DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

1N4148WS
1N4448WS

TECHNICAL SPECIFICATIONS OF SURFACE MOUNT SWITCHING DIODE

VOLTAGE - 100 Volts *CURRENT - 0.15 Ampere*

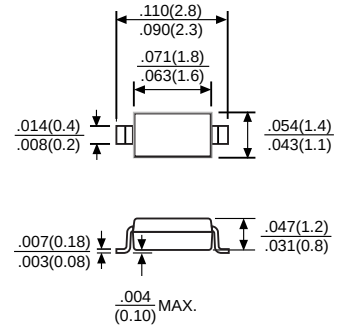
FEATURES

* 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.

SOD-323



Dimensions in inches and (millimeters)

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%.

	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	Io	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 Tamb=25°C	Ptot	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)	trr	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

Diode, Bridge Rectifiers INDEX ① | Diode, Bridge Rectifiers INDEX ② | Transistors, SCR, IC INDEX ① | Transistors, SCR, IC INDEX ② | EXIT

RATING AND CHARACTERISTIC CURVES (1N4148WS AND 1N4448WS)

FIG.1 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

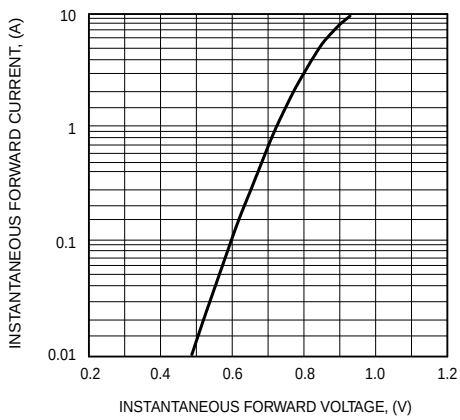


FIG.2 - TYPICAL REVERSE CHARACTERISTICS

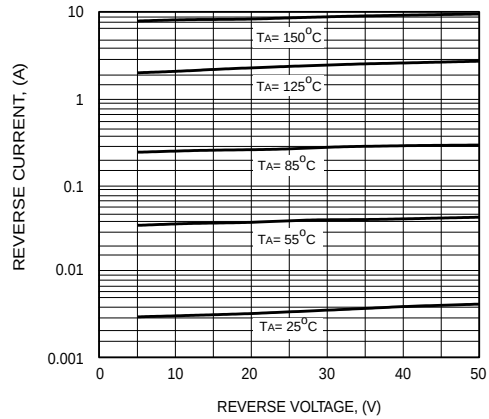


FIG.3 - TYPICAL JUNCTION CAPACITANCE

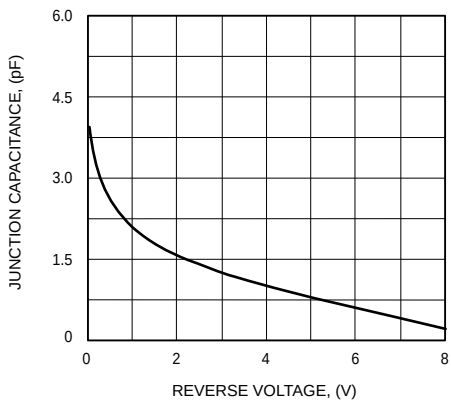


FIG.4 - RECTIFICATION EFFICIENCY MEASUREMENT CIRCUIT