

Preliminary data

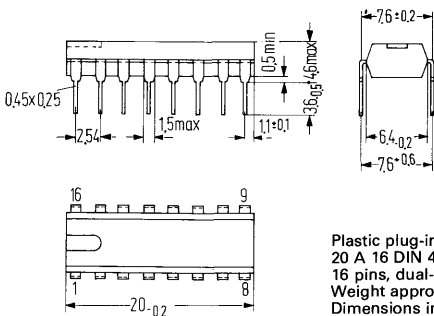
The monolithic integrated circuit TDA 1048 contains a gain-controlled push-pull amplifier, a demodulator, and a DC volume control. The AF outputs are referred to ground and stabilized against hum of the supply voltage.

The IC TDA 1048 is particularly suited for the use in the sound section of TV sets of French Standard (amplitude modulation).

- High input sensitivity
- Distortion-low control
- Distortion-low demodulation
- Volume control by D. C. voltage
- Internally stabilized supply voltage

Type	Ordering code
TDA 1048	Q67000-A1090

Package outlines



Plastic plug-in package
20 A 16 DIN 41866
16 pins, dual-in-line
Weight approx. 1.2 g
Dimensions in mm

Absolute maximum ratings

Supply voltage	V_{cc}	16.5	V
Output current	I_{11}	5	mA
Thermal resistance (system-air)	R_{thsa}	120	K/W
Junction temperature	T_j	150	°C
Storage temperature	T_s	-40 to +125	°C

Range of operation

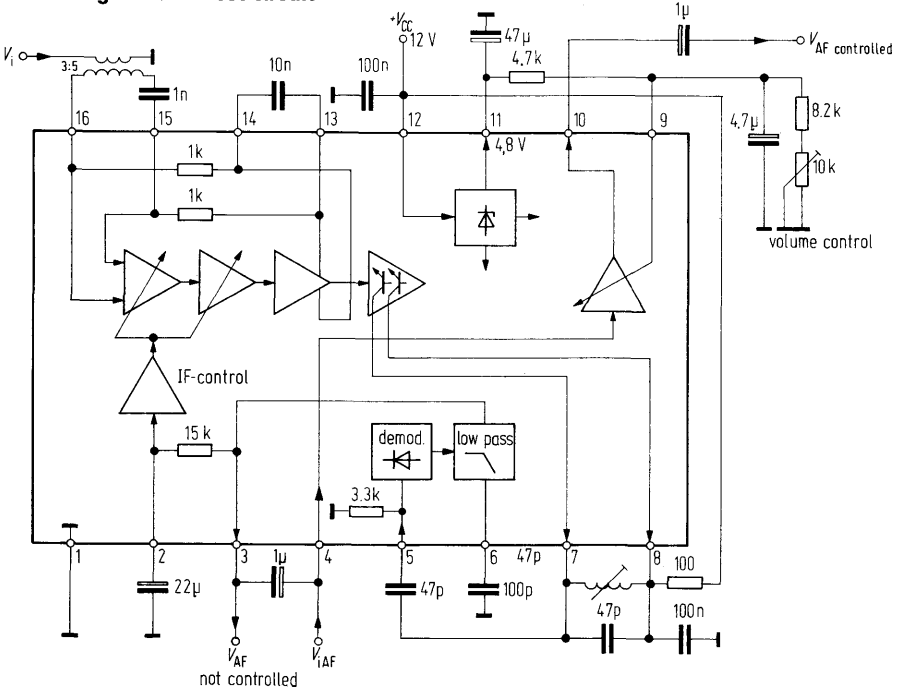
Supply voltage	V_{cc}	10 to 15	V
Ambient temperature in operation	T_{amb}	0 to +60	°C

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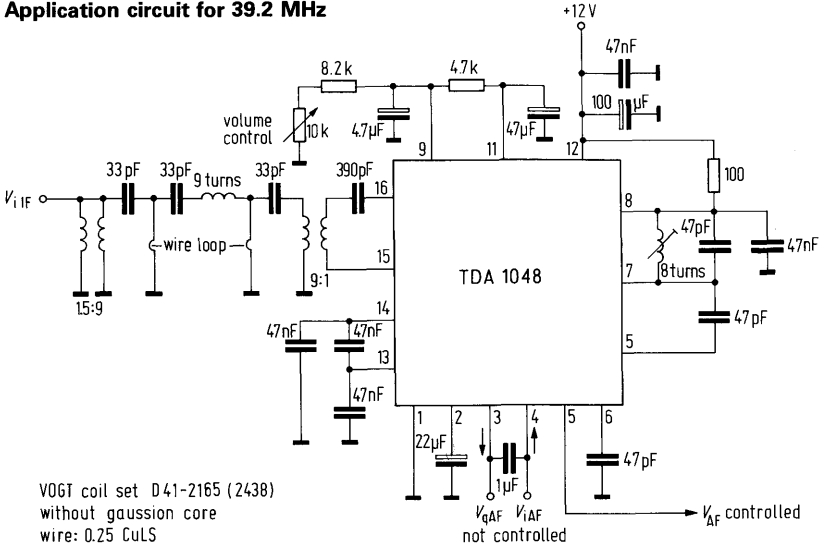
Electrical characteristics ($V_{cc} = 12V$; $f_i = 40\text{ MHz}$, $T_{amb} = 25^\circ\text{C}$)

Total current consumption	$I_{12} = I_7 + I_8 + I_{11}$	37	mA
Output DC currents of amplifier	$I_7 = I_8$	4	mA
Input voltage for starting of control (measured via input transmitter 3:5)	V_i	200	μV
AF output voltage ($m = 80\%$)	V_{AF}	≤ 1	V_{eff}
Range of volume control	V_{AFmax}/V_{AFmin}	≥ 70	dB
Output resistance	R_{q3}	150	Ω
	R_{q10}	100	Ω
Load resistance	R_{L3}	≥ 5	k Ω
	R_{L10}	≥ 5	k Ω
Stabilized voltage	V_{11}	4.8	V

Block diagram and Test circuit



Application circuit for 39.2 MHz



AF output voltage versus potentiometer resistance

