1N4148WS

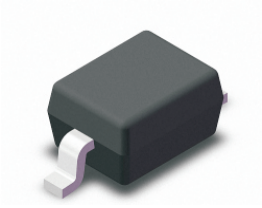
200mW Surface Mount Switching Didoe

Absolute Maximum Ratings T_A = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
P_D	Power Dissipation	200	mW
T_{STG}	Storage Temperature Range	-65 to +150	°C
T_J	Operating Junction Temperature	+150	°C
V_{RSM}	Non-Repetitive Peak Reverse Voltage	100	V
V_{RRM}	Repetitive Peak Reverse Voltage	75	V
I_{FRM}	Repetitive Peak Forward Current	300	mA
I_O	Continuous Forward Current	150	mA
I_{FSM}	Peak Forward Surge Current (Pulse Width=1us)	2	A

These ratings are limiting values above which the serviceability of the diode may be impaired.

Green Product



SOD-323 Flat Lead

ELECTRICAL SYMBOL

Specification Features:

- Fast Switching Device (T_{RR} <8.0 nS)
- General Purpose Diodes
- Flat Lead SOD-323 Small Outline Plastic Package
- Surface Device Type Mounting
- RoHS Compliant
- Green EMC
- Matte Tin(Sn) Lead Finish
- Band Indicates Cathode

DEVICE MARKING CODE:

Device Type	Device Marking
1N4148WS	S1
1N4448WS	S2
1N914BWS	S3

Electrical Characteristics T_A = 25°C unless otherwise noted

Symbol	Parameter		Test Condition	Limits		Unit
				Min	Max	
B_V	Breakdown Voltage		I_R=100μA	100		Volts
			I_R=5μA	75		
I_R	Reverse Leakage Current		V_R=20V		25	nA
			V_R=75V		5	μA
V_F	Forward Voltage	1N4448WS, 1N914BWS	I_F=5mA	0.62	0.72	Volts
		1N4148WS	I_F=10mA		1.0	
		1N4448WS, 1N914BWS	I_F=100mA		1.0	
T_{RR}	Reverse Recovery Time		I_F=10mA I_R=60mA R_L=100Ω I_{RR}=1mA		8	nS
C	Capacitance		V_R=0V, f=1M_{HZ}		4	pF

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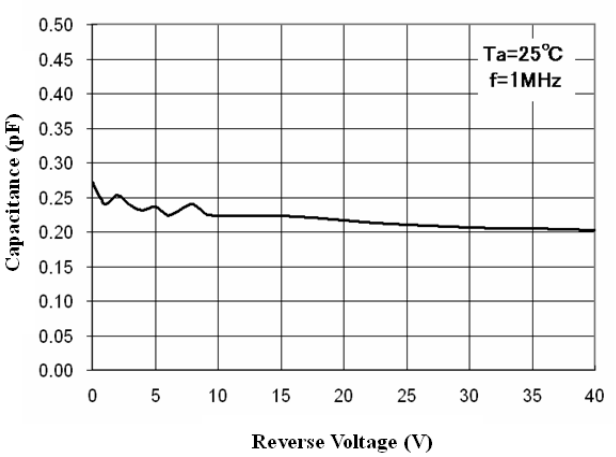
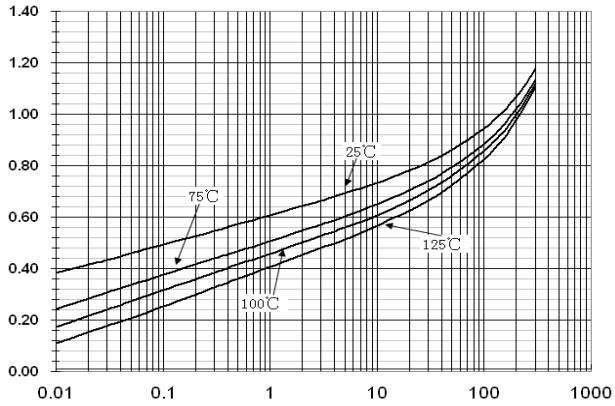
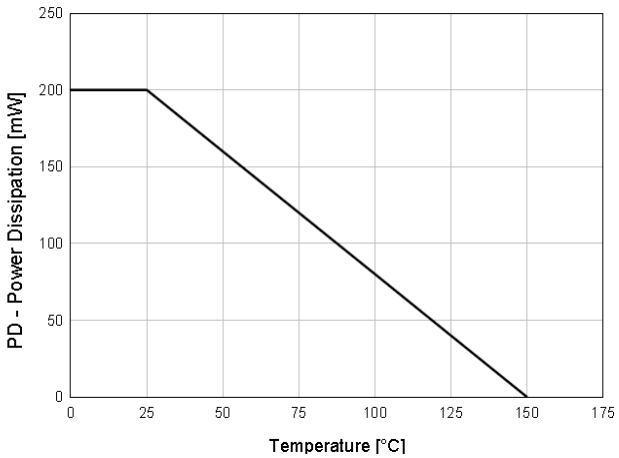
Total Capacitance



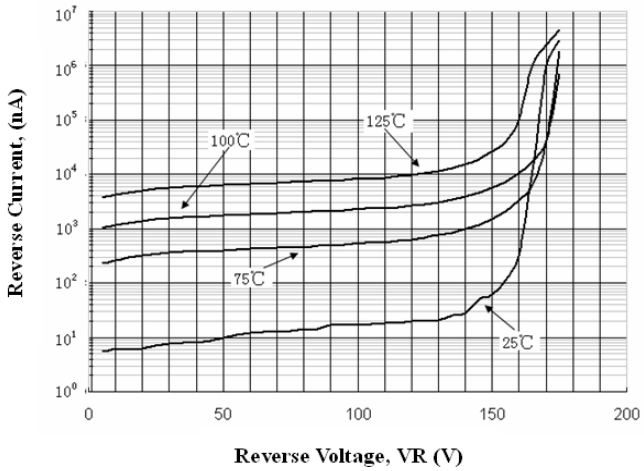
Forward Voltage vs Ambient Temperature



Power Derating Curve

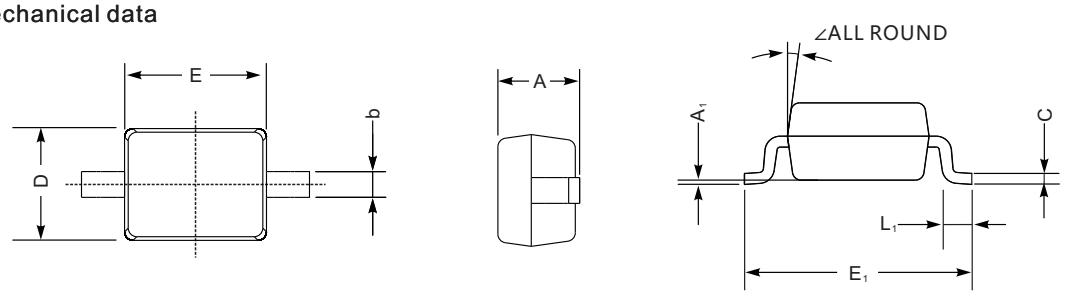


Reverse Current vs Reverse VoltageReverse



PACKAGE OUTLINE

SOD-323 mechanical data



UNIT		A	C	D	E	E_1	b	L_1	A_1	∠
mm	max	1.1	0.15	1.4	1.8	2.75	0.4	0.45	0.2	9°
	min	0.8	0.08	1.2	1.4	2.55	0.25	0.2	—	
mil	max	43	5.9	55	70	108	16	16	8	
	min	32	3.1	47	63	100	9.8	7.9	—	