

AN7220

AM Tuner, FM-AM IF Amplifier Circuit

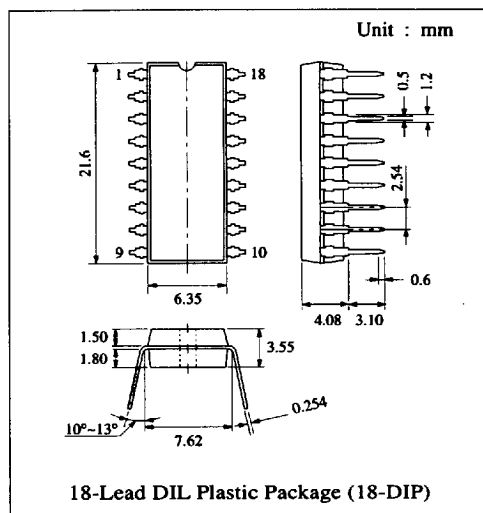
■ Description

The AN7220 is a monolithic integrated circuit designed for AM tuner, FM-AM IF Amp. in low voltage radio and radio/cassette tape recorder.

■ Features

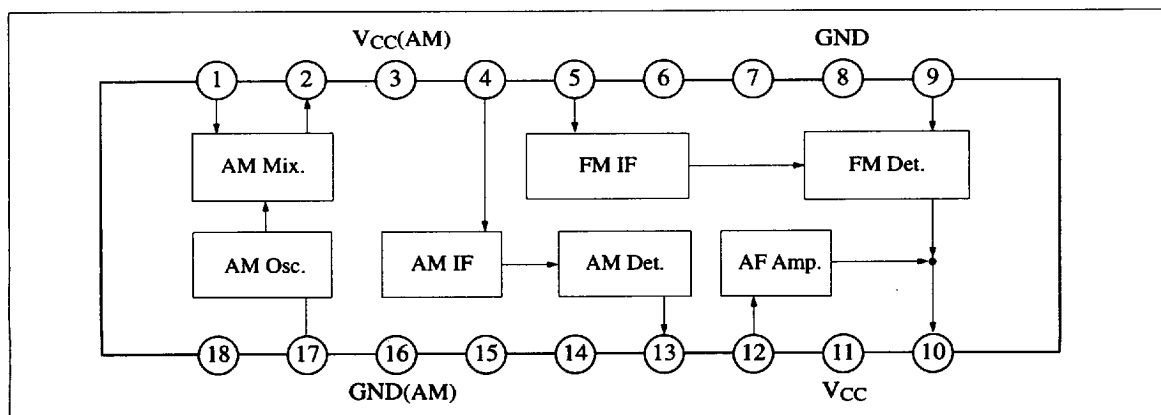
- Few external components
- Low power consumption
- Common IF Amp. for FM and AM

■ Pin



Pin No.	Pin Name	Pin No.	Pin Name
1	AM RF Amp. Input	10	AF Output
2	AM Mix Output	11	V _{CC}
3	V _{CC} (AM)	12	AM AF Amp. Input
4	AM IF Amp. Input	13	AM Detector Output
5	FM IF Amp. Input	14	Tuning Indicator
6	IF By-pass	15	AGC Input
7	IF By-pass	16	GND (AM)
8	GND	17	Oscillator Coil
9	FM Detector Coil	18	AGC

■ Block Diagram



■ 6932852 0013858 67T ■

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■ Absolute Maximum Ratings (Ta=25°C)

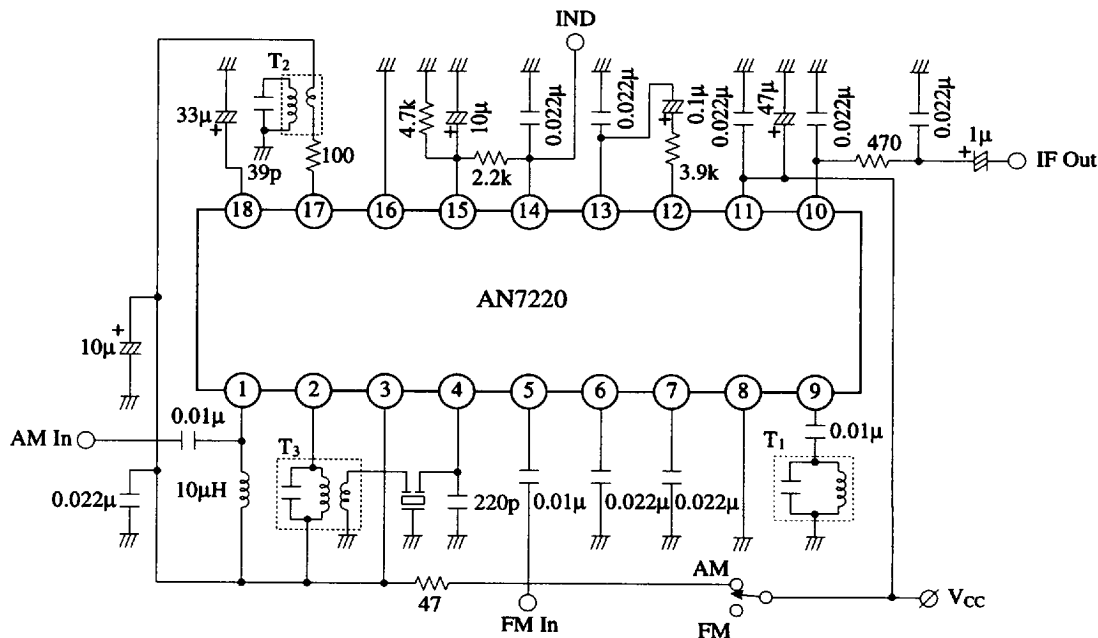
Item	Symbol	Rating	Unit
Supply Voltage	V _{CC}	6.6	V
Supply Current	I _{CC}	10	mA
Power Dissipation	P _D	66	mW
Operating Ambient Temperature	T _{opr}	-20 ~ +75	°C
Storage Temperature	T _{stg}	-55 ~ +150	°C

