

TECHNICAL DATA
DATA SHEET 5151, 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

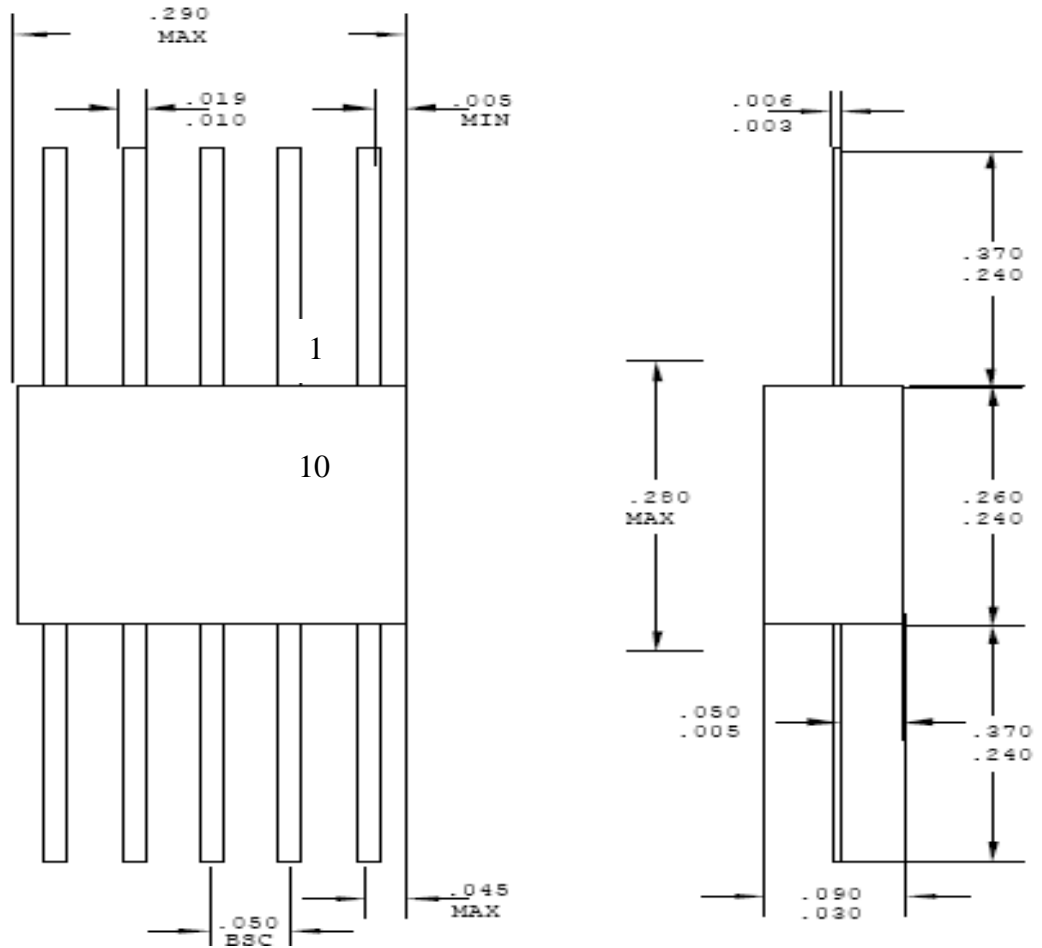
Characteristics	Symbol	Condition	Max.	Units
Reverse Breakdown Voltage	V_{BR}	Per diode @ 10 μ A	60	Vdc
Continuous Forward Current	I_O	Per diode, Derate at 2.4 mA/°C above +25 °C	300	mA
Peak Surge Current	I_{FSM}	Per diode, $t_p = 8.3$ msec	500	mA
Power Dissipation	P_D	Per Junction, Derate at 4.0 mW/°C above +25 °C	400	mW
Power Dissipation	P_D	Per Package, Derate at 4 mW/°C above 25 °C	500	mW
Max. Operating Temperature	T_J	-	-65 to +150	°C
Max. Storage Temperature	T_{stg}	-	-65 to +200	°C

Electrical Characteristics:

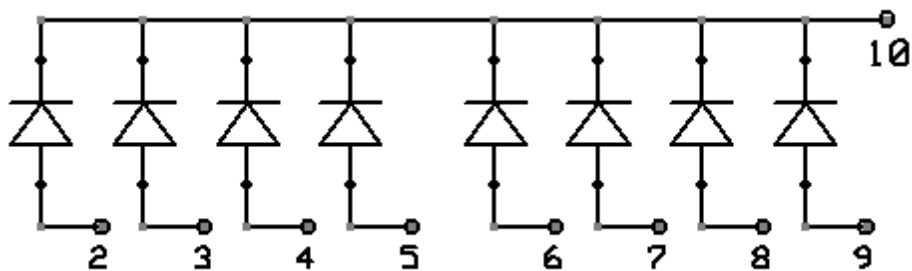
All ratings are per diode and at 25 °C unless otherwise noted

Characteristics	Symbol	Condition	Max.	Units	
Max. Forward Voltage Drop	V_{F1}	Pulsed PW = 300 μ s	$I_f = 100$ mA dc	1.00	V
	V_{F2}		$I_f = 500$ mA dc	1.50	V
Max. Reverse Current	I_{R1}	@ $V_R = 40$ V	0.1	μ A	
Max. Capacitance (Pin to Pin)	C_T	@ $V_R = 0$ V, $f = 1$ MHz	4	pF	
Max. Forward Recovery Time	T_{FR}	$I_F = 500$ mA	40	ns	
Max. Reverse Recovery Time	T_{RR}	$I_F = I_R = 200$ mA dc, $I_{RR} = 20$ mA dc, $R_L = 100$ ohms	20	ns	

Mechanical Dimensions: in inches / mm



Electrical Schematic



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