

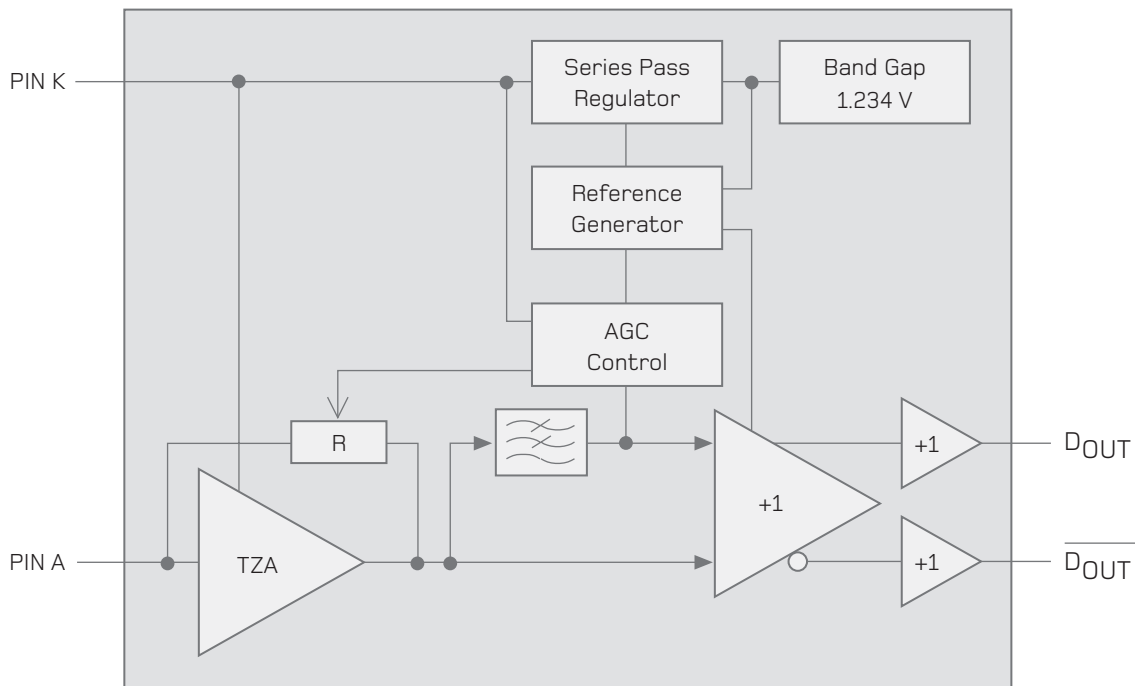
## 155 Mbps Pre-Amplifier

# MC2006

The MC2006 is a low-noise, transimpedance amplifier with AGC, manufactured in an advanced, low-cost, sub-micron CMOS process. Its wide dynamic range, differential output and high-PIN bias make it well suited for telecommunications, especially OC-3/STM-1. However, the MC2006 is intended to meet the needs of both telecom and datacom users. The MC2006 is designed to be used with the MC2045 post-amplifier IC. When combined with a photodiode, the chipset forms a high-performance, low-cost 5V receiver.

### KEY FEATURES

- > Low cost IC, fabricated in advanced sub-micron pure-CMOS process.
- > Receiver sensitivity typically -40 dBm at 155 Mbps, when integrated into a module with suitable photodiode and post-amplifier
- > 115 MHz -6 dB bandwidth with multi-pole roll off optimized for OC-3/STM-1
- > Typical differential gain of 200kohms at low signal levels
- > AGC gives continuous operation to > 0 dBm
- > > 35 dB power-supply noise rejection
- > 65 mW power consumption at 5V power supply
- > Available as die or in SOIC8 package



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