

# AN3592K, AN3592S

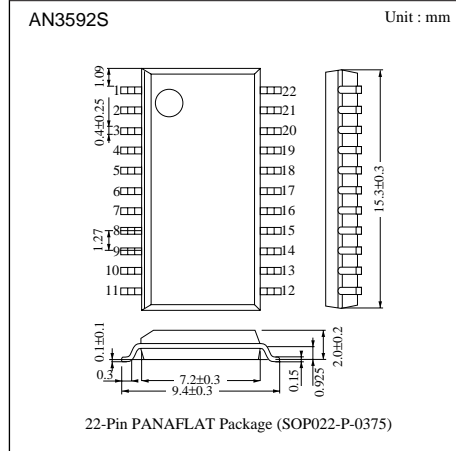
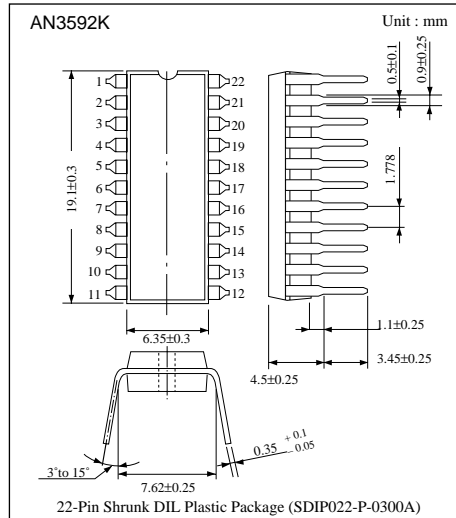
## Jumping Correction ICs for PAL VCR

### ■ Overview

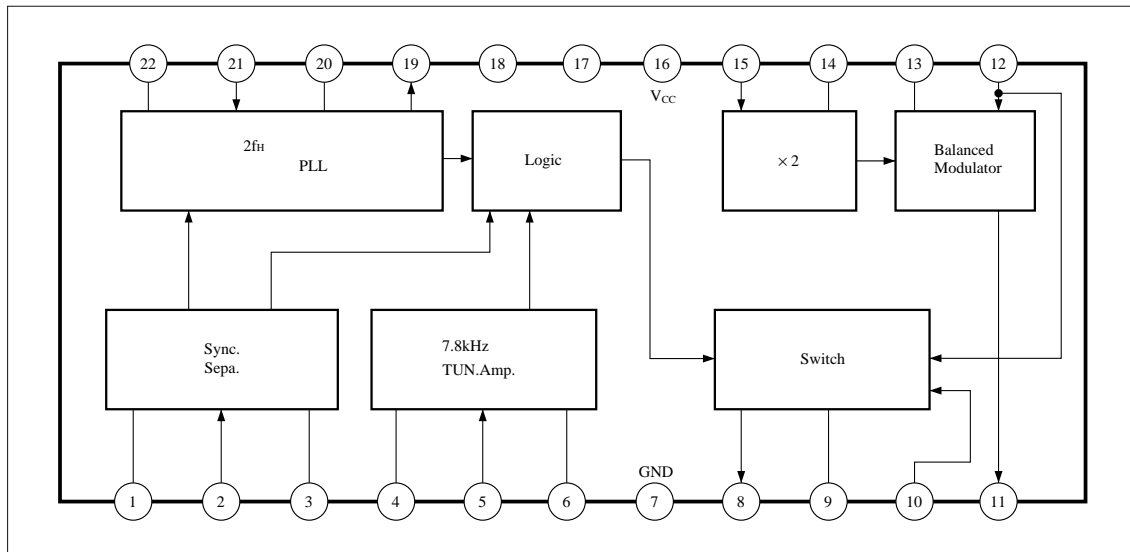
The AN3592K and AN3592S are ICs for correcting a waveform distortion generated at LP mode special play-back for PAL VCRs.

### ■ Features

- The AN3592K and AN3592S have the following functions : Video signal 0.5H discontinuous point detection circuit. Chroma signal phase dislocation detection/correction circuit
- Supply voltage : 5V.



### ■ Block Diagram



### ■ Pin Descriptions

Pin No.	Pin name	Pin No.	Pin name
1	V. killer	12	Chroma input
2	Sync. sepa. input	13	B.M. bias
3	Sync. sepa. filter	14	8.86MHz tuned coil
4	7.8kHz tuned coil	15	4.43MHz input
5	APC error input	16	V <sub>CC</sub>
6	APC error bias	17	1/2H M.M.
7	GND	18	1/2H jump output
8	Chroma output	19	P.C. output
9	CTL. input	20	VCO cap.
10	LPF input	21	VCO input
11	LPF output	22	VCO resistor

### ■ Absolute Maximum Ratings (Ta =25°C)

Parameter		Symbol	Rating	Unit
Supply voltage		V <sub>CC</sub>	6.0	V
Power dissipation		P <sub>D</sub>	200	mW
Operating ambient temperature		T <sub>opr</sub>	-20 to +75	°C
Storage temperature	AN3592K	T <sub>stg</sub>	-55 to +150	°C
	AN3592S		-55 to +125	

### ■ Electrical Characteristics (V<sub>CC</sub>=5V, Ta=25°C)

Parameter	Symbol	Condition	min	typ	max	Unit
Supply current	I <sub>CC</sub>		13	18.5	24	mA
Direct output voltage	V <sub>OD</sub>	Chroma 300mV <sub>P-P</sub> direct mode	440	510	580	mV <sub>P-P</sub>
Inverted/direct output voltage ratio	R <sub>ID</sub>	4.43MHz input 250mV <sub>P-P</sub>	-0.5	+1	+2.5	dB
Inversion mode leak	V <sub>OIL</sub>	Chroma 300mV <sub>P-P</sub> inversion mode	0	10	55	mV <sub>P-P</sub>
2nd harmonics spurious	V <sub>O2L</sub>	Chroma input 4.43MHz, input 300mV <sub>P-P</sub>	0	5	15	mV <sub>P-P</sub>
Switch amp. leak	V <sub>OSL</sub>	Pin10 input 300mV <sub>P-P</sub> direct mode	0	1.5	5	mV <sub>P-P</sub>
SYNC. SEP. minimum input	V <sub>SSP</sub>	APL 0%	—	150	200	mV <sub>P-P</sub>
2 <sub>m</sub> PLL ref. oscillation voltage	V <sub>OSC</sub>	Oscillation freq. 15.6kHz	2	2.4	2.8	V
2 <sub>m</sub> PLL pull-in rage	f <sub>P</sub>		15.1	15.6	16.1	kHz
2 <sub>m</sub> PLL VCO control sensitivity	S <sub>VCO</sub>		9.2	11.5	15.0	Hz/mV
APC error input minimum level	V <sub>APC</sub>		—	25	40	mV <sub>P-P</sub>
1/2H.M.M. threshold value	V <sub>MTH</sub>		2.2	2.5	2.8	V
Direct mode hold voltage	V <sub>CTL-D</sub>		0	—	0.7	V
Inversion mode holding voltage	V <sub>CTL-I</sub>		2	—	3.5	V
Active mode hold voltage	V <sub>CTL-A</sub>		4.7	—	5	V

■ Application Circuit

