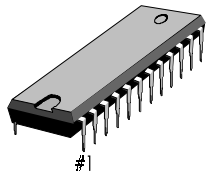
GENERAL DESCRIPTION

The KB22902 is an AM/FM 1 chip tuner

- AM: RF_AMP, AM MIX, AM OSC, AM_IF AMP, AM detect, AGC, TUNLED INDICATOR OUTPUT
- FM_FE: RF AMP, MIX, OSC
- FM_IF: IF AMP, Quadrature detect, FM mute, tune indicator output
- MPX: PLL stereo decoder, stereo indicator output

24–SDIP–300



FEATURE

- For new FCC
- AM, FM_FE/IF. MPX 1 chip tuner
- Non adjustment MPX_VCO

ORDERING INFORMATION

Device	Package	Operating Temperature
KB22902	24–SDIP–300	–20 ~ +75°C

BLOCK DIAGRAM

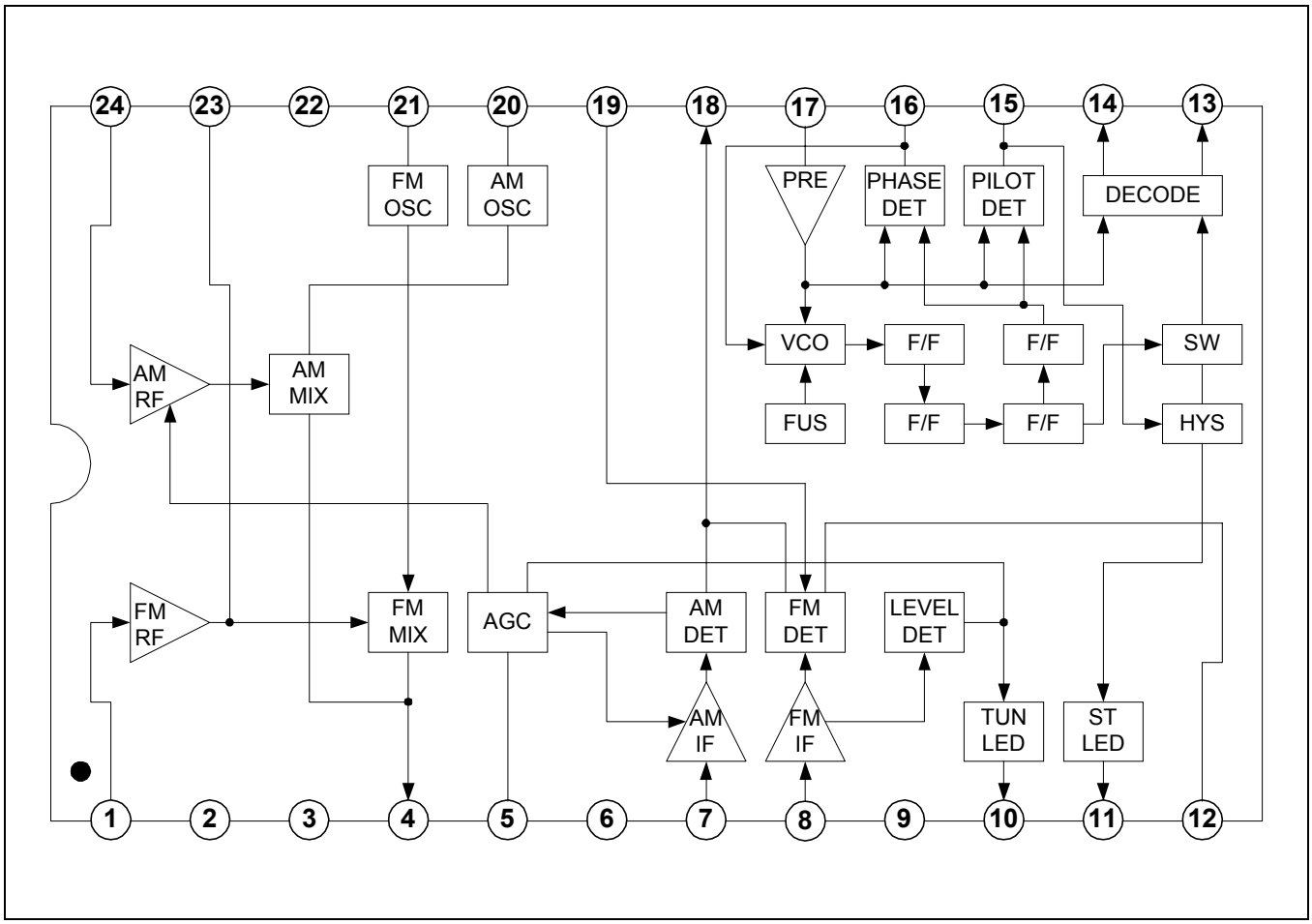


Figure 1.

