



TDK SEMICONDUCTOR CORP. Application Note

Getting Higher Data Rate Using 73M223

73M223 was designed to be a 1200 bps FSK half duplex modem chip using CCITT V.23 frequencies. It is a very simple chip to use and does not require a microcontroller. One of the real neat thing about this chip is that even though it is designed for V.23 frequencies and 1200 bps using 3.1872 Mhz crystal, by using higher frequency crystal you can actually get a higer data rate up to

4800 bps. As you increase the crystal frequency, the signaling frequencies shift accordingly and therefore it requires higher bandwidth proportional to increase in data rate. At 1200 bps, 3k bandwidth is adequate, however at 2400 bps it requires 6k and at 4800 bps 12k Hz bandwidth is needed.

