RECTRON SEMICONDUCTOR
TECHNICAL SPECIFICATION

1N4148W

SMALL SIGNAL DIODE

VOLTAGE RANG 75 Volts CURRENT0.5A mpere

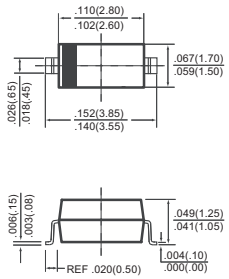
FEATURES

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

RATINGS		SYMBOL	1N4148W	UNITS
Non-Repetitive Peak Reverse Voltage		VRM	120	Volts
Maximum Repetitive Peak Reverse Voltage Maximum Working Peak reverse Voltage Maximum DC Blocking Voltage		VRRM VRWM VR	120	Volts
Maximum RMS Voltage		VRMS	53	Volts
Maximum Forward Comtinuous Current		IFM	300	mAmps
Maximum Average Forward Rectified Current		IO	500	mAmps
Non-Repetitive Peak Forward Surge Current	@t=1.0uS @t=1.0S	IFSM	2.0 1.0	Amps
Typical Reverse Recovery Time		Trr	4	nS
Typical Junction Capacitance		CT	2	pF
Maximum Power Dissipation		PD	500	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	@IF=1.0mA @IF=10mA @IF=50mA @IF=500mA	VF	0.715 0.855 1.0 1.25	Volts
Maximum Instantaneous Reverse Current	@VR=20V @VR=75V	IR	25 1.0	nAmps uAmps

2019-08
REV:D

RATING AND CHARACTERISTICS CURVES (1N4148W)

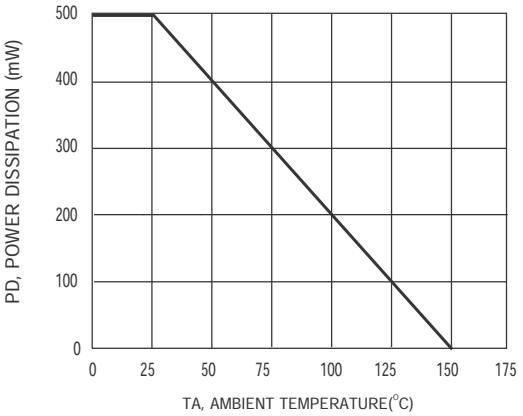


FIG.1 FORWARD DERATING CURVE

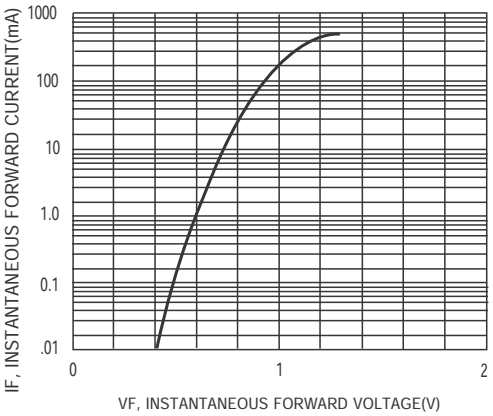


FIG.2 FORWARD CHARACTERISTICS

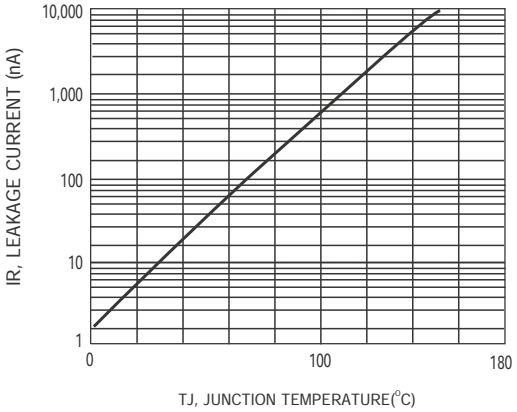
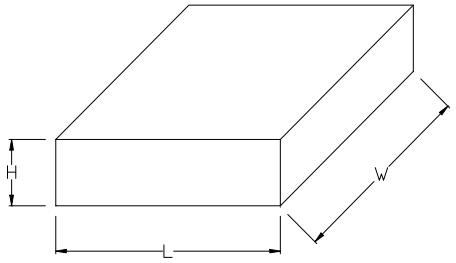


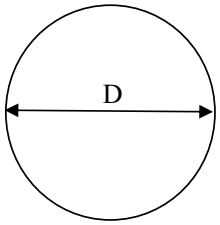
FIG.3 LEAKAGE CURRENT VS. JUNCTION TEMPERATURE

1. BOX



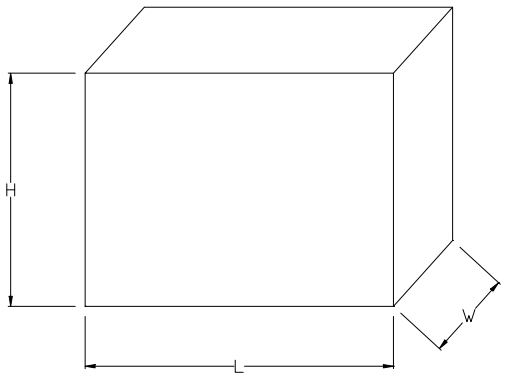
Packing Code	L (mm)	W (mm)	H (mm)
-T/W	338	338	40

2. REEL



Packing Code	D (mm)
-T/W	178

3. CARTON



Packing Code	L (mm)	W (mm)	H (mm)
-T/W	360	355	360

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

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