGS ( $T_a=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	$V_{RSM}$	100	V
Repetitive Peak Reverse Voltage	$V_{RRM}$	75	V
Repetitive Peak Forward Current	$I_{FRM}$	300	mA
Non-Repetitive Peak Forward Current *1	$I_{FSM}$	2	A
Continuous Forward Current	$I_O$	150	mA
Power Dissipation	$P_D$	200	mW
Junction Temperature	$T_J$	150	$^{\circ}\text{C}$
Storage Temperature	$T_{STG}$	-55 to +150	$^{\circ}\text{C}$

#### ELECTRICAL CHARACTERISTICS ( $T_a=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Type	Max	Unit
Breakdown Voltage	$BV_R$	$I_R=100\mu\text{A}$	100			V
		$I_R=5\mu\text{A}$	75			V
Reverse Current	$I_R$	$V_R=20\text{V}$			25	nA
		$V_R=75\text{V}$			5	$\mu\text{A}$
Forward Voltage	$V_F$	$I_F=5\text{mA}^{*2}$	0.62		0.72	V
		$I_F=10\text{mA}$			1	V
		$I_F=100\text{mA}^{*2}$			1	V
Capacitance	$C$	$V_R=0\text{V}, f=1\text{MHz}$			4	pF
Reverse Recovery Time	$T_{RR}$	$I_F=10\text{mA}, V_R=6\text{V}, I_{RR}=1\text{mA}, R_G=100\Omega$			4	ns

\*1 Pulse width = 1  $\mu\text{s}$

\*2 Excluded 1N4148WS

TYPICAL CHARACTERISTICS

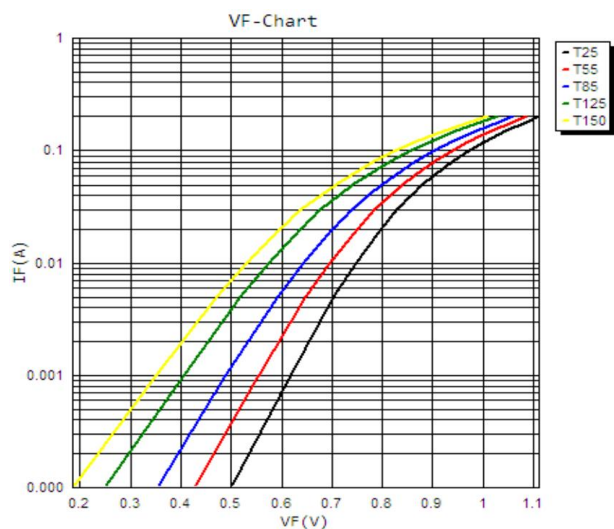


Fig.2 Forward current(IF) vs Forward voltage(VF)

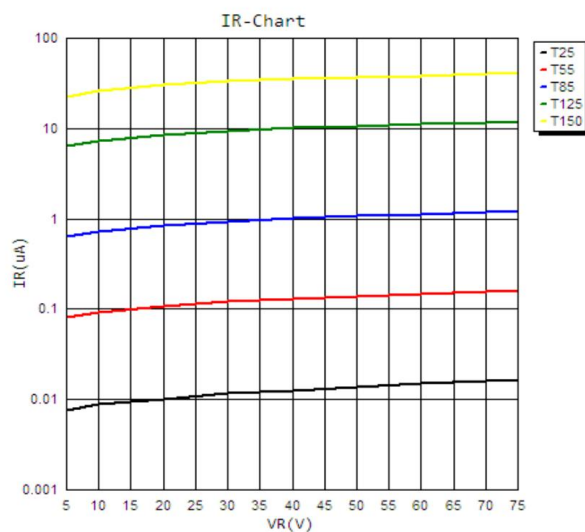


Fig.3 Reverse current(IR) vs Reverse voltage(VR)

