TECHNICAL DATA
DATA SHEET 4063, REV. –

HERMETIC POWER SCHOTTKY RECTIFIER

Low Forward Voltage Drop

Add Suffix "S" to Part Number for S-100 Screening.

Applications:

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

Features:

- **Ultra low Reverse Leakage Current**
- **Soft Reverse Recovery at Low and High Temperature**
- **High Surge Capacity**
- **Guard Ring for Enhanced Durability and Long Term Reliability**

DESCRIPTION: A 45-VOLT, 3.0 AMP DUAL POWER SCHOTTKY RECTIFIER IN A HERMETIC SHD-4/4A/4B PACKAGE.

MAXIMUM RATINGS ALL RATINGS ARE @ T_C = 25 °C UNLESS OTHERWISE SPECIFIED.

RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE	PIV	45	Volts
MAXIMUM DC OUTPUT CURRENT (With Cathode Maintained @ T_C=100 °C)	I_O	3.0	Amps
MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT (t=8.3ms, Sine)	I_{FSM}	55	Amps
MAXIMUM THERMAL RESISTANCE (Junction to Mounting Surface, Cathode)	$R_{\theta JC}$	2.2	°C/W
MAXIMUM OPERATING TEMPERATURE RANGE	Top/Tstg	-65 to + 175	°C
MAXIMUM STORAGE TEMPERATURE RANGE	Top/Tstg	-65 to + 175	°C

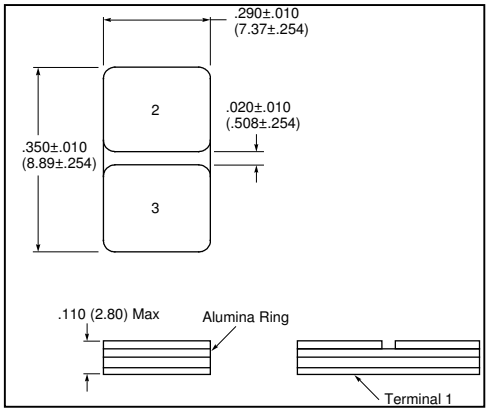
ELECTRICAL CHARACTERISTICS

CHARACTERISTIC	SYMBOL	MAX.	UNITS
MAXIMUM FORWARD VOLTAGE DROP, Pulsed (I_f = 3.0 Amps) T_J = 25 °C T_J = 125 °C	V_f	 0.64 0.57	Volts
MAXIMUM REVERSE CURRENT (I_r @ 45V PIV) T_J = 25 °C T_J = 125 °C	I_r	 0.08 3.0	mA
MAXIMUM JUNCTION CAPACITANCE (V_r =5V)	C_T	160	pF

