

# TA7342P LINEAR INTEGRATED CIRCUIT

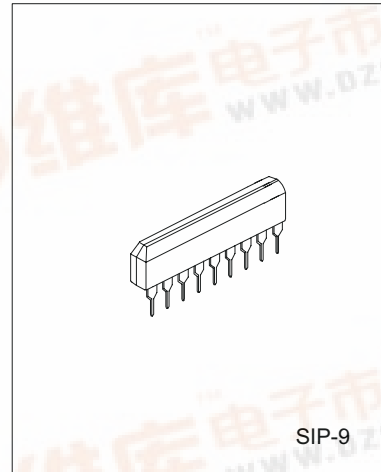
## PLL FM STEREO MULTIPLEX

### DESCRIPTION

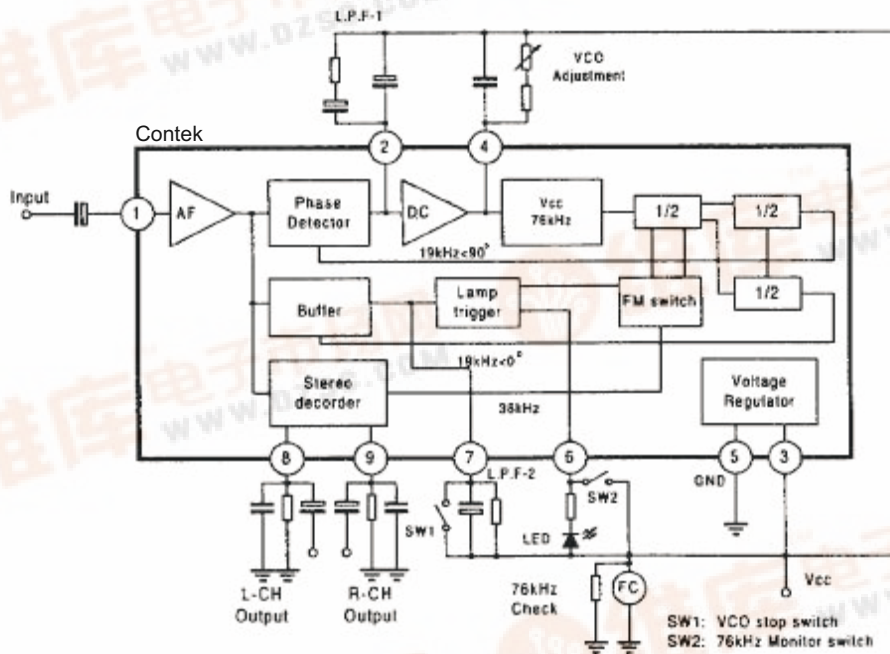
The Contek TA7342P is a PLL FM stereo multiplex integrated circuit, designed for portable radio applications.

### 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 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 <sub>CC</sub>	6	V
Lamp Voltage	V <sub>LAMP</sub>	8	V
Lamp Current (continuous)	I <sub>LAMP</sub>	8	mA
Power Dissipation	P <sub>D</sub>	500	mW
Operating Temperature Range	T <sub>OPR</sub>	-25 - +75	C
Storage Temperature Range	T <sub>STG</sub>	-55 +150	C

## ELECTRICAL CHARACTERISTICS

( Ta=25 C ,V<sub>CC</sub>=3V, f=1kHz, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Quiescent Circuit Current	I <sub>CCQ</sub>	At Lamp off		4.5	8	mA
Input Resistance	R <sub>IN</sub>			10		kΩ
Output Resistance	R <sub>OUT</sub>		4	5	6	kΩ
Maximum Input Voltage	V <sub>i(max)</sub>	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=1800mVrms, p=20mVrms, fm=1kHz		0.5		%
Voltage Gain	G <sub>V</sub>	Vi=200mVrms	-6.5	-5	-3.5	dB
Channel Balance	C <sub>B</sub>	Vi=200mVrms		0	1.5	dB
Lamp ON Level	V <sub>L(ON)</sub>	pilot only		9	15	mV
Lamp OFF Level	V <sub>L(OFF)</sub>	pilot only	2	6		mV
Stereo Lamp Hysteresis	V <sub>H</sub>	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