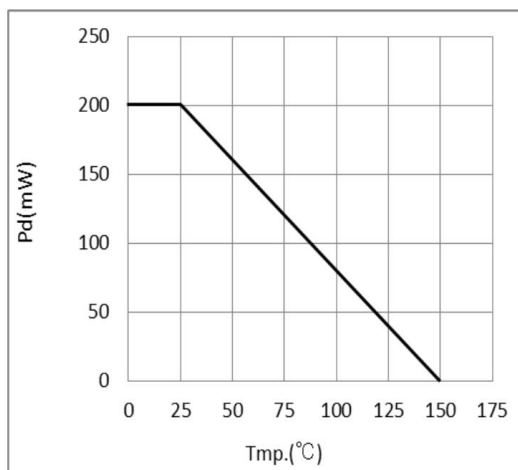


Fig.4 Power Derating Curve

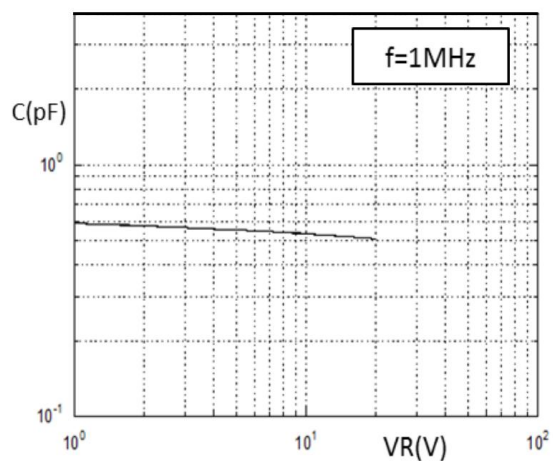
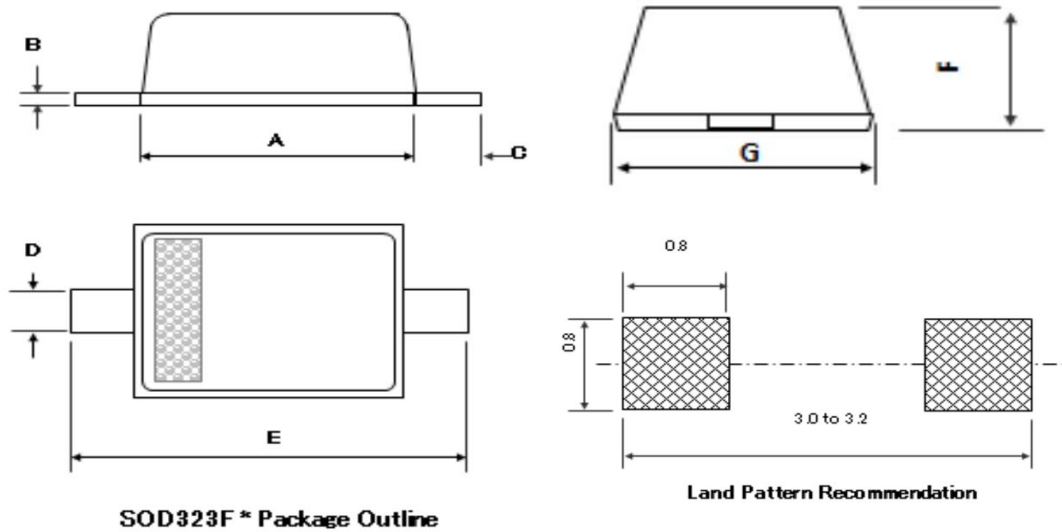


Fig.5 Capacitance vs Reverse voltage(VR)

**SOD-323F Package Information**



Symbol	Dimensions In Millimeters		
	Min	Typ	Max
A	1.600	-	1.800
B	0.06	-	0.21
C	0.30	-	0.50
D	0.25	-	0.40
E	2.30	-	2.70
F	0.60	-	0.75
G	1.15	-	1.35

1. Unit mm