

UTC TA7342P LINEAR INTEGRATED CIRCUIT

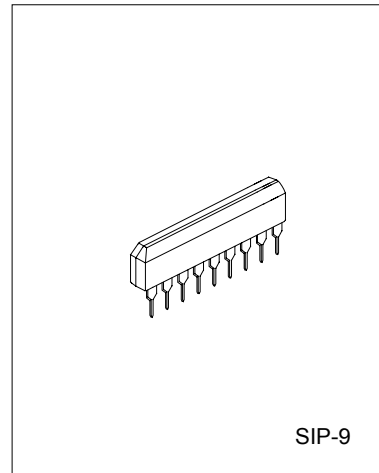
PLL FM STEREO MULTIPLEX

DESCRIPTION

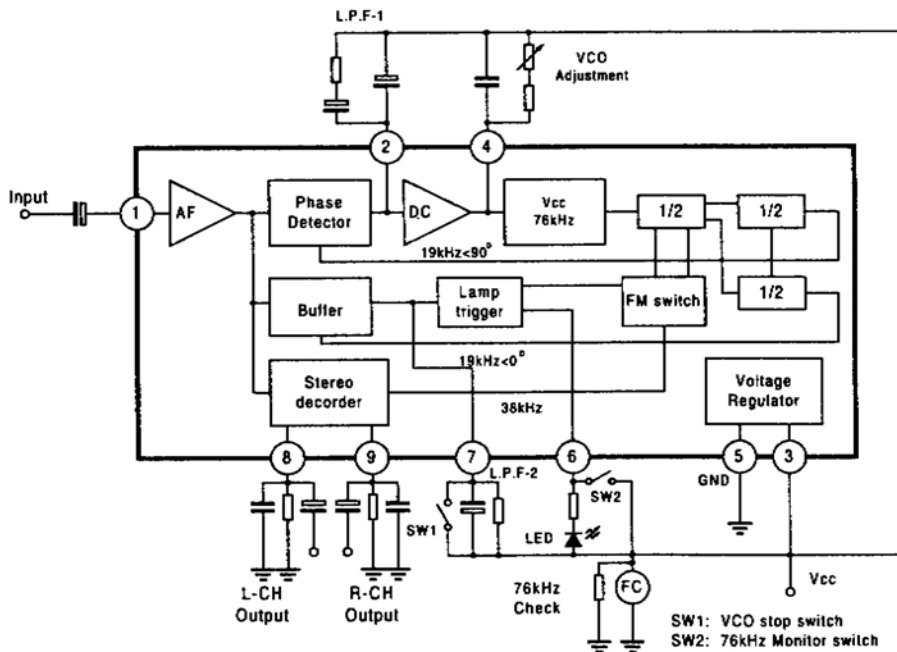
The UTC TA7342P is a PLL FM stereo multiplex integrated circuit, designed for portable radio applications.

FEATURES

- *Wide operating supply voltage : $V_{cc}=1.8V-5V$
- *Suitable for LED driving : $I_{lamp}=8mA(max.)$
- *VCO stop capability (The VCO is stopped when the LPF2 terminal is connected to the power supply line, and the stereo indicator is turn off.)
- *Easy Adjustment (The monitored free running frequency of VCO is 76kHz at stereo Lamp terminal)



BLOCK DIAGRAM



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ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

PARAMETER	SYMBOL	VALUE	UNIT
Supply Voltage	V _{CC}	6	V
Lamp Voltage	V _{LAMP}	8	V
Lamp Current (continuous)	I _{LAMP}	8	mA
Power Dissipation	P _D	500	mW
Operating Temperature Range	T _{OPR}	-25 - +75	°C
Storage Temperature Range	T _{STG}	-55 +150	°C

ELECTRICAL CHARACTERISTICS

(Ta=25°C ,V_{CC}=3V, f=1kHz, unless otherwise specified)

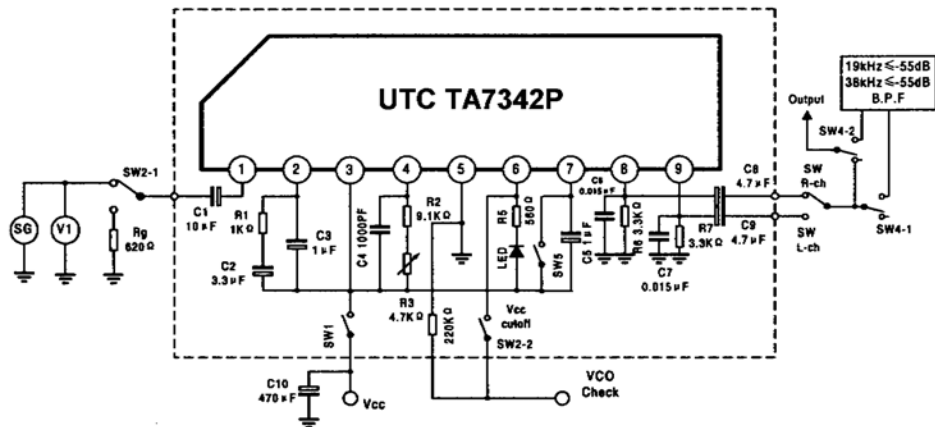
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Quiescent Circuit Current	I _{CCQ}	At Lamp off		4.5	8	mA
Input Resistance	R _{IN}			10		kΩ
Output Resistance	R _{OUT}		4	5	6	kΩ
Maximum Input Voltage	V _{i(max)}	Lj+R=90%, P=10% THD=5%, fm=1kHz		400		mVrms
Channel Separation	CS	L+R=180mV, P=20mV, fm=1kHz	30	35		dB
Total Harmonic Distortion(mono)	THD1	Vi=200mVrms (Monaural)		0.4	1	%
Total Harmonic Distortion (stereo)	THD2	L+R=180mVrms, p=20mVrms, fm=1kHz		0.5		%
Voltage Gain	G _V	Vi=200mVrms	-6.5	-5	-3.5	dB
Channel Balance	C _B	Vi=200mVrms		0	1.5	dB
Lamp ON Level	V _{L(ON)}	pilot only		9	15	mV
Lamp OFF Level	V _{L(OFF)}	pilot only	2	6		mV
Stereo Lamp Hysteresis	V _H	From ON to OFF		3		mVrms
Carrier Leakage	C.L.	19kHz, L+R=180mV, P=20mVrms		31		dB
		38kHz, L+R=180mV, P=20mVrms		60		dB
Capture range	C.R.	P=20mVrms		+3		%
SCA Rejection Ratio	SCA Rej.	P=20mVrms, L+R=160mVrms, SCA=200mVrms, fSCA=67kHz		80		dB
Signal to Noise Ratio	S/N	Vin=200mVrms, Rg=620Ω		82		dB

DC ELECTRICAL CHARACTERISTICS

TERMINAL	ITEM DESCRIPTION	VALUE	UNIT
1	INPUT	0.7	V
2	LPF-1	2.4	V
3	VCC	3.0	V
4	VO	2.5	V
5	GND	0	V
6	ST. LAMP	-	V
7	LPF-2	2.4	V
8	L-CH OUTPUT	1.0	V
9	R-CH OUTPUT	1.0	V

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TEST CIRCUIT



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