TECHNICAL DATA DATASHEET 5288, Rev -

# **Diode Array**

- Devices Are Serialized
- Built And Screened To Space Level Quality
- Space Quality Level Conformance Testing Is Performed On Each Lot
- SDA1002 internal diodes are 1N6638 (MIL-PRF-19500/578L)
- SDA1003 internal diodes are 1N6642 (MIL-PRF-19500/578L)

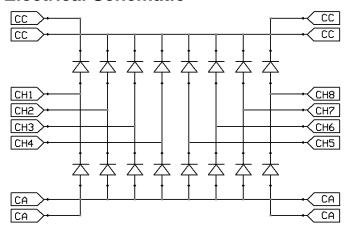
## MAX. RATINGS / ELECTRICAL CHARACTERISTICS FOR EACH DIODE

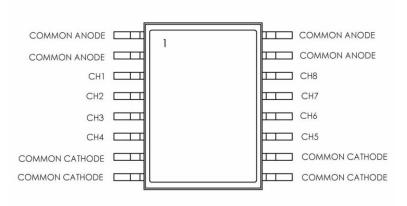
All rating at are  $T_A = 25^{\circ}$ C unless otherwise specified

RATING	SYMBOL	MAX	UNIT
Peak Inverse Voltage (DC) SDA1002 SDA1003	PIV	150 100	V
Average DC Output Current $T_A = 55^{\circ}C$ $T_A = 100^{\circ}C$	lo	0.30 0.16	А
Peak Single Cycle Surge Current (Tp=8.3ms single half-Sine wave)	I <sub>fsm</sub>	2.5	А
Max. Operating Junction Temperature	$T_J$	-55 to +150	°C
Max. Operating Ambient Temperature	$T_OP$	-30 to 100	°C
Storage Temperature Range	T <sub>stg</sub>	-65 to +175	°C
Maximum forward voltage SDA1002 @ 200mA SDA1003 @ 100mA	V <sub>f</sub>	1.2 1.3	V
Maximum Instantaneous Reverse Current At Rated (PIV) SDA1002, $T_A$ = 25°C SDA1002, $T_A$ = 100°C SDA1003, $T_A$ = 25°C SDA1003, $T_A$ = 100°C	I <sub>R</sub>	35 500 25 500	μА
Max. Reverse Recovery Time I <sub>F</sub> =10mA, I <sub>RM</sub> = 10mA	t <sub>rr</sub>	5	ns
Max Capacitance, f= 1MHz, $V_{AC}$ = 50mV $V_{R}$ = 1.5V	Ст	3	pF
Thermal Resistance Junction to Case	$R\theta_{JC}$	250	°C/W

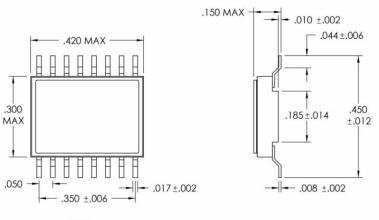
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## **Electrical Schematic**





#### **Mechanical Outline**



- NOTES:
- 1. TOLERANCE UNLESS OTHERWISE NOTED = ±.005
- 2. ALL DIMENSIONS PRIOR TO SOLDER DIPPING
- 3. LID AND ALL FLOATING METAL CONNECTED TO COMMON ANODE

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