

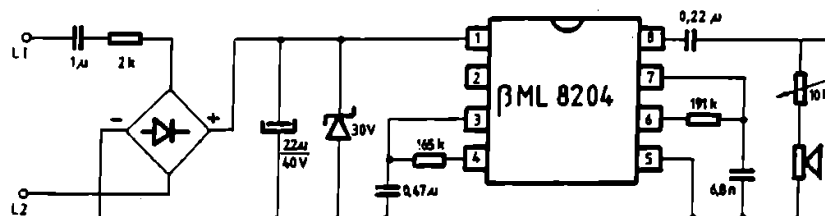
βML 8204
βML 8205
TONE RINGERS

The βML 8204 and βML 8205 are monolithic integrated circuits designed for telephone bell replacement. Each of them incorporates two oscillators, an output amplifier and a power supply control circuit. The oscillator frequency can be adjusted over a wide range, choosing the appropriate external components. One oscillator, normally operated at low frequency (fL), causes the second oscillator to alternate between its nominal frequency (fH1) and a related higher frequency (fH2). The resulting output is a distinctive "warbling" tone. The output amplifier can drive either a transformer or serial capacitor coupled loudspeaker, or a piezoceramic transducer. The device can be powered from a telephone line or a fixed DC supply. The power supply control circuit has built-in hysteresis to prevent false triggering and rotary dial "chirps". The βML 8204 can be triggered externally under logic control. The βML 8205 has provision for adjustment of the power supply initiation current.

Features

- Operating temperature	-25 ... +70 °C
- Storage temperature	-25 ... +125 °C
- Supply voltage	max. 30 V
- Supply initiation voltage	17 ... 21 V
- Sustaining voltage	9.7 ... 12 V
- Sustaining current	min. 0.7 mA
- Supply initiation current	1.4 ... 4.2 mA
- Trigger voltage (only βML 8204)	min. 10.5 V
- Disable voltage (only βML 8204)	max. 0.8 V
- Output voltage (no load)	(V+) - 2 ... V+ V

Typical application



β ML 8204 , β ML 8205 (cont.)

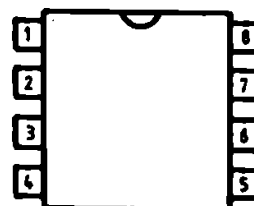
β ML 8204

- 1. V+
- 2. Trigger-in 1)
- 3. RL, CL
- 4. RL
- 5. GND
- 6. RH
- 7. RH, CH
- 8. Tone output

Note 1) Must be connected through a current limiting resistor, when used .

Pins 3 , 4 low frequency time constant adjustment .

Pins 6 , 7 high frequency time constant adjustment .



PACKAGE MP-48 / TOP VIEW

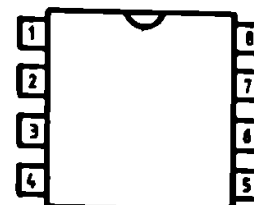
β ML 8205

- 1. V+ •
- 2. Initiation current 1)
- 3. RL, CL
- 4. RL
- 5. GND
- 6. RH
- 7. RH, CH
- 8. Tone output

Note 1) Must be connected to GND through an initiation current adjustment resistor .

Pins 3 , 4 low frequency time constant adjustment .

Pins 6 , 7 high frequency time constant adjustment .



PACKAGE MP-48 / TOP VIEW