Operating Supply Voltage Range: V_{CC} = 2.0V ~ 6.6V

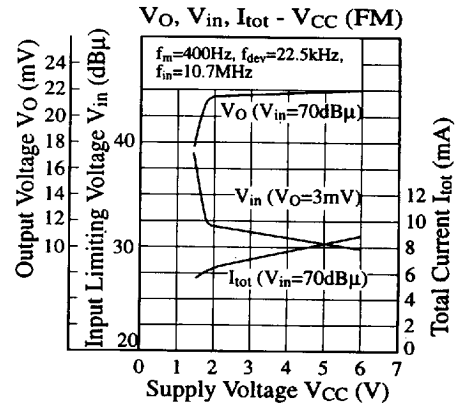
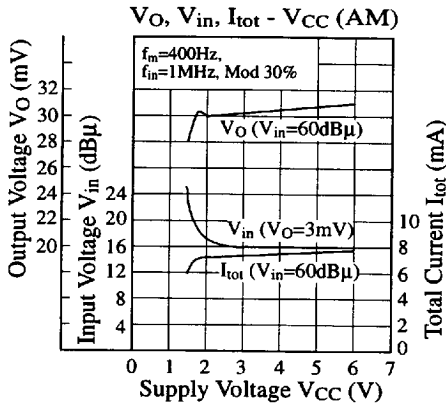
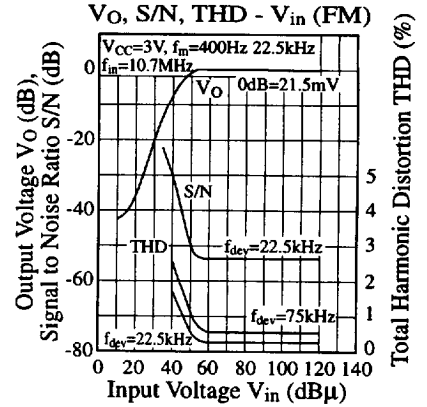
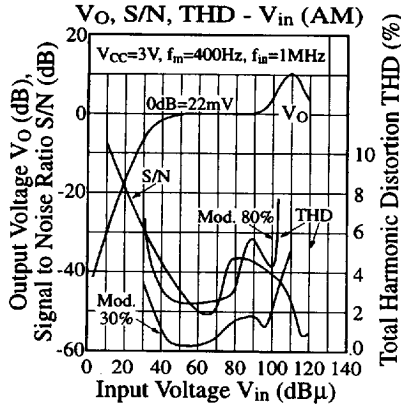
■ Electrical Characteristics (V_{CC}=3V, Ta=25°C)

Item	Symbol	Condition	min.	typ.	max.	Unit
FM	Detector Output Voltage	V _O V _{in} = 60dBμ, f = 10.7MHz, f _{dev} = 22.5kHz, f _m = 400Hz	16	21	26.5	mV
	Limiting Sensitivity	V _{in(lim)} V _O = -3dB	35	38	41	dBμ
AM	Detector Output	V _O V _{in} = 60dBμ, f = 1MHz, Mod = 30%, f _m = 400Hz	18.3	28.7	45.7	mV
	Maximum Sensitivity	S _{max} V _{in} = 20dBμ	3.3	6.5	11.2	mV
	Indicator Voltage	V ₁₄₋₈ Without Signal		450	630	mV

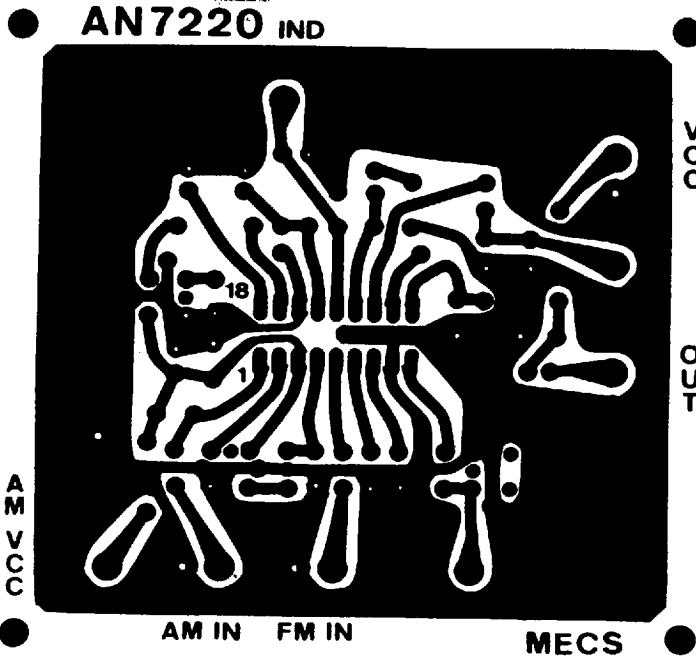
Test Circuit



■ Characteristics Curve



■ Printed Circuit Board Layout (Scale: 1:1)



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