

**SMALL SIGNAL DIODE**

**VOLTAGE RANGE 75 Volts CURRENT 150mAmpere**

**FEATURES**

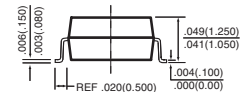
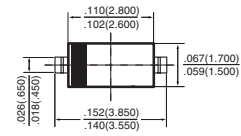
- \* Compact surface mount with same foot print as mini-melf
- \* High Breakdown Voltage
- \* Fast Switching Speed
- \* 400mW Power Dissipation
- \* General Purpose Switching Applications
- \* High Conductance

**MECHANICAL DATA**

- \* Case: Molded plastic
- \* Epoxy: UL 94V-O rate flame retardant
- \* Lead: MIL-STD-202E method 208C guaranteed
- \* Mounting position: Any
- \* Weight: 0.01 gram



**SOD-123**



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%.

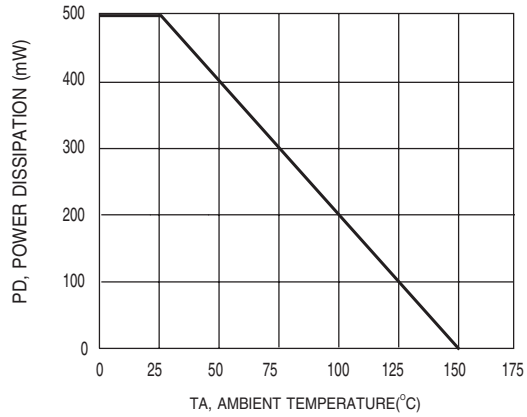
**MAXIMUM RATINGS (@ TA=25 °C unless otherwise noted)**

RATINGS	SYMBOL	1N4148W	UNITS
Non-Repetitive Peak Reverse Voltage	VRM	100	Volts
Maximum Repetitive Peak Reverse Voltage	VPRM	75	Volts
Maximum Working Peak reverse Voltage	VRWM		
Maximum DC Blocking Voltage	VR		
Maximum RMS Voltage	VRMS	53	Volts
Maximum Forward Continuous Current	IFM	300	mAmps
Maximum Average Forward Rectified Current	IO	150	mAmps
Non-Repetitive Peak Forward Surge Current	IFSM	@t=1.0uS	2.0
		@t=1.0S	1.0
Typical Reverse Recovery Time	Trr	4	nS
Typical Junction Capacitance	CT	2	pF
Maximum Power Dissipation	PD	400	mW
Typical Thermal Resistance	RθJA	315	°C/W
Operating and Storage Temperature Range	TJ, TSTG	-65 to + 150	°C

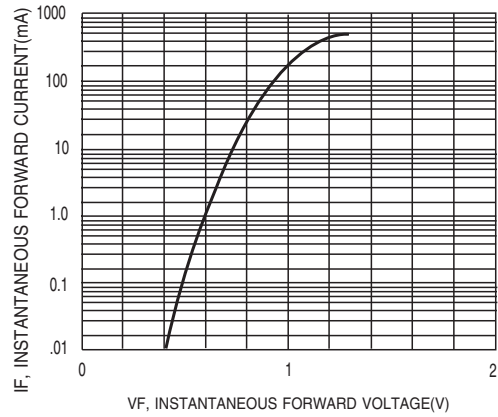
**ELECTRICAL CHARACTERISTICS (@TA=25 °C unless otherwise noted)**

CHARACTERISTICS	SYMBOL	1N4148W	UNITS
Maximum Instantaneous Forward Voltage	VF	@IF=1.0mA	0.715
		@IF=10mA	0.855
		@IF=50mA	1.0
		@IF=150mA	25
Maximum Instantaneous Reverse Current	IR	@VR=20V	25
		@VR=75V	1.0

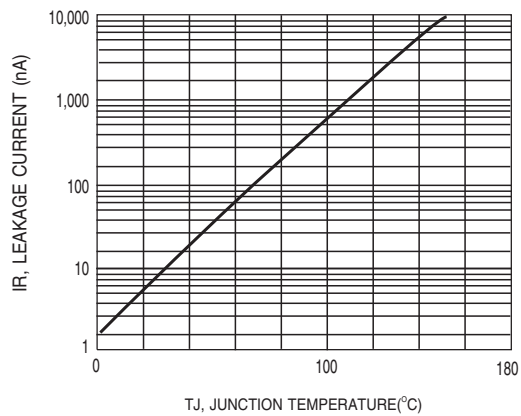
## RATING AND CHARACTERISTICS CURVES ( 1N4148W )



**FIG.1 FORWARD DERATING CURVE**



**FIG.2 FORWARD CHARACTERISTICS**



**FIG.3 LEAKAGE CURRENT VS. JUNCTION TEMPERATURE**