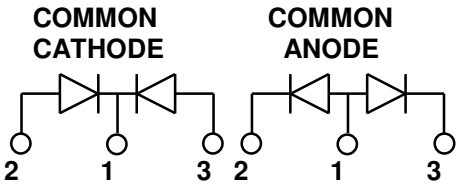
SENSITRON

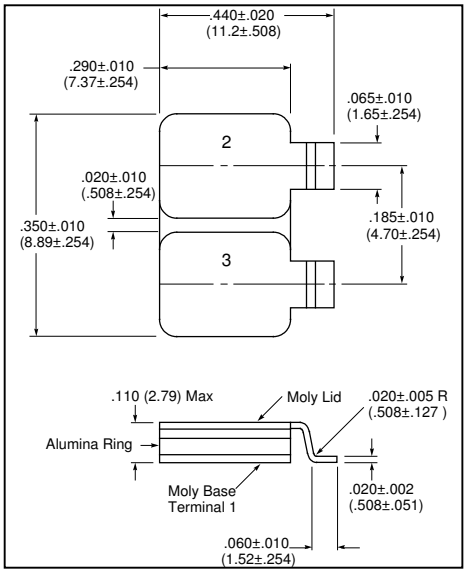
DATA SHEET 4063, REV. -

Mechanical Dimensions: In Inches / mm

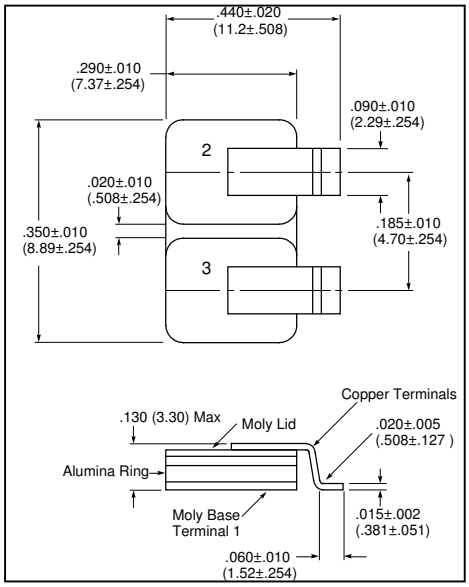


SHD-4





SHD-4A

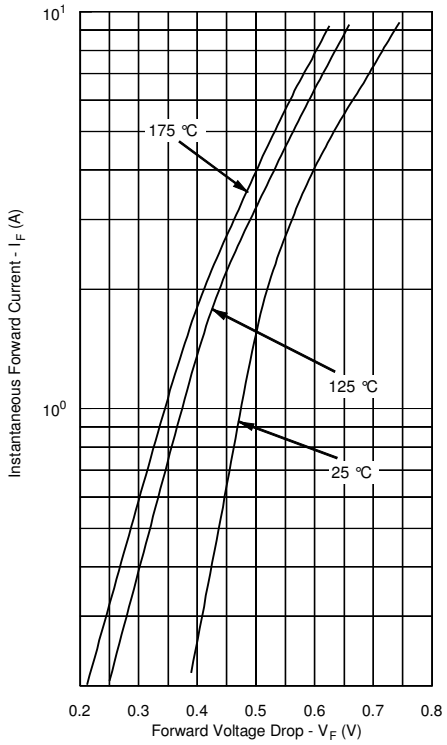


SHD-4B

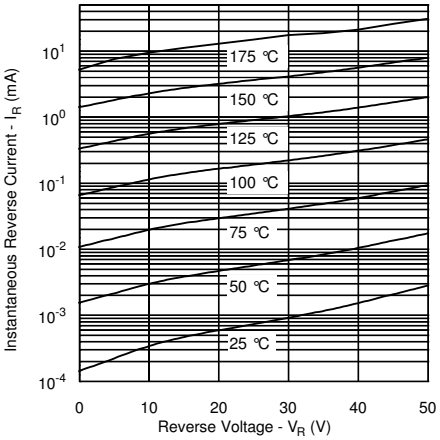
PINOUT TABLE

DEVICE TYPE	PIN 1	PIN 2	PIN 3
DUAL RECTIFIER, COMMON CATHODE (P)	COMMON CATHODE	ANODE 1	ANODE 2
DUAL RECTIFIER, COMMON ANODE (N)	COMMON ANODE	CATHODE 1	CATHODE 2

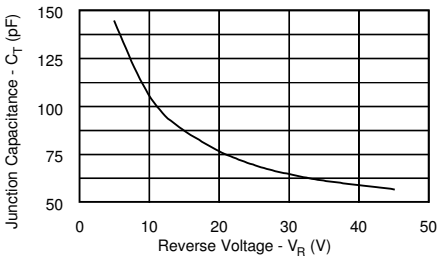
Typical Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



V_F @ 1A -55°C typical = 0.56V

SENSITRON
SEMICONDUCTOR

TECHNICAL DATA

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.

• 221 West Industry Court ▯ Deer Park, NY 11729-4681 ▯ (631) 586-7600 FAX (631) 242-9798 •
• World Wide Web - http://www.sensitron.com • E-Mail Address - sales@sensitron.com •