RECTRON SEMICONDUCTOR
TECHNICAL SPECIFICATION

1N4148W

SMALL SIGNAL DIODE

VOLTAGE RANG 100 Volts CURRENT0.3 Ampere

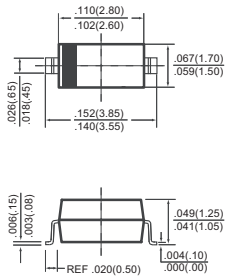
FEATURES

* 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
* Marking:T4

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		V_{RM}	120	Volts
Maximum Repetitive Peak Reverse Voltage Maximum Working Peak reverse Voltage Maximum DC Blocking Voltage		V_{RRM} V_{RWM} V_R	100	Volts
Maximum RMS Voltage		V_{RMS}	71	Volts
Maximum Forward Comtinuous Current		I_{FM}	300	mAmps
Non-Repetitive Peak Forward Surge Current	@t=1.0uS @t=1.0S	I_{FSM}	2.0 1.0	Amps
Typical Reverse Recovery Time		Trr	4	nS
Typical Junction Capacitance		C_T	2	pF
Maximum Power Dissipation		P_D	500	mW
Typical Thermal Resistance		$R_{\theta JA}$	315	°C/W
Operating and Storage Temperature Range		T_J, T_{STG}	-65 to + 150	°C

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

CHARACTERISTICS		SYMBOL	1N4148W	UNITS
Maximum Instantaneous Forward Voltage	@IF=1.0mA @IF=10mA @IF=50mA @IF=150mA	V_F	0.715 0.855 1.0 1.25	Volts
Maximum Instantaneous Reverse Current	@VR=20V @VR=100V	I_R	25 1.0	nAmps uAmps

2024-06/03
REV:F

RATING AND CHARACTERISTICS CURVES (1N4148W)

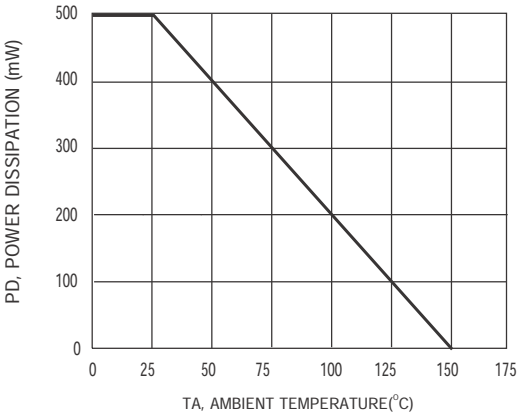


FIG.1 FORWARD DERATING CURVE

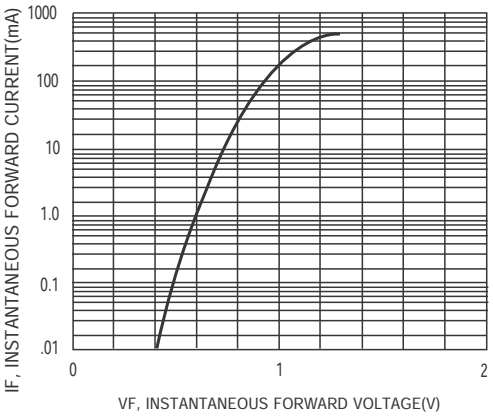


FIG.2 FORWARD CHARACTERISTICS

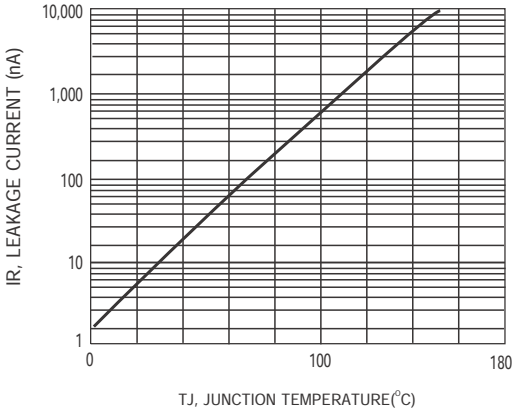
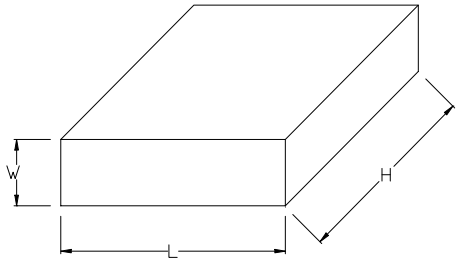


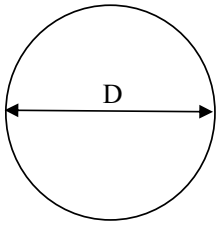
FIG.3 LEAKAGE CURRENT VS. JUNCTION TEMPERATURE

1. BOX



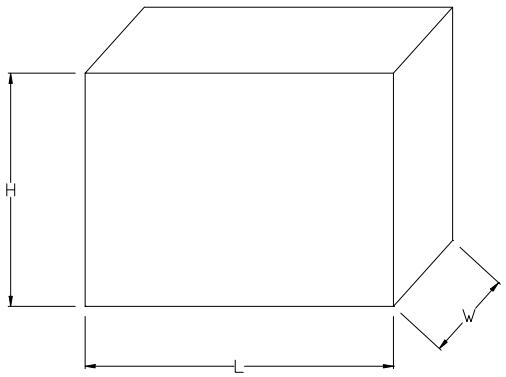
Packing Code	L (mm)	W (mm)	H (mm)
-T	182	68	182

2. REEL



Packing Code	D (mm)
-T	178

3. CARTON



Packing Code	L (mm)	W (mm)	H (mm)
-T	438	438	220

PACKAGING OF DIODE

REEL PACK

PACKAGE	PACKING CODE	REEL (EA)	COMPONENT SPACE(mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
SOD-123	-T	3,000	---	---	178	438*438*220	180,000	9.00

Visit http:// www.rectron.com for complete datasheets

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