

The KOA Speer DN series steering diode arrays are designed to protect communication port interfaces. The fast turn-on speed and low capacitance characteristics of this product series make it ideal for protecting high speed communication ports from ESD and fast transient events.

Often referred to as a dual rail diode network each network channel offers input signal protection through a series pair of high performance diodes as illustrated in figure 1.

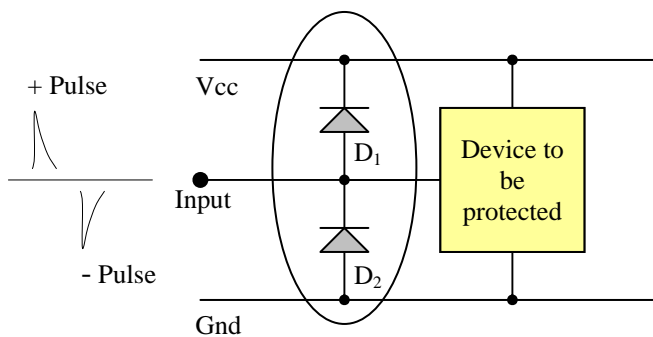


Figure 1

In this configuration a positive ESD event will cause diode D₁ to turn on or conduct. This limits the magnitude of the event voltage to the V_{cc} voltage plus the forward voltage drop of the diode. Likewise a negative ESD event will cause diode D₂ to turn on, limiting the voltage of the negative voltage event to the forward voltage drop of D₂.

Common applications for the DN series diode arrays are:

- USB port
- SIM card port
- IEEE 1284 port
- IEEE 1394 port
- Gigabit Ethernet port
- Speaker port
- Differential inputs
- Industrial sensors
- LCD interface
- Hot Swap PCI Bus

Part Number	Channels for Protection	Package
DNAQ20TTEB	18	QSOP-20
DN2Q20TTEB	18	QSOP-20
DN3S06TTE	4	SOT-236
DN4S14TTE	2	SOT-143
DN5Q20TTEB	18	QSOP-24
DN6N08TTEB	6	SOIC-8
DN7	18	QSOP-24
DN8	1	SOT-23
DN9	4	SOIC-8