PIN CONFIGURATION

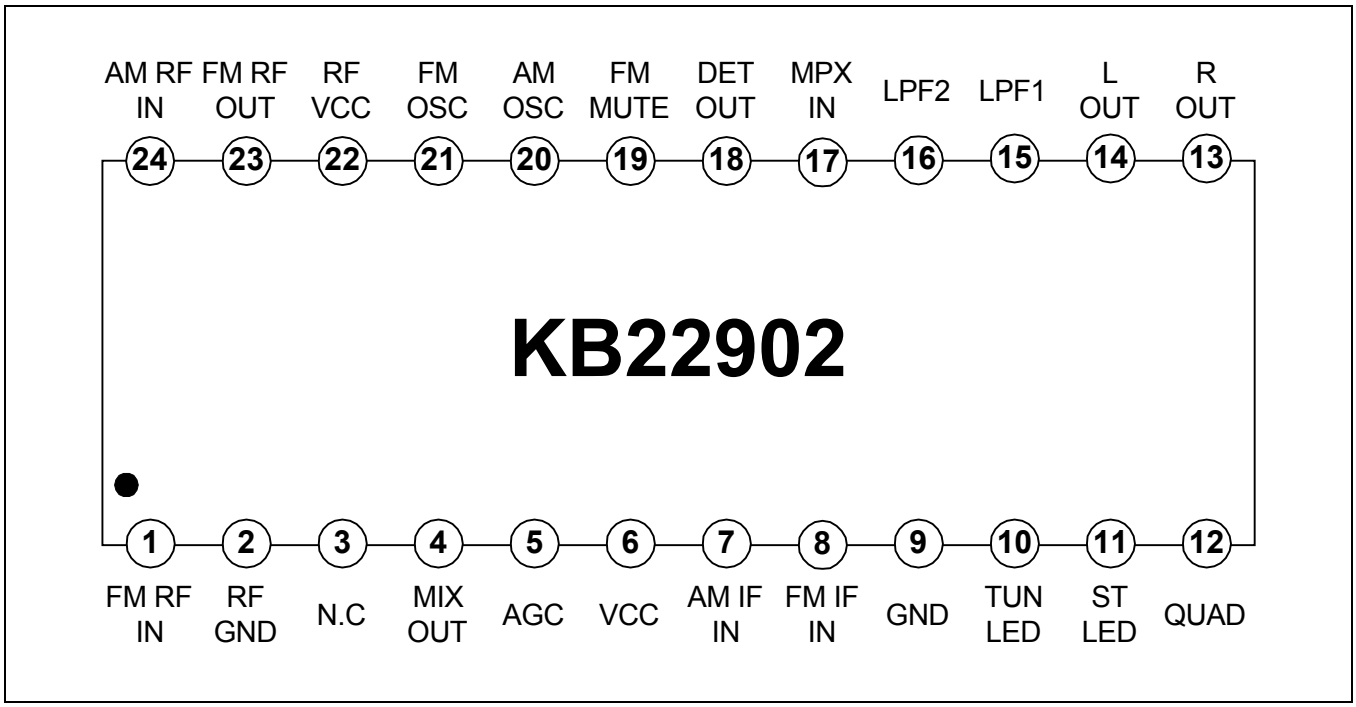


Figure 2.

PIN FUNCTION

Number	Symbol	IN/OUT	Function
1	FM RF IN	I	FM RF INPUT
2	RF GND	I	RF GROUND
3	NC	.	NO CONNECTION
4	MIX OUT	O	AM, FM MIX output
5	AGC	O	AM AGC
6	VCC	I	–
7	AM IF IN	I	AM IF input
8	FM IF IN	I	FM IF input
9	GND	I	–
10	TUN LED	O	TUNING LED
11	ST LED	O	STEREO LED
12	QUAD	I	FM QUADRATURE DETECTOR
13	R-OUT	O	R-Channel output
14	L-OUT	O	L-Channel output
15	LPF1	O	LPF terminal for synchronous detector bias terminal for MO/ST sw circuit
16	LPF2	O	LPF terminal for phase detector bias terminal for AM/FM switch circuit MPX input
17	MPX IN	I	MPX input
18	DET OUT	O	Detector output
19	FM MUTE	I	Connection for the FM mute switch
20	AM OSC	I	AM oscillation input
21	FM OSC	I	FM oscillation input
22	RF VCC	I	–
23	FM RF OUT	O	FM RF output
24	AM RF IN	I	AM RF input

ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Ratings	Unit	Remarks
Supply Voltage	Vs	10	V	
Operating Temperature	Top	– 20 ~ +75	°C	
Storage Temperature	Tstg	– 55 ~ +150	°C	
Power Dissipation	Pdmax	1200	mW	

