## SENSITRON SEMICONDUCTOR

#### TECHNICAL DATA DATA SHEET 4207, REV. -

# **Isolated Diode Array**

## **Applications:**

- High Frequency Data Lines
- RS-323 & RS-432 Networks
- LAN, Ethernet, I/O Ports
- IEC61000-4 compatible for ESD / EFT / Surge

## Features:

- Protects up to 8 I/O Ports
- Isolated diodes eliminate crosstalk
- High Density Packaging
- High Breakdown Voltage; High Speed Switching (< 10 nsec)
- Low Capacitance; Low Leakage
- Hermetic Ceramic package
- TX, TXV, S level screening available

## **Maximum Ratings:**

## All ratings are at 25 °C unless otherwise noted

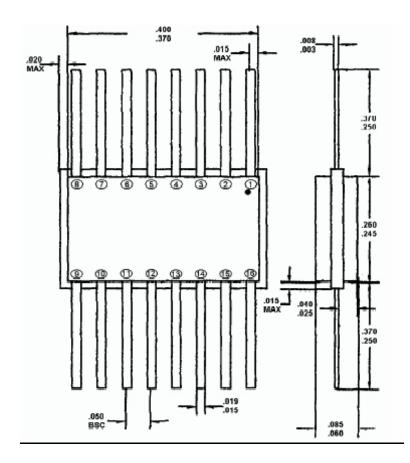
Characteristics	Symbol	Condition	Max.	Units
Reverse Breakdown Voltage	V <sub>BR</sub>	Per diode, Pulsed @ $I_R = 5 \mu A$	75	Vdc
		P <sub>w</sub> =300 μs +/- 50μs; duty <u>&lt;</u> 2%		
Continuous Forward Current	I <sub>F</sub>	Per diode, Derate at 2.4 mA/°C	300	mA
		above 25 °C		
Peak Surge Current	I <sub>FSM</sub>	Per diode, tp=8.3 msec	500	mA
Power Dissipation	PD	Per Junction	400	mW
Power Dissipation	P <sub>D</sub>	Per Package, Derate at	500	mW
		4 mW/°C above 25 °C		
Max. Operating Temperature	$T_{J}$	-	-65 to +150	°C
Max. Storage Temperature	T <sub>stg</sub>	-	-65 to +200	°C

## **Electrical Characteristics:**

All ratings are per diode and at 25 °C unless otherwise noted

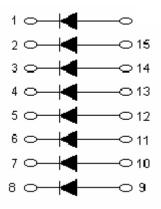
An ratings are per diode and at 23° 0 diffess otherwise noted						
Characteristics	Symbol	Condition	Max.	Units		
Max. Forward Voltage Drop	$V_{F1}$	$I_F$ = 100mA, Pulsed: P <sub>w</sub> =300µs +/- 50µs; duty cycle $\leq 2\%$	1.00	V		
Max. Reverse Current	I <sub>R1</sub>	$@V_{R} = 40V$	0.1	μA		
	I <sub>R2</sub>	@V <sub>R</sub> = 20V	25	nA		
Max. Capacitance (Pin to Pin)	C <sub>T</sub>	@V <sub>R</sub> = 0V, F=1MHz	4.0	pF		
Max. Forward Recovery Time	T <sub>FR</sub>	I <sub>F</sub> = 100mA	15	ns		
Max. Reverse Recovery Time	T <sub>RR</sub>	$I_f = I_R = 10$ mA, $i_{RR} = 1$ mA, R <sub>L</sub> = 100 ohms	10	ns		
Max. Forward Voltage Match	$V_{F5}$	I <sub>f</sub> = 10mA	5	mV		

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## Mechanical Dimensions: in inches / mm

**Electrical Schematic** 



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