### SENSITRON SEMICONDUCTOR

SDA1007 SDA1007S SDA1007SS

TECHNICAL DATA DATASHEET 5435, Rev B

# **Diode Array**

- Devices Are Serialized
- Eight 1N5615 diodes in surface mount package
- Die manufactured on qualified JANS line
- Built and screened to space level quality (SDA1007SS)
- Quality Conformance Inspection (QCI) in accordance with MIL-PRF-38534 is performed on each lot (SDA1007SS)
- Add suffix "S" for screening per MIL-PRF-38534, Class H (SDA1007S)
- Add suffix "SS" for Space Level Screening per MIL-PRF-38534, Class K (SDA1007SS)

#### **MAX. RATINGS / ELECTRICAL CHARACTERISTICS FOR EACH DIODE PAIR** All rating at are $T_{4} = 25^{\circ}$ C unless otherwise specified

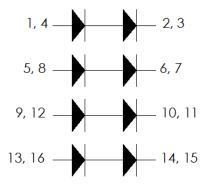
RATING	SYMBOL	MAX	UNIT
Peak Inverse Voltage (DC)	PIV	400	V
Average DC Output Current			
$T_A = 55^{\circ}C$	Ι <sub>Ο</sub>	1.0	А
$T_A = 100^{\circ}C$		0.75	
Peak Single Cycle Surge Current			
(Tp=8.3ms single half-Sine wave	I <sub>fsm</sub>	10	A
superimposed on rated load)			
Max. Operating Junction 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	Oo
Maximum forward voltage @3.0A	V <sub>f</sub>	3.2	V
Maximum Instantaneous Reverse	$T_A = 25^{\circ}C$	0.5	A
Current At Rated (PIV)	$T_{A} = 100^{\circ}C$	25	μΑ
Max. Reverse Recovery Time $I_F = 0.5 A$ ,	+	150	20
I <sub>R</sub> = 1.0A, I <sub>RR</sub> =0.25A	t <sub>rr</sub>	150	ns
Thermal Resistance Junction to Case	$\theta_{JC}$	21	°C/W

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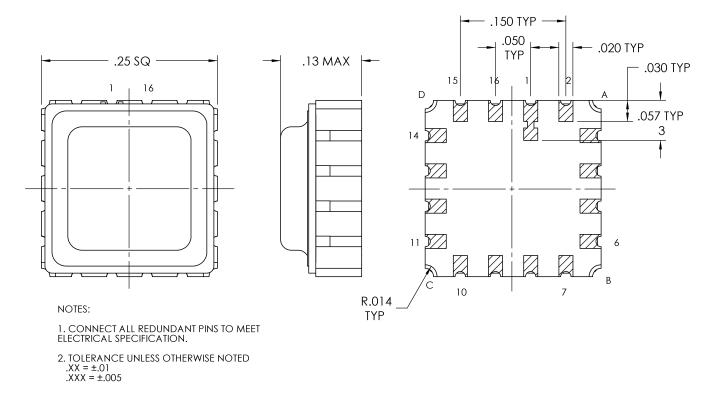
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### **Electrical Schematic**



A, B, C, D IS CONNECTED TO LID

## **Mechanical Outline**



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#### PART ORDERING INFORMATION

Part Number	Sensitron Screening Level	Screened In Accordance to:
SDA1007	-	-
SDA1007S	S	MIL-PRF-38534, Class H
SDA1007SS	SS	MIL-PRF-38534, Class K

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