

AN5625N

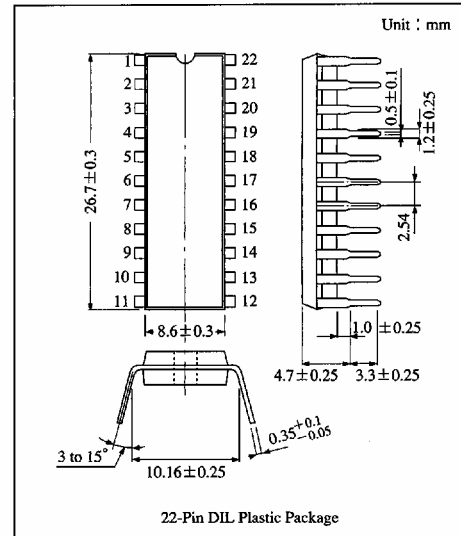
TV PAL/NTSC/M-NTSC Chrominance-Signal Processing IC

Overview

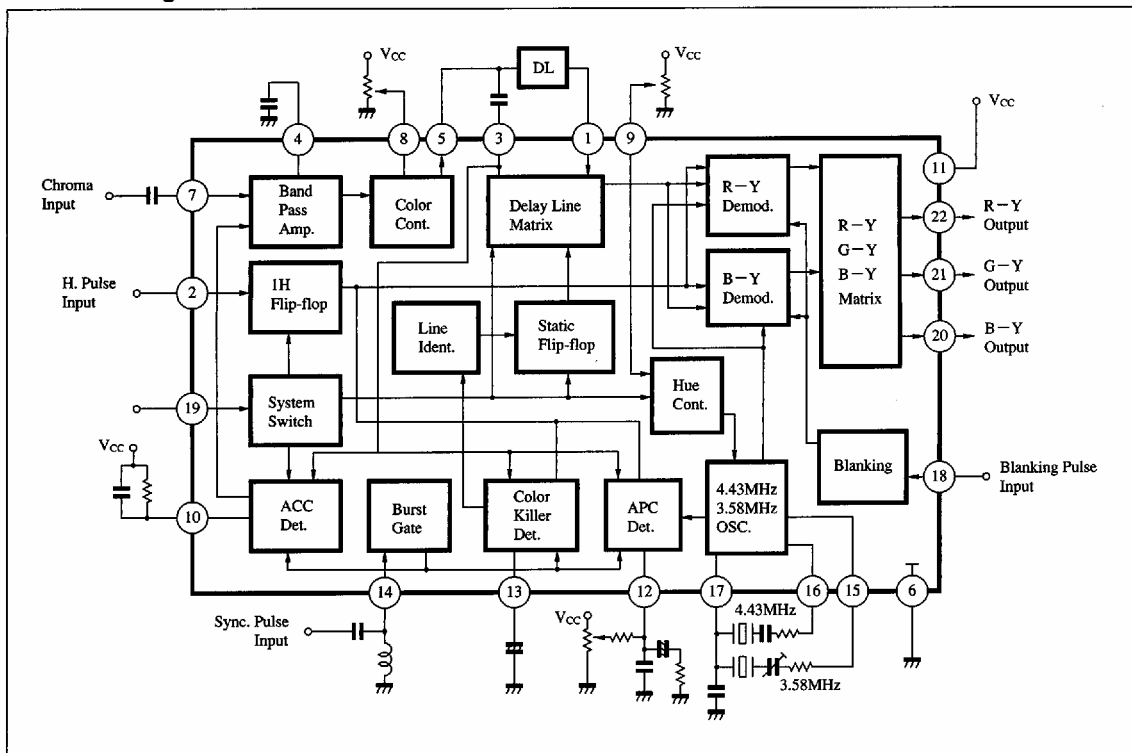
The AN5625N is an integrated circuit designed for color TV chrominance-signal processing circuit.

Features

- A PAL/NTSC/M-NTSC system demodulator is possible in combination with the AN5615
- 4-system demodulator is possible in combination with the AN5615 and the AN5635N



Block Diagram



Pin Descriptions

Pin No.	Pin name	Pin No.	Pin name
1	Chroma sig. input (DLIH)	12	APC filter
2	H. pulse input	13	Color killer filter
3	Chroma sig. input	14	Burst gate pulse input
4	Chroma by-pass	15	3.58MHz OSC
5	Chroma sig. output	16	4.43MHz OSC
6	GND	17	OSC input
7	Chroma sig. input	18	BLK pulse input
8	Color control	19	System SW.
9	Tint control	20	B-Y output
10	ACC filter	21	G-Y output
11	V _{CC}	22	R-Y output

