## SENSITRON SEMICONDUCTOR

TECHNICAL DATA DATASHEET 5324, Rev A

# **Diode Array**

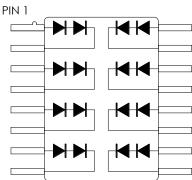
- Each leg has two 1N5806 diodes for redundancy
- Die manufactured on qualified JANS line
- Devices Are Serialized
- Built And Screened To Space Level Quality
- Space Quality Level Conformance Testing Is Performed On Each Lot

<b>MAX. RATINGS / ELECTRICAL CHARACTERISTICS</b> All rating at are $T_A = 25^{\circ}C$ unless otherwise specified			
RATING	SYMBOL	MAX	UNIT
Peak Inverse Voltage (DC)	PIV	300	V
Average DC Output Current per leg *			
$T_A = 55^{\circ}C$	Ι <sub>ο</sub>	1.0	A
$T_{A} = 100^{\circ}C$		0.75	
Peak Single Cycle Surge Current per leg **	I <sub>fsm</sub>	10	А
(Tp=8.3ms single half-Sine wave)	ISM	10	
Max. Operating Junction Temperature	TJ	-55 to +150	°C
Max. Operating Ambient Temperature	T <sub>OP</sub>	-30 to 100	°C
Storage Temperature Range	T <sub>stg</sub>	-65 to +175	°C
Maximum forward voltage @ 1A	V <sub>f</sub>	2.0	V
Maximum Instantaneous Reverse Current At	$T_A = 25^{\circ}C$	1	μΑ
Rated (PIV)	$T_{A} = 100^{\circ}C$	50	
Max. Reverse Recovery Time $I_F = 0.5 A$ , $I_R =$	t <sub>rr</sub>	45	ns
1.0A, I <sub>RR</sub> =0.25A			
Thermal Resistance Junction to Case	$\theta_{JC}$	13	°C/W

Note \* - Total current is package dissipation limited to 3A

Note \*\* - Surge rating is limited by package wirebond

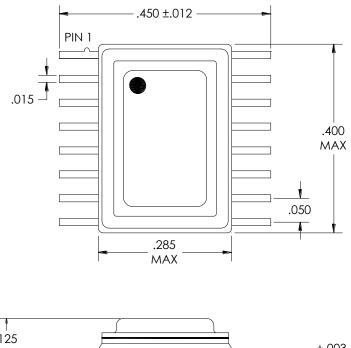
## **Electrical Schematic**



### SENSITRON SEMICONDUCTOR

#### TECHNICAL DATA DATASHEET 5324, Rev A

# **Mechanical Outline**





#### 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.