

# Communications

## XR2211A

TAN-009

### FSK Demodulator/Tone Decoder

TAN-008

EVALUATION  
MANUAL

#### Features

- Wide Frequency Range, 0.01Hz to 300kHz
- Wide Supply Voltage Range, 4.5V to 20V
- HCMOS/TTL/Logic Compatibility
- FSK Demodulation, with Carrier Detection
- Wide Dynamic Range, 10mV to 3V rms
- Adjustable Tracking Range (+1% to 80%)
- Excellent Temp. Stability, 100 ppm/°C, typ.

#### Applications

- Caller Identification Delivery
- FSK Demodulation
- Data Synchronization
- Tone Decoding
- FM Detection
- Carrier Detection

The XR2211A is a monolithic phase-locked loop (PLL) system especially designed for data communications applications. It is particularly suited for FSK modem applications. It operates over a wide supply voltage range of 4.5 to 20V and a wide frequency range of 0.01Hz to 300kHz. It can accommodate analog signals between 10mV and 3V, and can interface with conventional DTL, TTL, and ECL logic families.

The circuit consists of a basic PLL for tracking an input signal within the pass band, a quadrature phase detector which provides carrier detection, and an FSK voltage comparator which provides FSK demodulation. External components are used to independently set center frequency, bandwidth, and output delay. An internal voltage reference proportional to the power supply is provided at an output pin.

The XR2211A is available in 14 pin packages specified for commercial temperature ranges.