

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)**

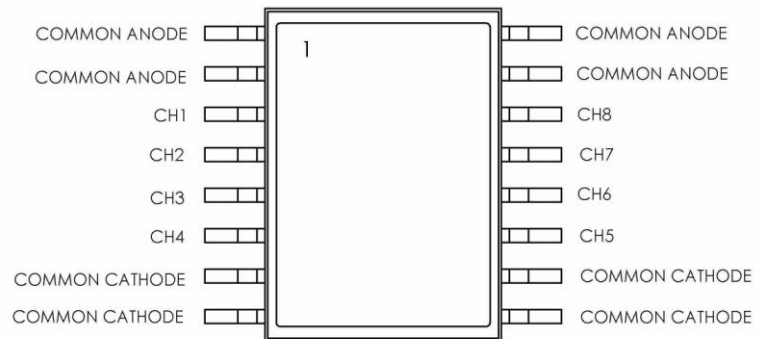
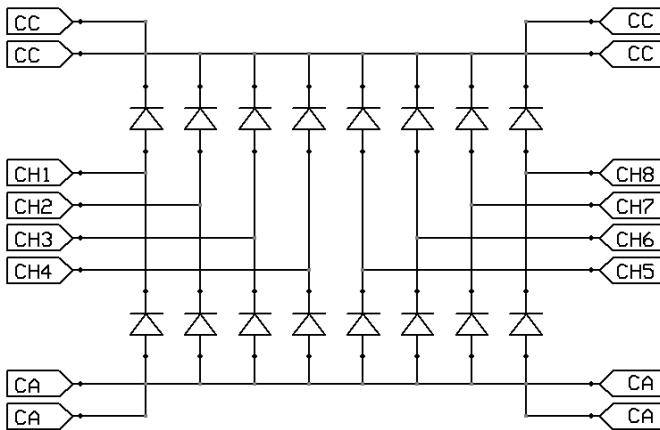
### MAX. RATINGS / ELECTRICAL CHARACTERISTICS FOR EACH DIODE

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

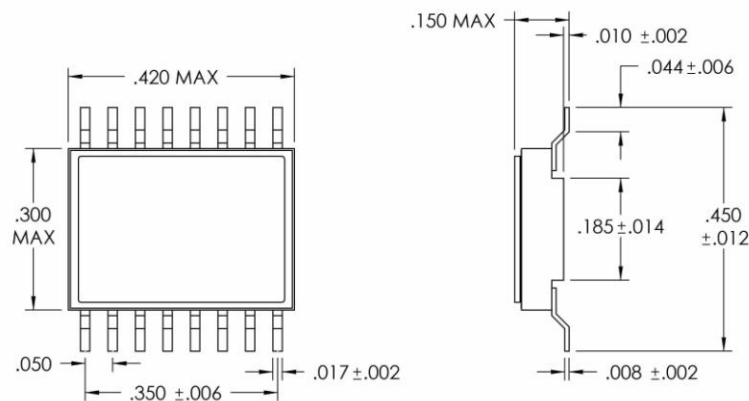
RATING	SYMBOL	MAX	UNIT
Peak Inverse Voltage (DC) SDA1002 SDA1003	PIV	150 100	V
Average DC Output Current $T_A = 55^{\circ}\text{C}$ $T_A = 100^{\circ}\text{C}$	$I_O$	0.30 0.16	A
Peak Single Cycle Surge Current ( $T_p=8.3\text{ms}$ single half-Sine wave)	$I_{fsm}$	2.5	A
Max. Operating Junction Temperature	$T_J$	-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 SDA1002 @ 200mA SDA1003 @ 100mA	$V_f$	1.2 1.3	V
Maximum Instantaneous Reverse Current At Rated (PIV) SDA1002, $T_A = 25^{\circ}\text{C}$ SDA1002, $T_A = 100^{\circ}\text{C}$ SDA1003, $T_A = 25^{\circ}\text{C}$ SDA1003, $T_A = 100^{\circ}\text{C}$	$I_R$	35 500 25 500	$\mu\text{A}$
Max. Reverse Recovery Time $I_F = 10\text{mA}$ , $I_{RM} = 10\text{mA}$	$t_{rr}$	5	ns
Max Capacitance, $f = 1\text{MHz}$ , $V_{AC} = 50\text{mV}$ $V_R = 1.5\text{V}$	$C_T$	3	pF
Thermal Resistance Junction to Case	$R_{\theta JC}$	250	$^{\circ}\text{C/W}$

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**Electrical Schematic**



**Mechanical Outline**



NOTES:

1. TOLERANCE UNLESS OTHERWISE NOTED =  $\pm 0.005$
2. ALL DIMENSIONS PRIOR TO SOLDER DIPPING
3. LID AND ALL FLOATING METAL CONNECTED TO COMMON ANODE

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