

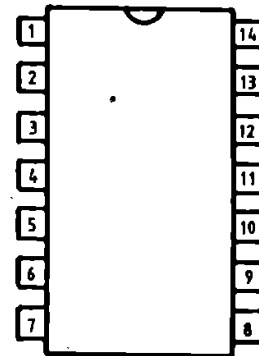
**µE 565**  
**PHASE LOCKED LOOP CIRCUIT**

The µE 565 is a general purpose phase locked loop integrated circuit, containing a stable, voltage controlled oscillator (VCO) for low distortion FM demodulation, and a double balanced phase detector (FD) with good carrier suppression. The VCO frequency is set with an external resistor and capacitor, and a tuning range of 10 : 1 can be obtained with the same capacitor. The characteristics of the closed loop system ( bandwidth , response speed, capture and pull in range ) can be adjusted with an external resistor and capacitor.

**Features**

- Operating temperature .....	0 ... +70 °C
- Storage temperature .....	-55 ... +125 °C
Supply voltage .....	max. +/- 16 V
- Supply current .....	max. 12.5 mA
Output offset voltage .....	max. 200 mV
- Triangle wave output voltage . ( fo=10 kHz )...	min. 2 Vpp
Square wave output voltage ... ( fo=10 kHz )...	min. 4.7 Vpp
- VCO maximum operating frequency (Co=2.7 pF)...	typ. 500 kHz
- Demodulated output voltage ( fo = 10 +/-1 kHz)	min. 200 mVpp
VCO output impedance .....	typ. 5 kohms
- Square wave rise time .....	typ. 20 ns
Square wave fall time .....	typ. 50 ns

- 1. V-
- 2. Input
- 3. Input
- 4. VCO output
- 5. Phase detector ref. input
- 6. Vref
- 7. VCO control voltage
- 8. fo resistance
- 9. fo capacitor
- 10. V+
- 11. NC
- 12. NC
- 13. NC
- 14. NC



PACKAGE TO-116 / TOP VIEW