RECTRON SEMICONDUCTOR
TECHNICAL SPECIFICATION

1N4148WV

SMALL SIGNAL DIODE

VOLTAGE RANG 100 Volts CURRENT0. 3 Ampere

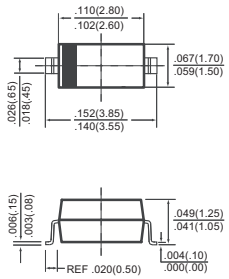
FEATURES

* 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
* P/N suffix V means AEC-Q101 qualified, e.g:1N4148WV
* P/N suffix V means Halogen-free

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 (@ T_A=25 °C unless otherwise noted)

RATINGS		SYMBOL	1N4148WV	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		TJ, T_{STG}	-65 to + 150	°C

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

CHARACTERISTICS		SYMBOL	1N4148WV	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:A

RATING AND CHARACTERISTICS CURVES (1N4148WV)

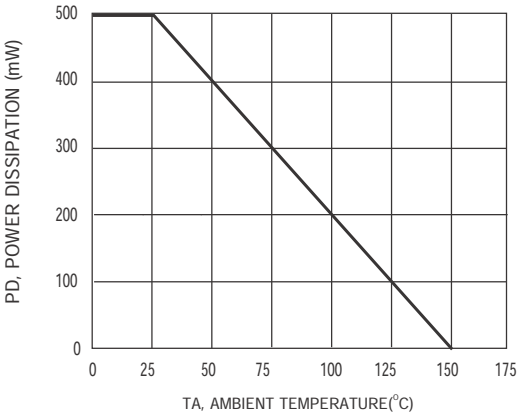


FIG.1 FORWARD DERATING CURVE

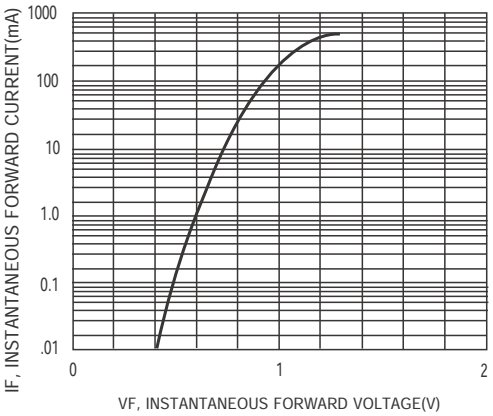


FIG.2 FORWARD CHARACTERISTICS

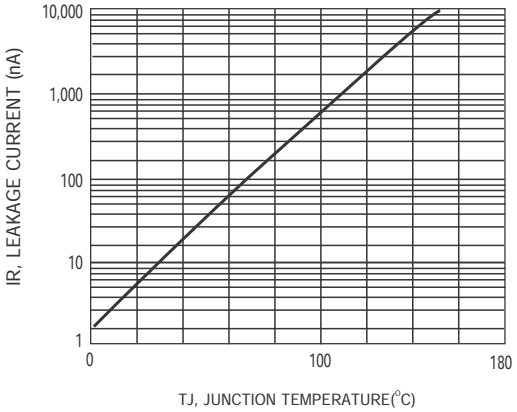
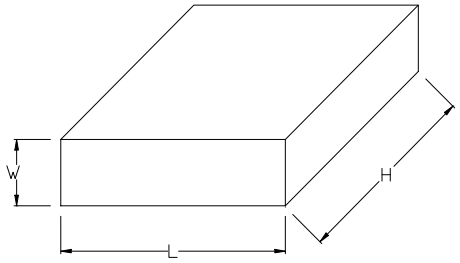


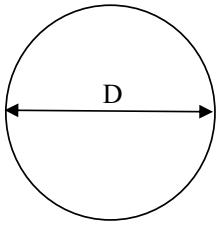
FIG.3 LEAKAGE CURRENT VS. JUNCTION TEMPERATURE

1. BOX



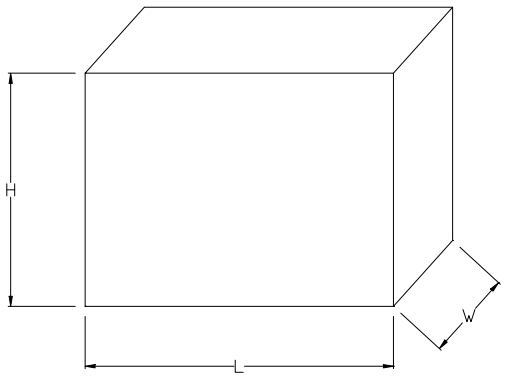
Packing Code	L (mm)	W (mm)	H (mm)
-T	182	68	182

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

DISCLAIMER NOTICE

Rectron Inc reserves the right to make changes without notice to any product specification herein, to make corrections, modifications, enhancements or other changes. Rectron Inc or anyone on its behalf assumes no responsibility or liability for any errors or inaccuracies. Data sheet specifications and its information contained are intended to provide a product description only. "Typical" parameters which may be included on RECTRON data sheets and/ or specifications can and do vary in different applications and actual performance may vary over time. Rectron Inc does not assume any liability arising out of the application or use of any product or circuit.

Rectron products are not designed, intended or authorized for use in medical, life-saving implant or other applications intended for life-sustaining or other related applications where a failure or malfunction of component or circuitry may directly or indirectly cause injury or threaten a life without expressed written approval of Rectron Inc. Customers using or selling Rectron components for use in such applications do so at their own risk and shall agree to fully indemnify Rectron Inc and its subsidiaries harmless against all claims, damages and expenditures.