# FAST RECOVERY RECTIFIERS

**MAX. RATINGS / ELECTRICAL CHARACTERISTICS** All ratings are at $T_A = 25^oC$ unless otherwise specified.

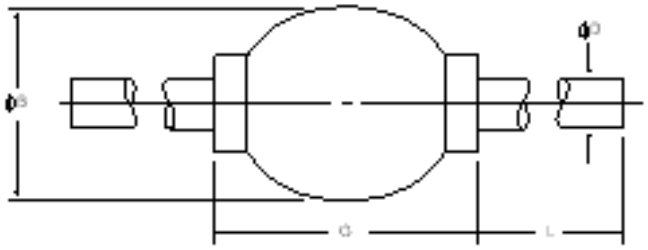
| RATING | CONDITIONS | MIN | TYP | MAX | UNIT |
|---|---|---|---|---|---|
| Peak Inverse Voltage (PIV)<br>1N5186<br>1N5187<br>1N5188<br>1N5190 | - | - | - | <br>100<br>200<br>400<br>600 | Vdc |
| Average DC Output Current ($I_o$) | $T_A = +25^oC$<br>$T_A = +150^oC$ | - | - | 3.0<br>0.7 | Amps |
| Peak 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 | °C |
| Maximum Forward Voltage ($V_f$) | $I_f$ = 9A (300 μsec pulse, duty cycle < 2%) | .9 | - | 1.5 | Volts |
| Maximum Instantaneous Reverse Current At Rated (PIV) | $T_A$ = 25° C<br>$T_A$ = 100° C | - | - | 2.0<br>100 | μAmps |
| Reverse Recovery Time ($t_{rr}$)<br>1N5186<br>1N5187<br>1N5188<br>1N5190 | $I_f$ = 0.5A, $I_r$ = 1.0A, $I_{rr}$ = 0.25A | - | - | <br>150<br>200<br>250<br>400 | nsec |
| Thermal Resistance ($\theta_{JL}$) | d = 0.375" | - | - | 20 | ° C/W |

**1N5186**
**1N5187**
**1N5188**
**1N5190**

# *SENSITRON SEMICONDUCTOR*

**TECHNICAL DATA**
**DATA SHEET 124, REV A**

AXIAL LEAD RECTIFIER OUTLINES




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

| PACKAGE STYLE | DIMENSIONS - INCHES / MILLIMETERS | | | |
|---|---|---|---|---|
| | ϕB | ϕD | G | L |
| 303 | .110/.180 | .037/.042 | .130/.260 | .90/1.30 |
| | 2.79/4.57 | .94/1.07 | 3.30/6.60 | 22.9/33.0 |

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