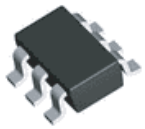
# Diode Network / ESD Suppressor

COMCHIP
SMD DIODE SPECIALIST

# CDA3S06-G (RoHS Device)

**Voltage:10 Volts**
**Current: 50 mA**



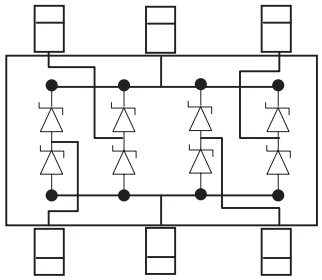
**Package (SOT23-6)**
Marking " DN3 "

## Feature

This diode network is designed to provide four channels for active termination of high-speed data signals to eliminate signal undershoot and overshoot. The network has the added benefit of acting to suppress any ESD voltage events by shunting the energy to ground assuring maximum reliability of electronic systems in the field. Trigger levels are defined by the positive and negative bias levels set by the user.

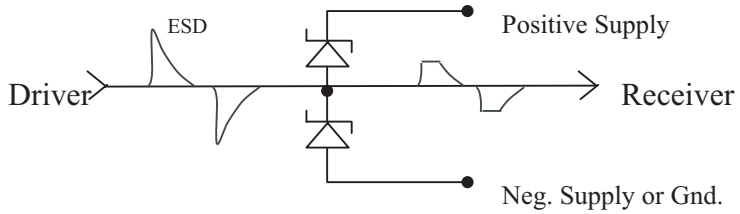
RoHS Device has reflow temperature profile of 260 deg C for 10 seconds

## Schematic



1 3

## Application




**Absolute Maximum Ratings:** ( Ta = 25°C )

| Symbol | Parameter | Value | Units |
|---|---|---|---|
| $T_{OP}$ | Operating temperature | -40 to +85 | $^0$C |
| $V_S$ | Supply voltage (Vp ~ Vn) | 8 | V |
| $I_F$ | Continuous forward current | 50 | mA |
| $P_O$ | Total power | 1 | W |

* One diode conducting.

**Electrical Ratings:** ( Ta = 25°C )

| Symbol | Characteristic | Min | Max | Units | Test Condition |
|---|---|---|---|---|---|
| $V_F$ | Forward voltage | 0.6 | 0.95 | V | $I_F$ = 25 ma |
| $V_R$ | Reverse breakdown voltage | 9.5 | 11 | V | $I_R$ = 1 ma |
| $I_L$ | Leakage current | ± 0.1 | ± 2.0 | uA | 8v |
| $C_T$ | Capacitance | 1.0 | 5.0 | pF | @ 1Mhz |
| $V_{ESD}$ | Channel clamp voltage | - | ± 10 | V | 8kV HBM |
| $V_{PV}$ | Peak ESD voltage capability | | 16 | kV | HBM |

"-G" suffix designates RoHS compliant version.



Comchip Technology Corporation • Tel: 510-657-8671 • Fax: 510-657-8921 • www.comchiptech.com