

1N4148WS, 1N4448WS

SURFACE MOUNT SWITCHING DIODES

75 Volts

POWER

200 mWatts

PACKAGE

SOD-323

FEATURES

- Fast switching speed.
- Surface mount package Ideally Suited for Automatic insertion
- Electrically Identical to Standard JEDEC
- High Conductance

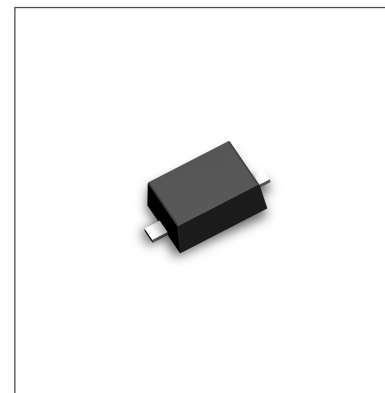
MECHANICAL DATA

Case: SOD-323, Plastic

Terminals: Solderable per MIL-STD-202, Method 208

Approx. Weight: 0.008 gram

Marking: A2, A3



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

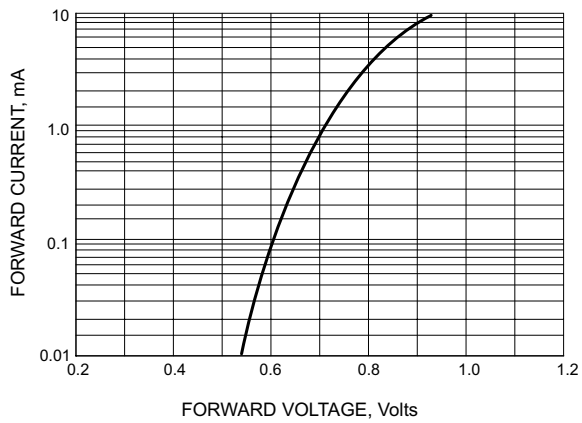
PARAMETER	SYMBOL	1N4148WS	1N4448WS	UNITS
Reverse Voltage	V_R	75	75	V
Peak Reverse Voltage	V_{RM}	100	100	V
Rectified Current (Average), Half Wave Rectification with Resistive Load and $f \geq 50$ Hz	I_o	150	150	mA
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	2.0	4.0	A
Power Dissipation Derate Above 25°C	P_{TOT}	200	200	mW
Maximum Forward Voltage	V_F	1 @ $I_F=10mA$	0.72 @ $I_F=5mA$ 1 @ $I_F=10mA$	V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_J = 25^\circ C$	I_R	2.5	2.5	μA
Typical Junction Capacitance(Notes1)	C_{Jot}	4.0	4.0	pF
Maximum Reverse Recovery (Notes2)	T_{RR}	4.0	4.0	ns
Maximum Thermal Resistance	$R_{\theta JA}$	357		$^\circ C / W$
Storage Temperature Range	T_J	-55 TO +125		$^\circ C$

NOTE:

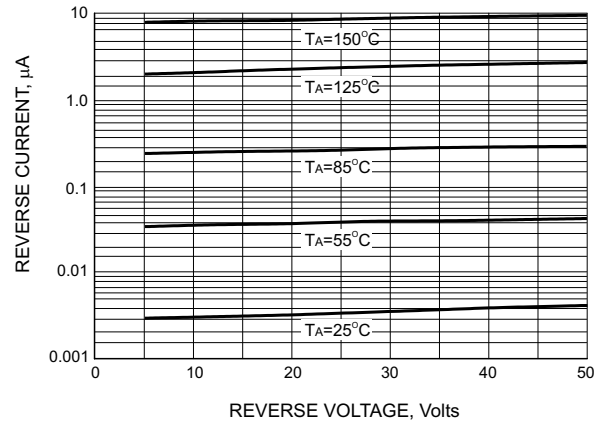
1. C_J at $V_R=0$, $f=1MHz$

2. From $I_F=10mA$ to $I_R=1mA$, $V_R=6Volts$, $R_L=100\Omega$

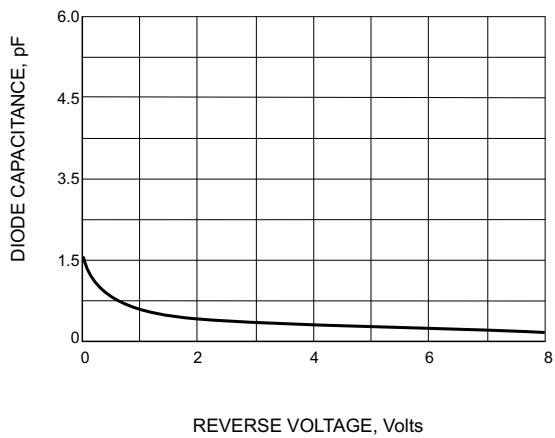
RATING and CHARACTERISTIC CURVES



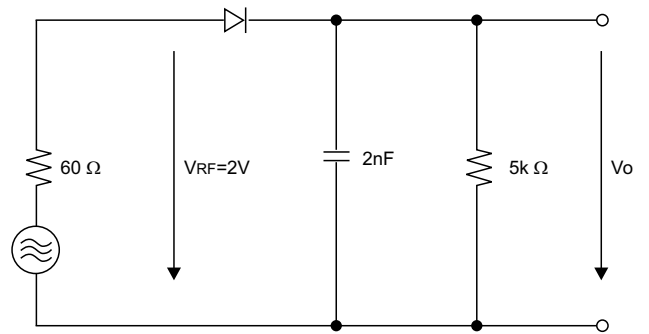
FORWARD VOLTAGE



LEAKAGE CURRENT



TYPICAL CAPATCANCE



RECTIFICATION EFFICIENCY MEASUREMENT CIRCUIT

OUTLINE DRAWING

SOD-323

