

LINEAR
INTEGRATED
CIRCUITS
=RADIO-TV=

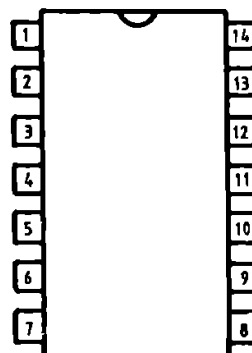
\$ **βMC 1309A**
\$ **βMC 1309**
PHASE LOCK LOOP STEREO DECODERS

The βMC 1309A and βMC 1309 are monolithic integrated circuits using IIL and linear bipolar technology. They perform the function of a stereo signal demodulator - decoder. Internal functions include automatic mono - stereo mode switching and drive for an external lamp to indicate stereo mode operation. The decoder uses a low number of external components. It has only one control to adjust : a potentiometer to set oscillator frequency. No external coils are required.

Features

- Operating temperature	-25 ... 170 °C
- Storage temperature	-25 ... +125 °C
- Supply voltage	βMC 1309A ... 4.5 ... 16 V
	βMC 1309 ... 6.0 ... 16 V
- Channel balance	max. 1 dB
- Monaural gain	typ. 0.9 dB
- Channel separation	typ. 40 dB
- Capture range	min. +/- 7 %

- | 1. V+
- | 2. Input
- | 3. Amplifier output
- | 4. Left channel output
- | 5. Right channel output
- | 6. Lamp indicator
- | 7. GND
- | 8. Switch filter
- | 9. Switch filter
- | 10. 19 kHz output
- | 11. Phase & amplitude detector input
- | 12. Loop filter
- | 13. Loop filter
- | 14. Oscillator RC network



PACKAGE TO-116 / TOP VIEW

\$ Preliminary data

βMC 1309A ; βMC 1309 (cont)

Typical application and test circuit

C1 = 2 μF	R1 = 3.3 kohms
C2 = 22 nF	R2 = 3.3 kohms
C3 = 22 nF	R3 = 1 kohms
C4 = 0.22 μF	R4 = 16 kohms
C5 = 47 nF	R5 = 5 kohms
C6 = 0.47 μF	
C7 = 470 pF	
C8 = 0.22 μF	

