

TECHNICAL DATA DATA SHEET 5152, 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

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|---|------------------|--|-------------|-------|--|--|--|
| Characteristics                                 | Symbol           | Condition                                      | Max.        | Units |  |  |  |
| Reverse Breakdown Voltage                       | $V_{BR}$         | Per diode @ 10 µA                              | 60          | Vdc   |  |  |  |
| Continuous Forward Current                      | Io               | Per diode, Derate at 2.4 mA/°C above +25 °C    | 300         | mA    |  |  |  |
| Peak Surge Current                              | I <sub>FSM</sub> | Per diode, $t_P = 8.3$ msec                    | 500         | mA    |  |  |  |
| Power Dissipation                               | $P_{D}$          | Per Junction, Derate at 4.0 mW/°C above +25 °C | 400         | mW    |  |  |  |
| Power Dissipation                               | $P_D$            | Per Package, Derate at 4 mW/°C above 25 °C     | 500         | mW    |  |  |  |
| Max. Operating Temperature                      | TJ               | -  | -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

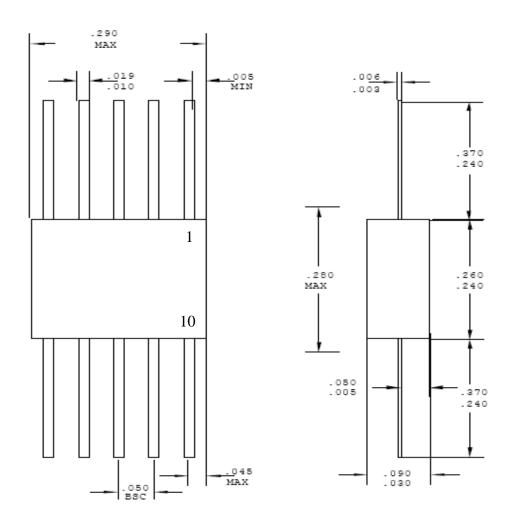
| Characteristics                  | Symbol          | Condition  |              | Max. | Units |
|----------------------------------|-----------------|--|--------------|------|-------|
| Max. Forward Voltage Drop        | $V_{F1}$        | Pulsed<br>PW = 300 μs  | If = 100mAdc | 1.00 | V     |
|                                  | V <sub>F2</sub> |  | If = 500mAdc | 1.50 | V     |
| Max. Reverse Current             | I <sub>R1</sub> | @V <sub>R</sub> = 40V  |              | 0.1  | μA    |
| Max. Capacitance<br>(Pin to Pin) | Ст              | @V <sub>R</sub> = 0V, f =1MHz  |              | 8    | pF    |
| Max. Forward Recovery Time       | $T_{FR}$        | I <sub>F</sub> = 500mA   |              | 40   | ns    |
| Max. Reverse Recovery Time       | $T_RR$          | $I_F = I_R = 200 \text{ mA dc}, I_{RR} = 20 \text{ mA dc}, R_L = 100 \text{ ohms}$ |              | 20   | ns    |

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## Mechanical Dimensions: in inches / mm



#### **SENSITRON**

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