

Schottky Diode Network

FEATURES

- 36 Schottky diodes integrated in single package providing fast turn-on and reverse recovery characteristics.
- Effective termination for controlled and uncontrolled line impedances.
- Available in QSOP Package, thus reducing board space and cost.

DESCRIPTION

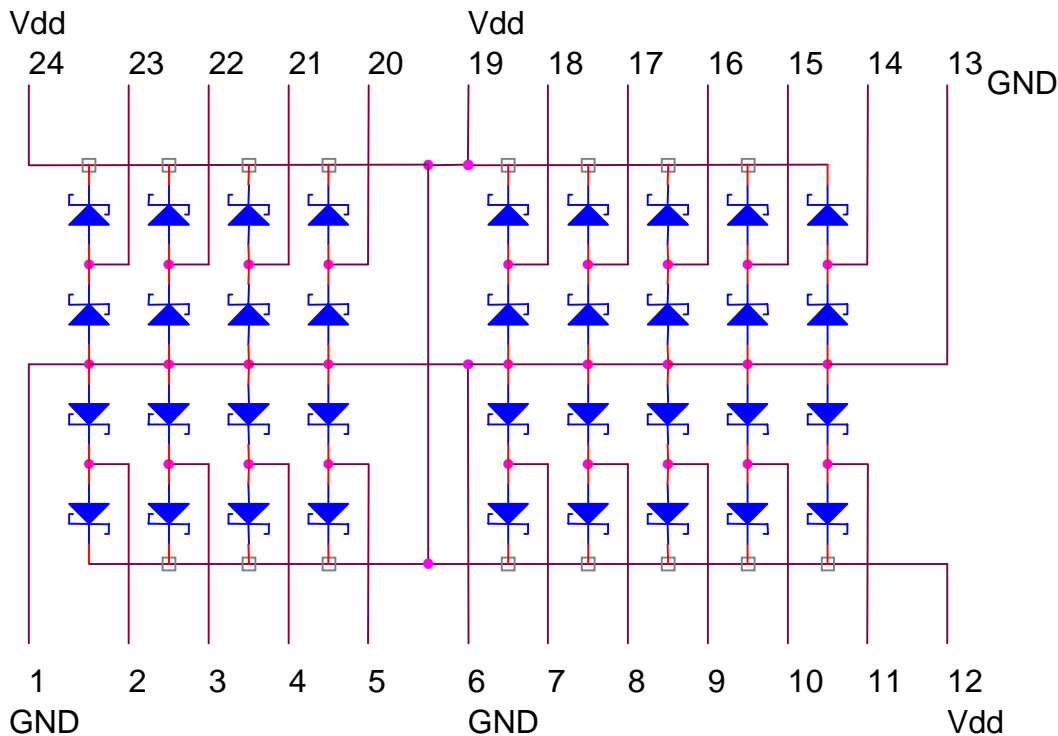
The EiSDN001 is an integrated Schottky diode network which is a low-power and low-noise solution for reducing reflections on high speed data lines. This highly integrated monolithic Schottky diode network provides supports upto 18 termination lines per package with simultaneous clamping both to ground and the V_{DD} rail. These highly integrated networks offer

the most effective termination for all high speed data lines. These products are manufactured using gold interconnect metalization to achieve superior performance and reliability. The EiSDN001 is available in QSOP package to provide reduction in board-space and a low-cost termination solution.

APPLICATIONS:

- Reduce overshoots and undershoot for all high speed data lines.
- Also suitable for high speed memory bus applications.

Schematic Configuration:



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Specifications:

PARAMETER	DESIGNATION	RATING
Supply Voltage	V_{DD}	-0.3 to +7.0 V
Channel Input Voltage	V_{Signal}	-0.3V to +($V_{DD} + 0.3$)
Channel Clamp Current	I_{Clamp}	+/- 50 mA
Operating Temperature	T	0° C to 70° C
Storage Temperature	T_s	-65° C to +150° C
Power Dissipation/ Channel	P_d	100mW
Package Power Rating (QSOP Package @ 70° C	P_{max}	1.00 Watt (max)

Diode Characteristics at 0° C to 70° C:

Parameter	Conditions	Min	Typ	Max
Diode Forward Voltage	@ $I_f = 10$ mA		0.5 V	0.65 V
	@ $I_f = 50$ mA		0.8 V	1.0 V
Channel Leakage	$0 < V_{in} < V_{DD}$		0.1 μ A	μ A5
Input Capacitance	f = 1 MHz, $V_{in} = 2.5$ V $V_{DD} = 5$ V, $T_a = 25^\circ$ C		5pF	

Ordering Information:

Pkg	Part Number
24-SOIC	EiSDN001CS
24-QSOP	EiSDN001CQ