

SMALL SIGNAL DIODE

VOLTAGE RANGE 75 Volts CURRENT 150 mAmpere

FEATURES

- * Fast Switching Speed
- * Surface Mount Package Ideally Suited for Automatic Insertion
- * For General Purpose Switching Applications
- * High Conductance

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-O rate flame retardant
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight: 0.004 grams

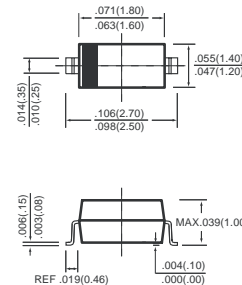
Ratings at 25

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)

MAXIMUM RATINGS (@T_A=25°C unless otherwise noted)

RATINGS	SYMBOL	1N4148WS	UNITS
Non-Repetitive Peak Reverse Voltage	V _{RM}	100	Volts
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	75	Volts
Maximum Working Peak reverse Voltage	V _{VRM}		
Maximum DC Blocking Voltage	V _R		
Maximum RMS Voltage	V _{RMS}	53	Volts
Maximum Forward Continuous Current	I _{FM}	300	mAmps
Maximum Average Forward Rectified Current	I _O	150	mAmps
Non-Repetitive Peak Forward Surge Current	I _{FSM}	@t=1.0uS	2.0
		@t=1.0S	1.0
Typical Reverse Recovery Time (Note 1)	T _{rr}	4	nS
Typical Junction Capacitance (Note 2)	C _J	2	pF
Maximum Power Dissipation (Note 3)	P _D	200	mW
Typical Thermal Resistance	R _{θJA}	625	°C/W
Operating and Storage Temperature Range	T _J ,T _{STG}	-65 to + 150	°C

ELECTRICAL CHARACTERISTICS (@T_A=25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	1N4148WS	UNITS
Maximum Instantaneous Forward Voltage	V _F	@ I _F =1.0mA	0.715
		@ I _F =10mA	0.855
		@ I _F =50mA	1.0
		@ I _F =150mA	1.25
Maximum Instantaneous Peverse Current	I _R	@ V _R =20V	25
		@ V _R =75V	1

NOTES : 1. Measured at I_F=I_R=10mA, I_{RR}=0.1I_R And R_L=100Ω.
2. Measured at 1MHz and applied reverse voltage of 0 volts.
3. Part mounted on FR-4 PC board with minimum recommended pad layout.

RATING AND CHARACTERISTICS CURVES (1N4148WS)

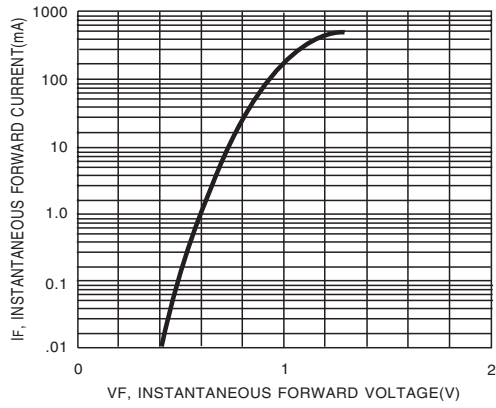


FIG.1 FORWARD CHARACTERISTICS

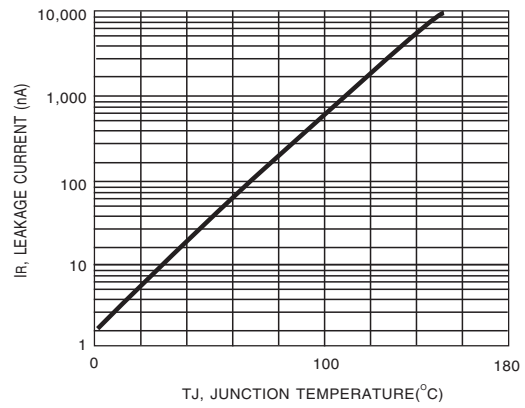


FIG.2 LEAKAGE CURRENT VS. JUNCTION TEMPERATURE