

TECHNICAL DATA
DATA SHEET 4251, 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

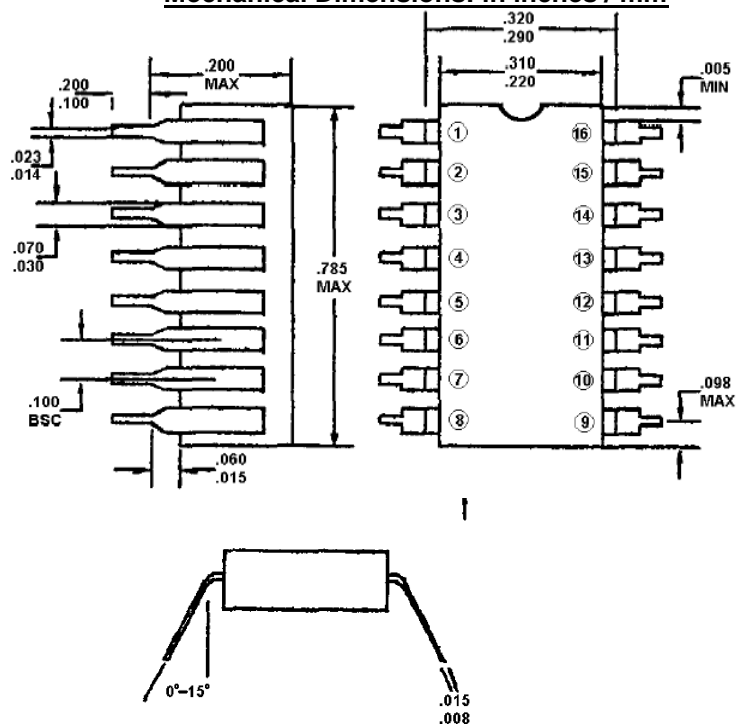
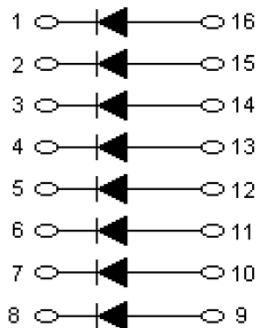
Characteristics	Symbol	Condition	Max.	Units
Reverse Breakdown Voltage	V_{BR}	Per diode, Pulsed: PW = 100ms max.; duty cycle < 20%	75	Vdc
Continuous Forward Current	I_O	Per diode, Derate at 2.4mA/°C above +25 °C	300	mA
Peak Surge Current	I_{FSM}	Per diode, tp= 1/120 s	500	mA
Power Dissipation	P_D	Per Junction, Derate at 4.0mW/°C above +25 °C	400	mW
Power Dissipation	P_D	Per Package, Derate at 4.8 mW/°C above 25 °C	600	mW
Max. Operating Temperature	T_J	-	-65 to +150	°C
Max. Storage Temperature	T_{stg}	-	-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: PW = 300us +/- 50us, duty cycle < 2%, 90us after leading edge, $I_f = 100\text{mAdc}$	1.00	V
Max Forward Voltage Match	V_{F5}	$I_f = 10\text{mAdc}$	5	mV
Max. Reverse Current	I_{R1}	@ $V_R = 40\text{V}$	0.1	µA
	I_{R2}	@ $V_R = 20\text{V}$	25	nA
Max. Capacitance (Pin to Pin)	C_T	@ $V_R = 0\text{V}$, F=1MHz	4.0	pF
Max. Forward Recovery Time	T_{FR}	$I_f = 100\text{mA}$	15	ns
Max. Reverse Recovery Time	T_{RR}	$I_f = I_R = 100\text{mAdc}$, irr = 1mAdc, RL = 100 ohms	10	ns

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Mechanical Dimensions: in inches / mm

Electrical Schematic

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