## Schottky Diode Termination Network

## QDN001 Series

- Suitable for high speed memory bus applications
- RoHS compliant and Sn/Pb terminations available
- Reduces overshoot and undershoot for all data line types
- Effective termination for both controlled/uncontrolled line terminations
- 36 Schottky diodes integrated in a QSOP package for fast turn-on/reverse recovery characteristics


## Electrical Data

| Parameter | Min Value | Max Value |
| :---: | :---: | :---: |
| Operating Voltage ( $\mathrm{V}_{\mathrm{DD}}$ ) | -0.3V | 7.0V |
| Diode Forward Voltage <br> Forward Current $=10 \mathrm{~mA}$ <br> Forward Current $=50 \mathrm{~mA}$ | N/A | $\begin{aligned} & 0.5 \mathrm{~V} \\ & 0.8 \mathrm{~V} \end{aligned}$ |
| Channel Input Capacitance $\left(\mathrm{V}_{\mathrm{IN}}=2.5 \mathrm{~V}, \mathrm{~V}_{\mathrm{DD}}=5 \mathrm{~V}, \mathrm{~T}=25^{\circ} \mathrm{C}\right)$ | N/A | 5 pF |
| ESD Protection <br> MIL-STD-883 Method 3015 | N/A | $\pm 4 \mathrm{KV}$ |
| Channel Leakage Current $\left(T=25^{\circ} \mathrm{C}\right)\left(0 \mathrm{~V}_{\mathrm{IN}} \mathrm{V}_{\mathrm{DD}}\right)$ | N/A | $0.1 \mu \mathrm{~A}$ |
| Channel Clamp Current | N/A | $\pm 50 \mathrm{~mA}$ |
| Package Power Rating | N/A | 1.0W |
| Operating Temperature Range | $0^{\circ} \mathrm{C}$ | $+70^{\circ} \mathrm{C}$ |
| Storage Temperature Range | $-65^{\circ} \mathrm{C}$ | $+150^{\circ} \mathrm{C}$ |

## Schematic Data



## Physical Data




LEAD CO-PLANARITY 0.004" MAX


Note: Lead Coplanarity 0.004" Max.

Note: All dimesions exclude mold flash and end flash which shall not exceed 0.006" per side. Drawing proportions not to scale

## Ordering Data



Model. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
QDN001LF = 24-pin, high speed, 18-line termination network with $100 \%$ matte tin, Pb -free terminations
QDN001 = 24-pin, high speed, 18 -line termination network with $\mathrm{Sn} / \mathrm{Pb}$ terminations

## Packaging

Specify tubes or tape \& reel.

For additional information or to discuss your specific requirements,
please contact our Applications Team using the contact details below.

