Schottky Diode Network

Features

- Highly effective termination on controlled and uncontrolled line impedances
- 18 terminating lines/package
- Saves board space and component cost

Applications

- Reduce overshoots and undershoots on high speed data lines

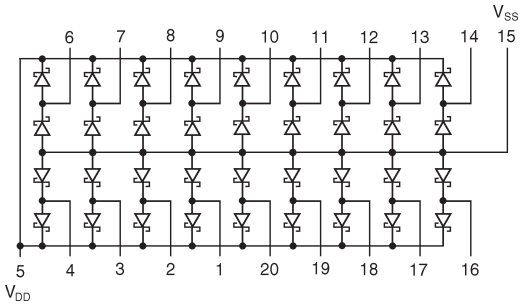
Product Description

Reflections on high speed data lines lead to undershoot and overshoot disturbances which may result in improper system operation. Resistors, when used to terminate these high speed data lines, increase power consumption and degrade the output high level resulting in reduced noise immunity. For these reasons, Schottky diodes are often recommended for termination.

CAMD's PDN001 Schottky Diode minimizes the overshoots and undershoots and provides effective termination of high speed data lines under variable loading conditions.

Note: The PDN001 has been improved and is available as an upgraded device — PACDN005. The PACDN005 is recommended for all new designs.

SCHEMATIC CONFIGURATION



STANDARD PART ORDERING INFORMATION

Package		Ordering Part Number		
Pins	**Style**	**Tubes**	**Tape & Reel**	**Part Marking**
20	QSOP	PDN001/T	PDN001/R	PDN001

STANDARD SPECIFICATIONS

Parameter	Symbol	Rating
Operating Temperature Range		0°C to 70°C
Diode Forward Voltage		
@IF = 1mA		0.45V (typical), 0.55V (Max)
@IF = 12mA		1V
Supply Voltage	$V_{DD} - V_{SS}$	0.3V to 7V
Channel Clamp Current	I_{CLAMP}	±5mA
Power Dissipation, Max, TA = 25°C		900mW
Channel Leakage, $0 \le V_{IN} \le V_{DD}$		100nA
Storage Temperature		–65°C to 150°C
Package Power Rating		1W, Max

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