

TECHNICAL DATA
DATA SHEET 872, REV. B
Formerly SHD1262 / P / N / D

HERMETIC POWER SCHOTTKY RECTIFIER

Applications:

- Switching Power Supply • Converters • Free-Wheeling Diodes • Polarity Protection Diode

Features:

- Low Reverse Leakage Current
- Soft Reverse Recovery at Low and High Temperature
- Low Forward Voltage Drop
- Low Power Loss, High Efficiency
- High Surge Capacity
- Guard Ring for Enhanced Durability and Long Term Reliability
- Guaranteed Reverse Avalanche Characteristics

MAXIMUM RATINGS

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

RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE (PER LEG)	PIV	45	Volts
MAXIMUM DC OUTPUT CURRENT ($T_C = 100^\circ\text{C}$) (Single / Doubler)	I_o	15	Amps
MAXIMUM DC OUTPUT CURRENT ($T_C = 100^\circ\text{C}$) (Common Cathode / Common Anode)	I_o	16	Amps
PEAK SINGLE CYCLE SURGE CURRENT $t_p = 8.3$ msec. (PER LEG)	I_{FSM}	75	Amps
MAXIMUM THERMAL RESISTANCE (Single / Doubler) (Common Cathode / Common Anode)	$R_{\theta JC}$	1.45 0.72	$^\circ\text{C/W}$
MAXIMUM OPERATING AND STORAGE TEMPERATURE RANGE	T_{op}, T_{stg}	-65 to +175	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS

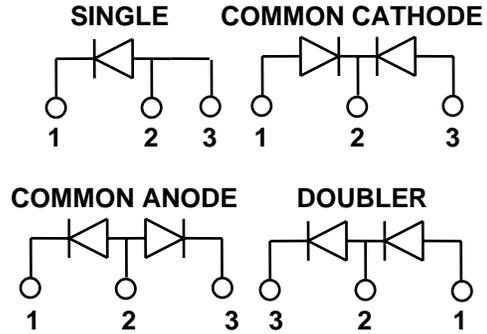
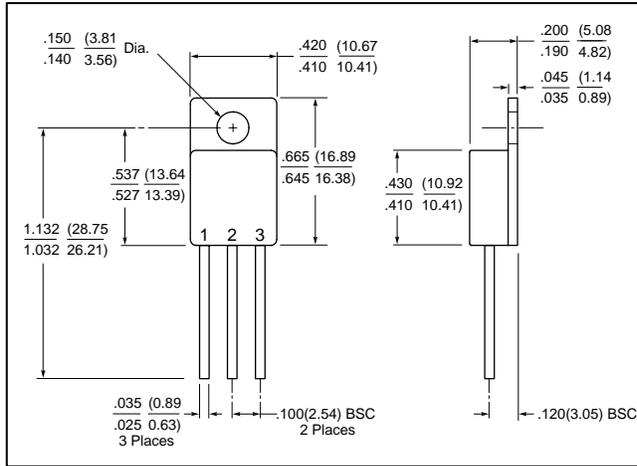
CHARACTERISTICS	SYMBOL	MAX.	UNITS
MAXIMUM FORWARD VOLTAGE DROP Common Cathode Per Leg $I_F = 15\text{A}, T_A = 25^\circ\text{C}$ $I_F = 15\text{A}, T_A = 125^\circ\text{C}$	V_f	0.78 0.71	Volts
MAXIMUM FORWARD VOLTAGE DROP Common Anode / Doubler Per Leg $I_F = 15\text{A}, T_A = 25^\circ\text{C}$ $I_F = 15\text{A}, T_A = 125^\circ\text{C}$	V_f	0.81 0.76	Volts
MAXIMUM REVERSE CURRENT I_r @ PIV (PER LEG) $T_A = 25^\circ\text{C}$ $T_A = 125^\circ\text{C}$	I_r	0.4 15	mA mA
JUNCTION CAPACITANCE $V_R = 10\text{Vdc}, f = 1\text{MHz}$ $V_{SIG} = 50\text{mV (p-p) (Max) (PER LEG)}$	C_J	800	pF

(Curves are for bare die only. SD125SB45A)

SENSITRON

TECHNICAL DATA
DATA SHEET 872, REV. B

Mechanical Dimensions: In Inches / mm

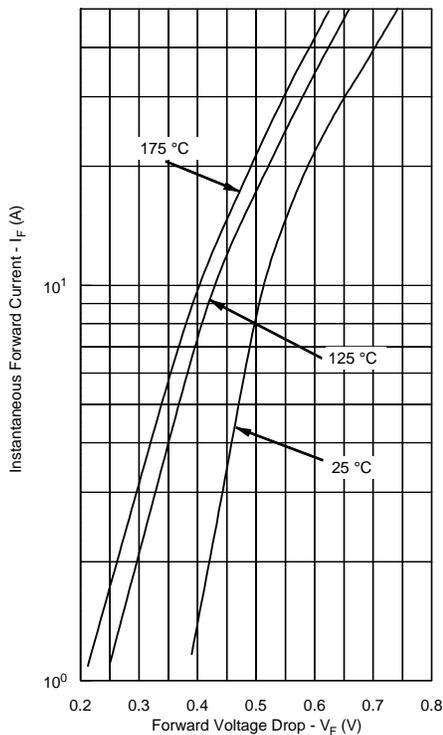


TO-257

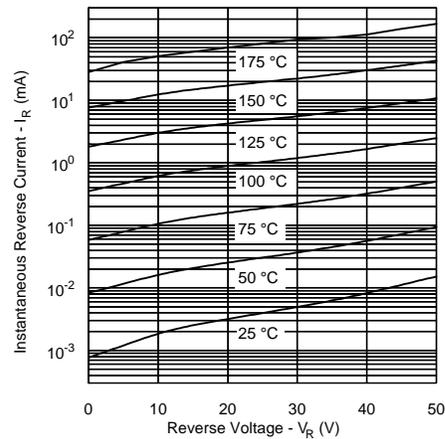
PINOUT TABLE

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

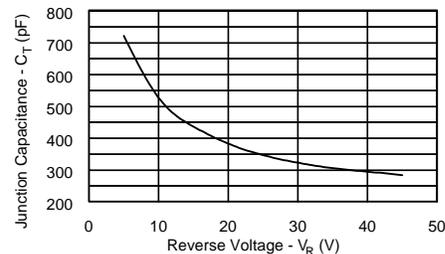
Typical Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



SENSITRON

TECHNICAL DATA

DATA SHEET 872, REV. B

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.