



安徽富信半導體科技有限公司

ANHUI FOSAN SEMICONDUCTOR TECHNOLOGY CO., LTD

1N4001W-1N4007W

1.0 AMP SURFACE MOUNT SILICON RECTIFIERS

FEATURES

- * Ideal for surface mount applications
- * Easy pick and place
- * Built-in strain relief
- * High surge current capability

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Solder plated, solderable per MIL-STD-202F, method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any

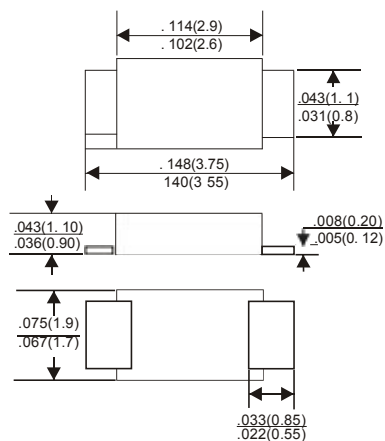
VOLTAGE RANGE

50 to 1000 Volts

CURRENT

1.0 Ampere

SOD123FL



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25 °C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%.

	1N4001W	1N4002W	1N4003W	1N4004W	1N4005W	1N4006W	1N4007W	
TYPE NUMBER	A1	A2	A3	A4	A5	A6	A7	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at Ta=75 °C	1.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	25							A
Maximum Instantaneous Forward Voltage at 1.0 A	1.1							V
Maximum DC Reverse Current Ta=25 °C	5.0							μA
at Rated DC Blocking Voltage Ta=100 °C	50							μA
Typical Junction Capacitance (Note 1)	15							pF
Typical Thermal Resistance R _{JA} (Note 2)	80							C/W
Operating and Storage Temperature Range T _J , T _{STG}	-65—+150							°C
Marking Code								

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance from Junction to Ambient.

RATING AND CHARACTERISTIC CURVES (A1 THRU A7)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

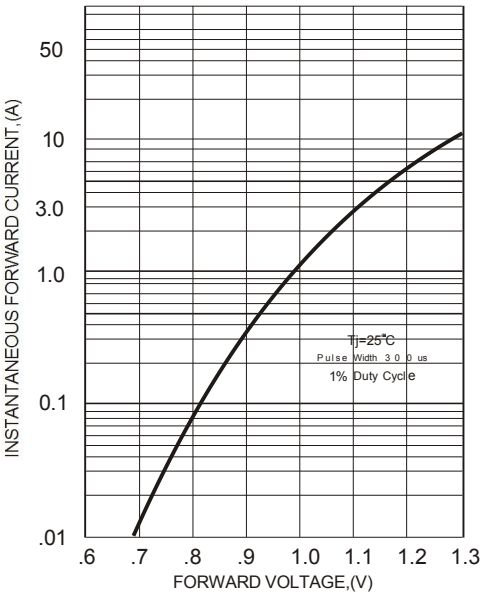


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

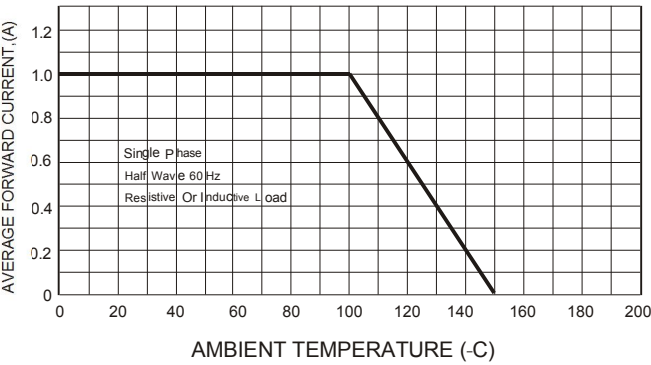


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

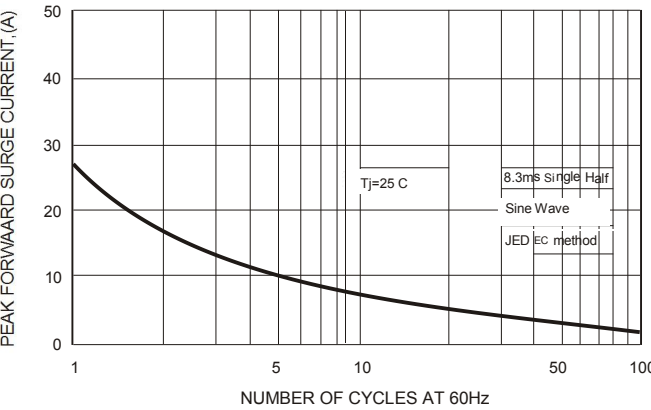


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

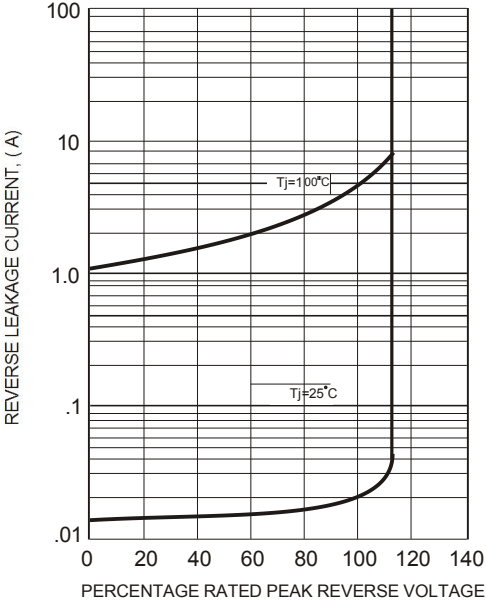


FIG.5-TYPICAL JUNCTION CAPACITANCE

