# LA1207 monolithic linear IC

CIRCUIT DRAWING No.2012

## FM/AM IF AMP FOR RADIO CASSETTE, MUSIC CENTER

3006A

**Features**

- S meter output characteristic suited for LED light-up.
  Other characteristics are the same as for the LA1205.
- Low-level shortwave oscillation with few harmonic components.

AM:
- Usable in the range of LW to SW
- Low-level AM oscillation with ALC

  Oscillation output per pin MW 130mV
  SW 110 to 180mV
  (8MHz)(30MHz)

(Note) A slight change in these values may take place depending on the coil to be used.

FM:
- Ratio detection
- Advantageous in the following points as compared with quadrature detector IC
  - Especially suited for in headphone radio applications because low quiescent noise eliminates the need for muting at weak inputs.
  - Low side peak.
  - High S/N
- Front end bias available (Pin 10 1.2V)

Others:
- Improvement in reduced voltage characteristic (Operating voltage: 2.5 to 9.0V)
- FM/AM S meter output with wide dynamic range (Pin 14: 0 to 2.1V, meter deflection variable by external R)

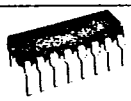
**Functions**

- AM: Converter, oscillator, IF, S meter outputs
- FM: IF, S meter outputs

# LA1231N monolithic linear IC

CIRCUIT DRAWING No.2014

## FM IF SYSTEM



3006A

**Functions**

- IF amplification, Limiter
- Quadrature detection
- AF preamplifier
- Muting at weak input
- Muting at detuning
- Signal meter drive output
- AFC tuning meter drive output
- Delay AGC output
- Inverting circuit for muting drive voltage
- IF amplifier stop circuit

**Features**

- High sensitivity on limiting: 18μV typ.
- Low distortion: 0.05% typ. determined by the linearity of phase characteristics in phase shifting circuit.
- High demodulation output: 330 mVrms typ.
- High S/N ratio: 78.5 dB typ.
- Muting at detuning with small pop noise.
- Single meter drive output proportional to the input signal level (dB).
- Detuning muting band having good symmetry.
- Tuning meter driving output having wide swing width.
- Delay AGC drive output for front end.
- Voltage regulator is built in: Operation voltage 9 to 14 V.
- Interstation muting characteristic is excellent.