

# **SENSITRON** **SEMICONDUCTOR**

1N5186  
1N5187  
1N5188  
1N5190

TECHNICAL DATA  
DATA SHEET 124, REV A

SJ SX SV
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## FAST RECOVERY RECTIFIERS

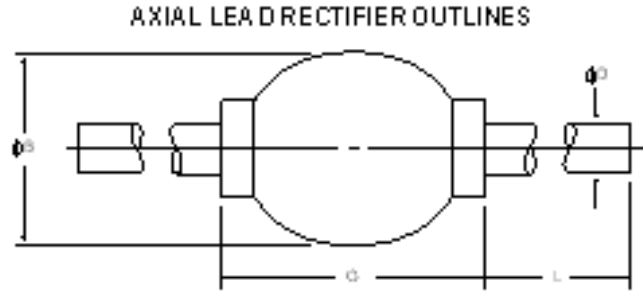
**MAX. RATINGS / ELECTRICAL CHARACTERISTICS** All ratings are at  $T_A = 25^\circ\text{C}$  unless otherwise specified.

RATING	CONDITIONS	MIN	TYP	MAX	UNIT
Peak Inverse Voltage (PIV) 1N5186 1N5187 1N5188 1N5190	-	-	-	100 200 400 600	Vdc
Average DC Output Current ( $I_o$ )	$T_A = +25^\circ\text{C}$ $T_A = +150^\circ\text{C}$	-	-	3.0 0.7	Amps
Peak Single Cycle Surge Current ( $I_{fsm}$ )	$t_p = 8.3$ ms Single Half Cycle Sine Wave, Superimposed On Rated Load	-	-	80	Amps(pk)
Operating and Storage Temp. ( $T_{op}$ & $T_{stg}$ )	-	-65	-	+175	$^\circ\text{C}$
Maximum Forward Voltage ( $V_f$ )	$I_f = 9\text{A}$ (300 $\mu\text{sec}$ pulse, duty cycle < 2%)	.9	-	1.5	Volts
Maximum Instantaneous Reverse Current At Rated (PIV)	$T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$	-	-	2.0 100	$\mu\text{Amps}$
Reverse Recovery Time ( $t_{rr}$ ) 1N5186 1N5187 1N5188 1N5190	$I_f = 0.5\text{A}$ , $I_r = 1.0\text{A}$ , $I_{rr} = 0.25\text{A}$	-	-	150 200 250 400	nsec
Thermal Resistance ( $\theta_{JL}$ )	$d = 0.375''$	-	-	20	$^\circ\text{C/W}$

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Note: Cathode side of device is indicated by a dark band marked on body.

PACKAGE STYLE	DIMENSIONS - INCHES / MILLIMETERS			
	$\phi B$	$\phi D$	G	L
303	.110/.180 2.79/4.57	.037/.042 .94/1.07	.130/.260 3.30/6.60	.90/1.30 22.9/33.0

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