

TECHNICAL DATA
PART NUMBER: SCP-6291, Rev -

Diode Array

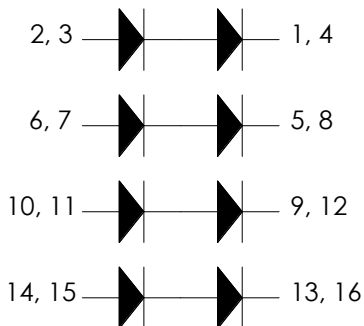
- **Devices Are Serialized**
- **Built And Screened To Space Level Quality**
- **Space Quality Level Conformance Testing Is Performed On Each Lot**
- **Two Diodes In Series Per Leg For Redundancy**

MAX. RATINGS / ELECTRICAL CHARACTERISTICS FOR EACH DIODE PAIR

All rating at are $T_A = 25^{\circ}\text{C}$ unless otherwise specified

RATING	SYMBOL	MAX	UNIT
Peak Inverse Voltage (DC)	PIV	400	V
Average DC Output Current $T_A = 55^{\circ}\text{C}$ $T_A = 100^{\circ}\text{C}$	I_O	1.0 0.75	A
Peak Single Cycle Surge Current ($T_p=8.3\text{ms}$ single half-Sine wave superimposed on rated load)	I_{fsm}	10	A
Max. Operating Junction Temperature	T_J	-55 to +150	$^{\circ}\text{C}$
Max. Operating Ambient Temperature	T_{OP}	-30 to 100	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	-65 to +175	$^{\circ}\text{C}$
Maximum forward voltage @3.0A	V_f	3.2	V
Maximum Instantaneous Reverse Current At Rated (PIV)	$T_A = 25^{\circ}\text{C}$ $T_A = 100^{\circ}\text{C}$	0.5 25	μA
Max. Reverse Recovery Time $I_F = 0.5\text{ A}$, $I_R = 1.0\text{A}$, $I_{RR} = 0.25\text{A}$	t_{rr}	150	ns
Thermal Resistance Junction to Case	θ_{JC}	21	$^{\circ}\text{C/W}$

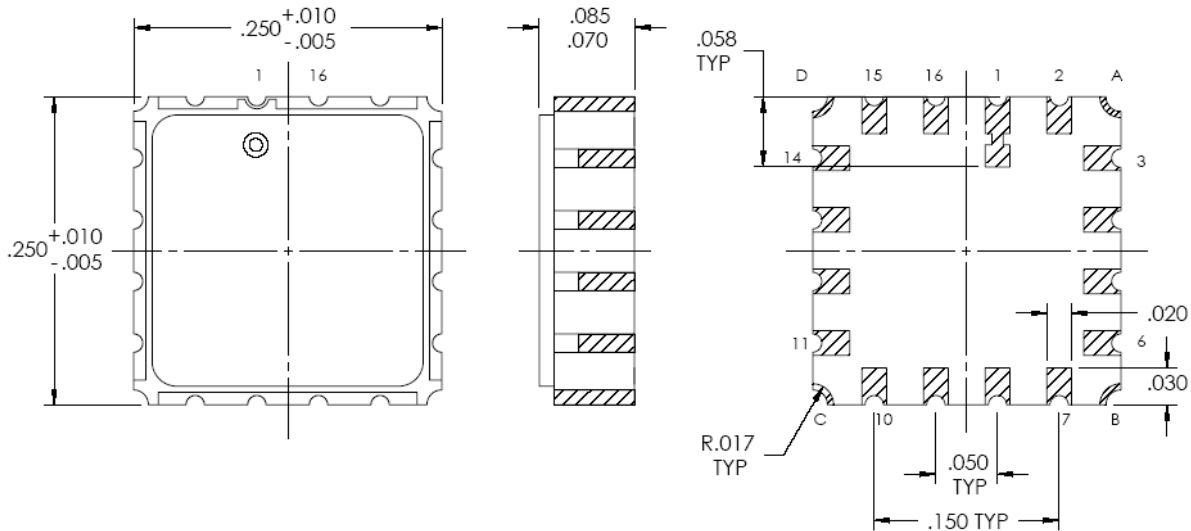
Electrical Schematic



A, B, C, D IS CONNECTED TO LID

TECHNICAL DATA
PART NUMBER: SCP-6291, Rev -

Mechanical Outline



-- Contact Sensitron for your Space Level Diode Arrays requirements --

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.