

**LA3376,3376M**

monolithic linear IC

CIRCUIT DRAWING  
No.2054**PILOT CANCELER-PROVIDED PLL FM  
MPX STEREO DEMODULATOR**

3020A(LA3376),3036B(LA3376M)

The LA3376 is a multiplex IC for use in car stereo applications. It contains 2 functions of skip noise control and pilot cancel and is packaged in 16-pin SEP. The LA3376M is a miniflat package version of the LA3376.

**Functions**

- Pilot canceler (Level follow-up type)
- Stereo noise controller (SNC function)
- High-cut controller (HCC function)
- Automatic selection between stereo and monaural
- VCO oscillation stop
- Forced monaural function (stereo lamp off, pilot cancel and HCC function hold) of reception mode is realized by cutting off pin 10 from VCC.

**Features**

- Low distortion (0.05% typ 300mV input mono)
- Good ripple rejection of power supply (35dB typ)
- Wide supply voltage range ( $V_{CC} = 6.5$  to  $14V$ )
- Good space factor due to single-end package
- Easy to draw printed circuit pattern due to pin-to-pin space of 3mm

**LA3400**

monolithic linear IC

CIRCUIT DRAWING  
No.2057**VCO NON-ADJUSTING PLL FM MPX STEREO  
DEMODULATOR WITH FM ACCESSORIES**

3010A

The LA3400 is a multifunctional MPX demodulator IC designed for FM stereo electronic tuning. It features the VCO non-adjusting function that eliminates the need to adjust free-running frequency of VCO and the accessory functions such as AM/FM input, AM/FM changeover, muting.

**Applications**

- Home stereos, portable hi-fi sets

**Functions**

- VCO non-adjusting function.
- PLL MPX stereo demodulator.
- Gain variable type post amp.
- FM $\leftrightarrow$ AM changeover.
- Muting at the FM $\leftrightarrow$ AM changeover mode (changeover mute)
- Muting function.
- Drive pin for external muting.
- VCO stop function.
- Separation adjust function.
- Muting at the VCC-ON mode.

**Features**

- Non-adjusting VCO: Eliminates the need to adjust free-running frequency.
- Good temperature characteristic of VCO:  $\pm 0.1\%$  typ. for  $\pm 50$  deg change.
- Low distortion: 1kHz 300mV input mono 0.006% typ.  
main 0.02% typ.
- High S/N: 91dB typ. (mono 300mV input LPF).  
92dB typ. (mono 300mV input, IHF BPF).
- High voltage gain: Approximately 8.5dB (Common to FM, AM at standard constants)  
This gain can be varied by external constants.
- Wide dynamic range: Distortion 1.0% typ. at mono 800mV 1kHz input.
- The semifixed resistor (pin 4) for separation adjust can be changed to a fixed resistor or can be removed.
- Good ripple rejection of power supply: 34dB typ.