

DN5 SERIES

Diode Terminator

Low parasitics, fast reverse recovery time, and a low forward voltage characteristic make KOA's DN5 Schottky diode network an excellent bus terminator for very high speed I/O. This network offers the designer a single package solution to address overshoot and undershoot problems, ringing, and bus reflections that are common to high speed I/O. Today these networks are commonly used to optimize bus performance in high end computers, external data storage peripherals, LAN networks, and many other applications where high transfer rates are necessary.

Features

- Negligible reverse recovery time
- Low capacitance
- Low forward voltage drop
- 18-channel terminator in a single package
- Resolved bus impedance mismatch

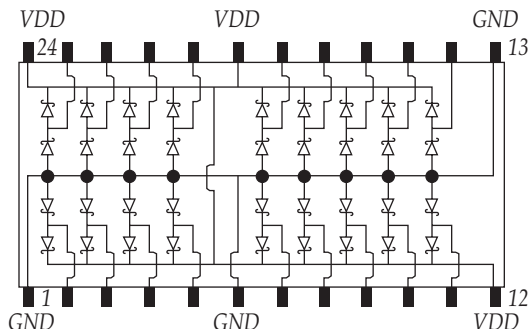
Applications

- Termination of data/control signals @ ≥ 66 MHz
- Dynamic RAM bus termination
- RISC architecture

Electrical Characteristics

- Supply Voltage (VDD) -3V to +7V
- Channel Clamp Current ± 50 mA
- Package Power Rating @ 70°C 1W
- Operating Temperature 0°C to +70°C
- Storage Temperature -65°C to +150°C
- Forward Voltage (to VDD @ 50ma) 0.55V to 0.90V
- Forward Voltage (to GND @ 50ma) 0.55V to 0.85V
- Reverse Recovery Time (@ 50ma) <400ps
- Channel Leakage ($0 < V_{in} < V_{DD}$) 0.1 μ A to 5 μ A
- Input Capacitance ($I_f = 1$ MHz, $V_{in} = 2.5v$) 5pF
- ESD Protection 4KV min.

Circuit Schematic



Available Pin Configurations

n = Number of Pins (24)
 See physical configurations on page G-3 for available pin/package configurations.

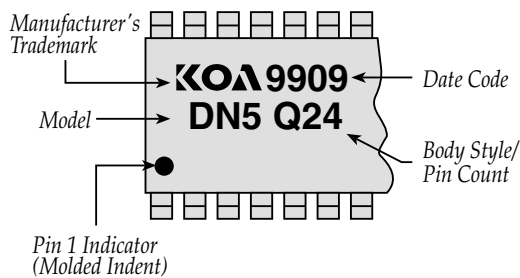
Physical Configurations

<i>Body Style</i>	<i>Resistance Pin Count</i>
QSOP	24
TSSOP	24

Mechanical Characteristics

<i>Item</i>	<i>Material</i>
Substrate	Silicon
Resistor material	TaN
Passivation	Glass

Part Marking



Ordering Information

DN5	Q	24	B
<i>Circuit Type</i>	<i>Body Style</i>	<i>Number of Pins</i>	<i>Packaging</i>
	Q = QSOP T = TSSOP	24 See above table	B = 13" Embossed Plastic Tape & Reel, see Packaging Section for details