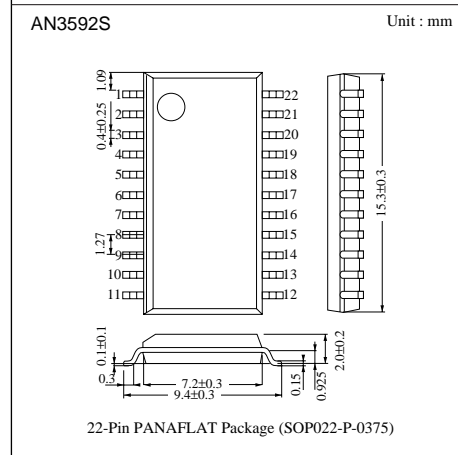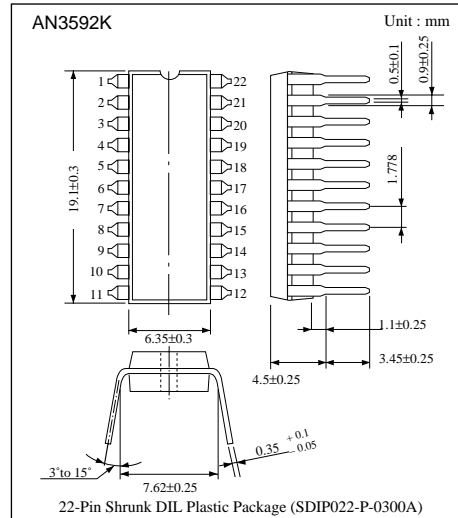**Panasonic**

AN3592K, AN3592S

Jumping Correction ICs for PAL VCR
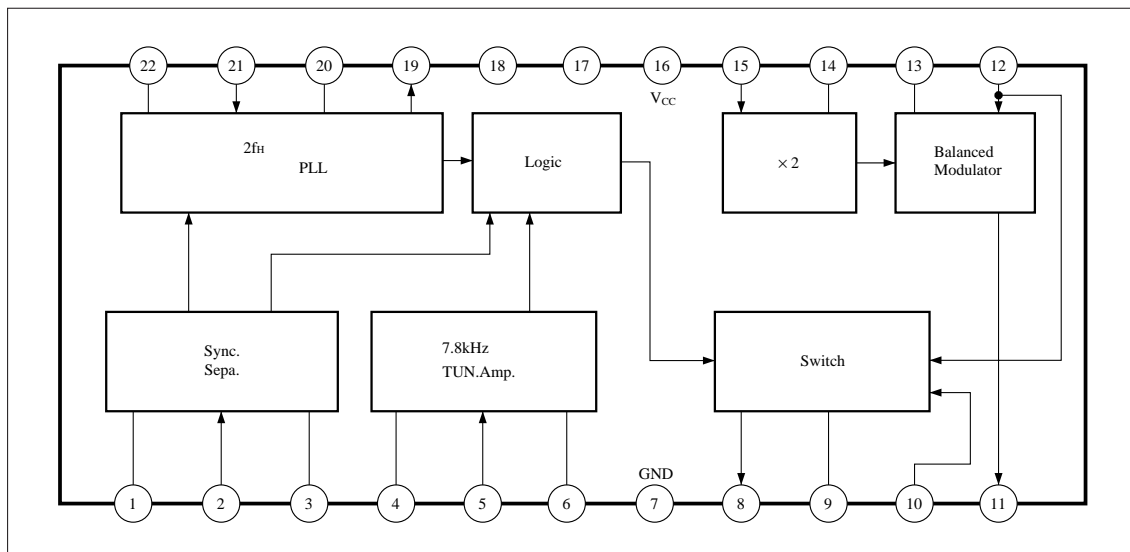
■ Overview

The AN3592K and AN3592S are ICs for correcting a waveform distortion generated at LP mode special playback 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.

AN3592K   Unit : mm

22-Pin Shrunk DIL Plastic Package (SDIP022-P-0300A)

AN3592S   Unit : mm

22-Pin PANAFLAT Package (SOP022-P-0375)

■ Block Diagram

Panasonic

■ 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_{CC}
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_{CC}	6.0	V
Power dissipation		P_D	200	mW
Operating ambient temperature		T_{opr}	−20 to + 75	°C
Storage temperature	AN3592K	T_{stg}	−55 to + 150	°C
	AN3592S		−55 to + 125	

■ Electrical Characteristics (V_{CC}=5V, Ta=25°C)

Parameter	Symbol	Condition	min	typ	max	Unit
Supply current	I_{CC}		13	18.5	24	mA
Direct output voltage	V_{OD}	Chroma 300mV_{P-P} direct mode	440	510	580	mV_{P-P}
Inverted/direct output voltage ratio	R_{ID}	4.43MHz input 250mV_{P-P}	− 0.5	+1	+2.5	dB
Inversion mode leak	V_{O1L}	Chroma 300mV_{P-P} inversion mode	0	10	55	mV_{P-P}
2nd harmonics spurious	V_{O2L}	Chroma input 4.43MHz, input 300mV_{P-P}	0	5	15	mV_{P-P}
Switch amp. leak	V_{OSL}	Pin10 input 300mV_{P-P} direct mode	0	1.5	5	mV_{P-P}
SYNC. SEP. minimum input	V_{SSP}	APL 0%	──	150	200	mV_{P-P}
2_{fH} PLL ref. oscillation voltage	V_{OSC}	Oscillation freq. 15.6kHz	2	2.4	2.8	V
2_{fH} PLL pull-in rage	f_P		15.1	15.6	16.1	kHz
2_{fH} PLL VCO control sensitivity	S_{VCO}		9.2	11.5	15.0	Hz/mV
APC error input minimum level	V_{APC}		──	25	40	mV_{P-P}
1/2H.M.M. threshold value	V_{MTH}		2.2	2.5	2.8	V
Direct mode hold voltage	V_{CTL-D}		0	──	0.7	V
Inversion mode holding voltage	V_{CTL-I}		2	──	3.5	V
Active mode hold voltage	V_{CTL-A}		4.7	──	5	V

■ Application Circuit