

TECHNICAL DATA
DATA SHEET 395, REV. C

VERY LOW VOLTAGE DROP
HERMETIC POWER SCHOTTKY RECTIFIER
150°C Maximum Operating Temperature

DESCRIPTION: 200 VOLT, 3.0 AMP, POWER SCHOTTKY RECTIFIER IN A HERMETIC TO-257 PACKAGE.

MAXIMUM RATINGS

ALL RATINGS ARE @ $T_C = 25^\circ\text{C}$ UNLESS OTHERWISE SPECIFIED.

RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE	PIV	200	Volts
MAXIMUM DC OUTPUT CURRENT (With Cathode Maintained @ $T_C=100^\circ\text{C}$) (per leg) Single Rectifier and Doubler (D)	I_O	3.0	Amps
MAXIMUM DC OUTPUT CURRENT (With Cathode Maintained @ $T_C=100^\circ\text{C}$) (per package) for Common Cathode (P) and Common Anode (N)	I_O	6.0	Amps
MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT ($t = 8.3\text{ms}$, Sine) (per leg)	I_{FSM}	55	Amps
MAXIMUM JUNCTION CAPACITANCE ($V_f=5\text{V}$) (per leg)	C_T	60	pF
MAXIMUM THERMAL RESISTANCE (Junction to Case) (per leg)	$R_{\theta JC}$	11.9	$^\circ\text{C}/\text{W}$
MAXIMUM OPERATING/JUNCTION TEMPERATURE RANGE	Top	-65 to + 150	$^\circ\text{C}$
MAXIMUM STORAGE TEMPERATURE RANGE	Tstg	-65 to + 175	$^\circ\text{C}$

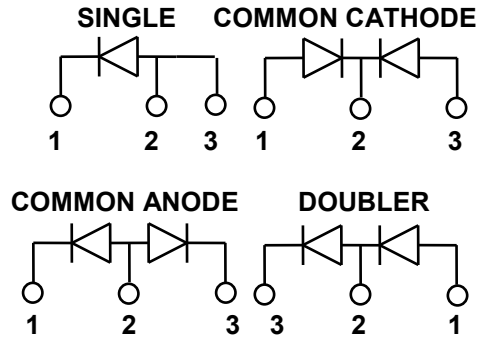
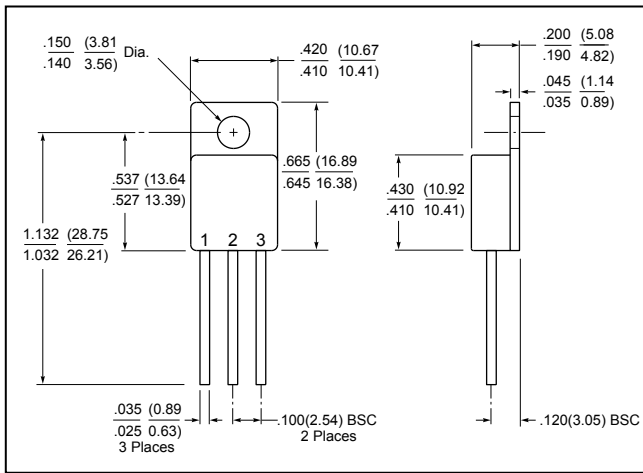
ELECTRICAL CHARACTERISTICS

CHARACTERISTIC			
MAXIMUM FORWARD VOLTAGE DROP, Pulsed ($I_f = 3.0$ Amps) (per leg) $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	V_f	1.02 0.86	Volts
MAXIMUM REVERSE CURRENT (I_r @ 200V PIV) (per leg) $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	I_r	0.07 1.6	mA
REVERSE RECOVERY TIME	t_{rr}	9.0	ns

SENSITRON

DATA SHEET 395, REV. C

Mechanical Dimensions: In Inches / mm

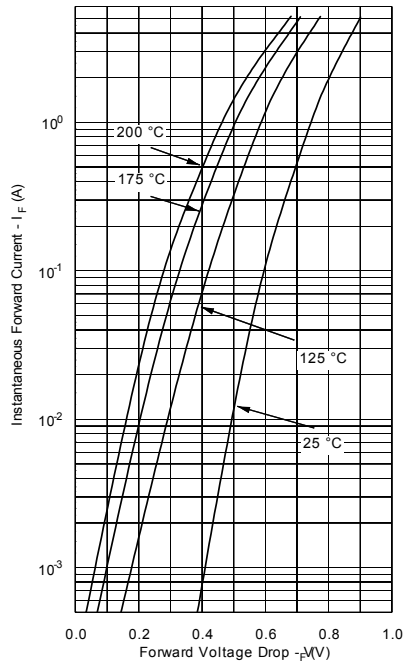


TO-257

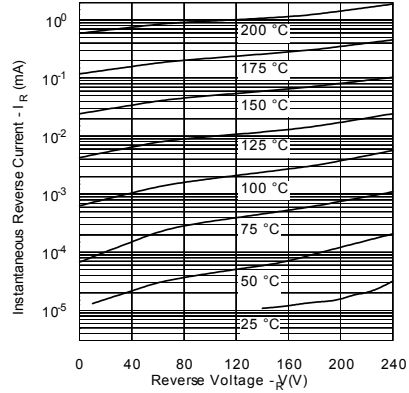
PINOUT TABLE

TYPE	PIN 1	PIN 2	PIN 3
SINGLE RECTIFIER	CATHODE	ANODE	ANODE
DUAL RECTIFIER, COMMON CATHODE (P)	ANODE 1	COMMON CATHODE	ANODE 2
DUAL RECTIFIER, COMMON ANODE (N)	CATHODE 1	COMMON ANODE	CATHODE 2
DUAL RECTIFIER, DOUBLER (D)	ANODE	ANODE/CATHODE	CATHODE

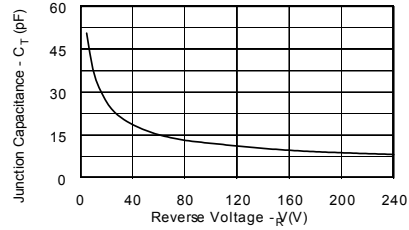
Typical Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



SENSITRON

DATA SHEET 395, REV. C

DISCLAIMER:

1- The information given herein, including the specifications and dimensions, is subject to change without prior notice to improve product characteristics. Before ordering, purchasers are advised to contact the Sensitron Semiconductor sales department for the latest version of the datasheet(s).

2- In cases where extremely high reliability is required (such as use in nuclear power control, aerospace and aviation, traffic equipment, medical equipment, and safety equipment), safety should be ensured by using semiconductor devices that feature assured safety or by means of users' fail-safe precautions or other arrangement.

3- In no event shall Sensitron Semiconductor be liable for any damages that may result from an accident or any other cause during operation of the user's units according to the datasheet(s). Sensitron Semiconductor assumes no responsibility for any intellectual property claims or any other problems that may result from applications of information, products or circuits described in the datasheets.

4- In no event shall Sensitron Semiconductor be liable for any failure in a semiconductor device or any secondary damage resulting from use at a value exceeding the absolute maximum rating.

5- No license is granted by the datasheet(s) under any patents or other rights of any third party or Sensitron Semiconductor.

6- The datasheet(s) may not be reproduced or duplicated, in any form, in whole or part, without the expressed written permission of Sensitron Semiconductor.

7- The products (technologies) described in the datasheet(s) are not to be provided to any party whose purpose in their application will hinder maintenance of international peace and safety nor are they to be applied to that purpose by their direct purchasers or any third party. When exporting these products (technologies), the necessary procedures are to be taken in accordance with related laws and regulations.