

1N4148WS AND 1N4448WS

TECHNICAL SPECIFICATIONS OF SURFACE MOUNT SWITCHING DIODE

VOLTAGE - 100 Volts

CURRENT - 0.15 Ampere

FEATURES

- * Low power loss, high efficiency
- * Low leakage
- * Low forward voltage drop
- * High speed switching
- * High current capability
- * High reliability

MECHANICAL DATA

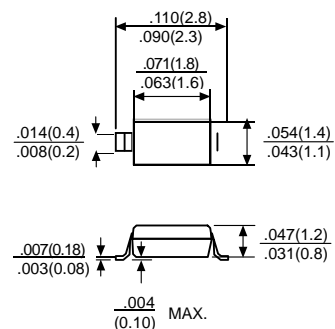
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Solder plated, solderable per MIL-STD-202E, Method 208 guaranteed
- * Mounting position: Any
- * Weight: 0.008 grams Approx.

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%.



SOD-323



Dimensions in inches and (millimeters)

	SYMBOL	1N4148WS	1N4448WS	UNITS
Maximum DC Blocking Voltage	V _{DC}		75	V
Maximum Recurrent Peak Reverse Voltage	V _{RRM}		100	V
Maximum Average Rectified Current	I _o		150	mA
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	2.0	4.0	A
Maximum Power Dissipation T _{amb} =25°C	P _{tot}		200	mW
Maximum Forward Voltage	V _F	1.0 / 50mA	0.72 / 5mA 1.0 / 100mA	V
Maximum Reverse Current at Rated DC Blocking Voltage @ T _A =25°C	I _R		2.5	µA
Maximum Reverse Recovery Time(Note 1)	t _{rr}		4.0	ns
Typical Junction Capacitance(Note 2)	C _J		4.0	pF
Operating and Storage Temperature Range	T _J ,T _{STG}		-55 to + 125	°C

Note: 1. Test conditions: I_F=I_R=10mA, R_L=100Ω, measured at I_R=1mA
 2. Measured at 1MHz and V_R=0

RATING AND CHARACTERISTIC CURVES (1N4148WS AND 1N4448WS)

FIG.1 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

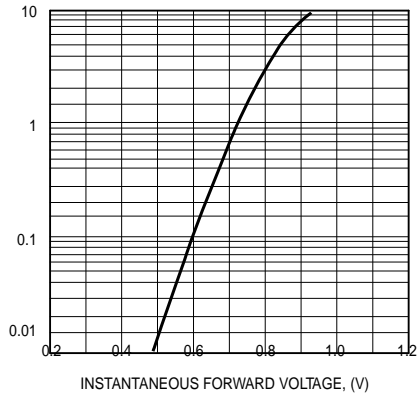


FIG.2 - TYPICAL REVERSE CHARACTERISTICS

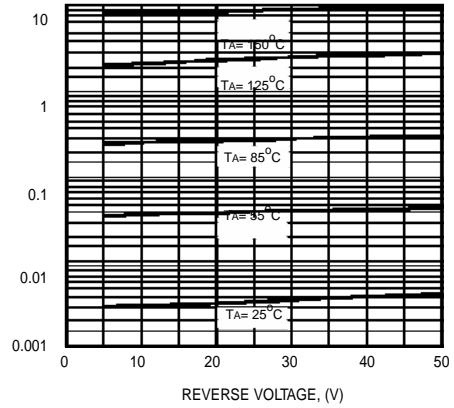


FIG.3 - TYPICAL JUNCTION CAPACITANCE

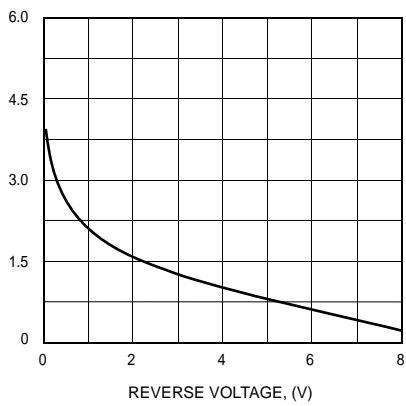


FIG.4 - RECTIFICATION EFFICIENCY MEASUREMENT CIRCUIT

