



## 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.

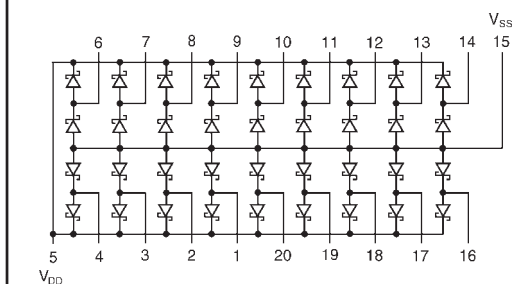
CMD's PDN001 Schottky Diode minimizes the overshoots and undershoots and provides effective termination of high speed data lines under variable loading conditions.

Note: The PDN001 has been improved and is available as an upgraded device -- PAC DN005. The PAC DN005 is recommended for all new designs.

### STANDARD SPECIFICATIONS

Operating Temperature Range	0°C to 70°C
Diode Forward Voltage @ $I_F = 1\text{mA}$	0.55V (max), 0.45V (typical)
	@ $I_F = 12\text{mA}$ 1 Volt
Supply Voltage	$V_{DD} - V_{SS}$ 0.3V to +7V
Channel Clamp Current	$I_{clamp}$ $\pm 50\text{mA}$
Power Dissipation, max., $T_A = 25^\circ\text{C}$	900mW
Channel Leakage, $0 \leq V_{in} \leq V_{DD}$	100nA
Storage Temperature	-65°C to +150°C
Package Power Rating	1.00W, max.

### SCHEMATIC CONFIGURATION



### STANDARD PART ORDERING INFORMATION

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