TEMPERATURE CHARACTERISTICS

Parameter	Symbol	Condition	Ratings	Unit	Remarks
Quiescent circuit current1 (FM)	ΔIcc1	– 20 ~ +70°C	20	uA/°C	
Quiescent circuit current2 (AM)	ΔIcc1	– 20 ~ +70°C	20	uA/°C	

ESD CHARACTERISTICS

Parameter	Condition	Pin number	Ratings	Unit	Remarks
Human Body Model	C = 100pF, R = 1.5kΩ	All pins	± 2000	V	
Machine Model	C = 200pF, R = 0kΩ	All pins	± 300	V	
CDM	–	All pins	± 500	V	

APPLICATION CIRCUIT

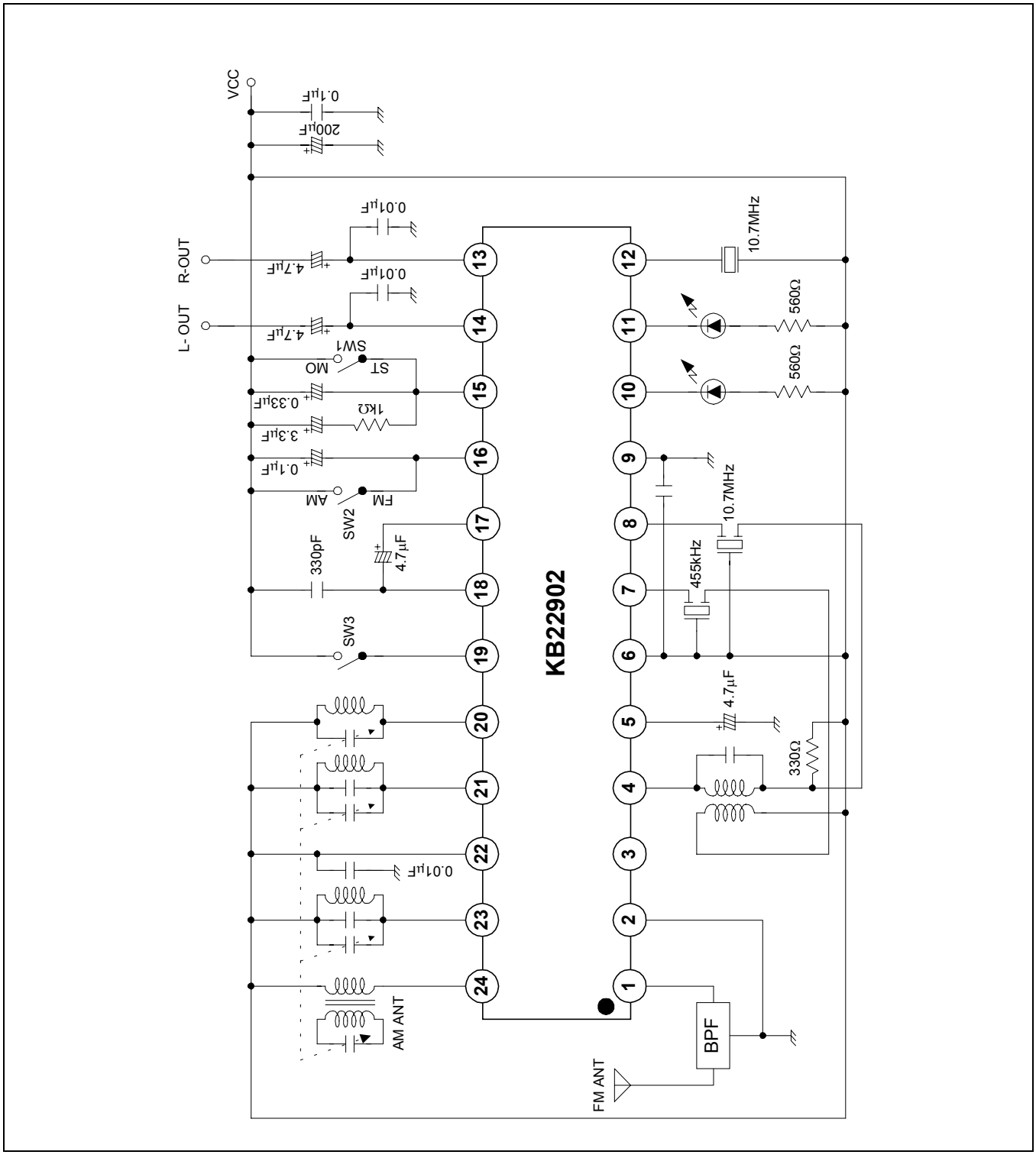


Figure 3.