



# SMALL SIGNAL DIODE VOLTAGE RANGE 30 Volts

## **FEATURES**

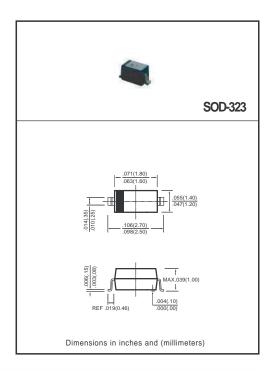
- \* Fast Switching Speed
- \* Low turn-on voltage

#### **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

#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at  $25^{\circ}$ C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.



# $\textbf{MAXIMUM RATINGS} \ (@T_A = 25^{\circ}C \ unless \ otherwise \ noted)$

RATINGS	SYMBOL	SD107WS	UNITS
Reverse Breakdown Voltage @ I <sub>R</sub> =100µA	V <sub>(BR)R</sub>	30	Volts
Maximum Working Peak reverse Voltage	VRM	30	Volts
Maximum Forward Comtinuous Current	IFM	100	mAmps
Non-Repetitive Peak Forward Surge Current @tp=10mS	IFSM	750	mAmps
Maximum Power Dissipation (T <sub>C</sub> = 25°C)	PD	250	mW
Thermal Resistance Junction to ambient air	T JA	500	°C/W
Operating and Storage Temperature Range	TJ,TSTG	-65 to + 150	°C

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

CHARACTERISTICS		SYMBOL	MIN.	TYP.	MAX.	UNITS
Reverse voltage leakage current	(V <sub>R</sub> =25V)	I <sub>R</sub>	-	-	1	μА
Forward voltage Pulse Tesx tp<300μs,δ<2%	(I <sub>F</sub> =2mA) (I <sub>F</sub> =15mA)	VF	-	300 360		mV
	(I <sub>F</sub> =50mA) (I <sub>F</sub> =100mA)			470 580	550 800	
Diode capacitance	(V <sub>R</sub> =10V,f=1MHz)	C <sub>T</sub>	-	-	7	pF

# **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.