Absolute Maximum Ratings (T_a=25°C)

Parameter	Symbol	Rating	Unit
Supply voltage	V _{CC}	14.4	V
Circuit current	I _{CC}	83	mA
Power dissipation	P _D	1200	mW
Temperature	Operating ambient temperature	T _{opr}	-20 to +70
	Storage Temperature	T _{stg}	-55 to +150

ICs for
TV

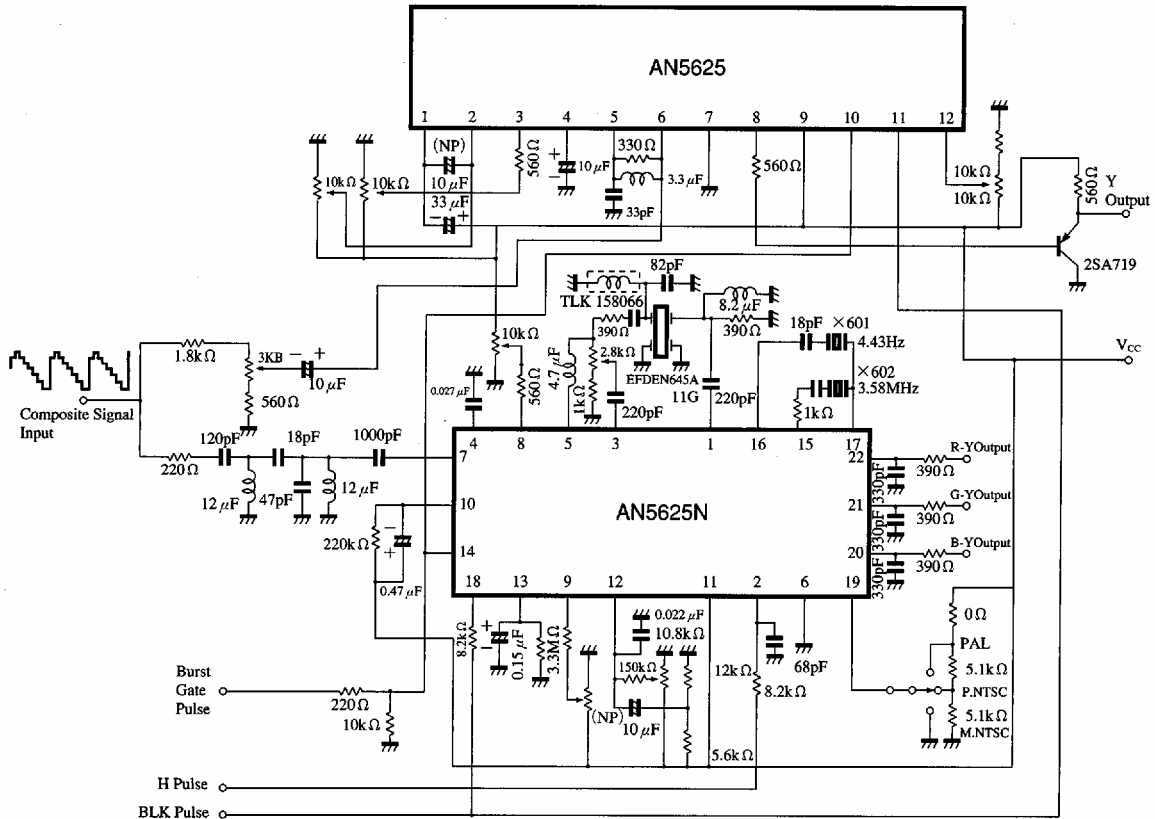
Electrical Characteristics (T_a=25°C)

Parameter	Symbol	Condition	min	typ	max	Unit
Total circuit current	I _{tot}	V _{CC} =12V	40	54	69	mA
Pin① voltage	V ₁₋₆	V _{CC} =12V	2.3	2.8	3.3	V
Pin③ voltage	V ₃₋₆	V _{CC} =12V	2.3	2.8	3.3	V
Pin⑤ voltage	V ₅₋₆	V _{CC} =12V	8.0	8.5	9.0	V
Pin⑦ voltage	V ₇₋₆	V _{CC} =12V	0.8	1.3	1.8	V
Max. output voltage (R-Y)	e _o	Color bar input 150mV _{P-P} , Color max. Pin⑩=V _{CC}	7.5	8.0	—	V _{P-P}
Output voltage (R-Y)	e _{o2}	Color bar input 150mV _{P-P} , Color typ	2.25	3.0	3.75	V _{P-P}
Ratio of demodulated signals (R-Y)/(B-Y)	R/B	⑦=4.43MHz 100mV _{P-P} ⑰=4.44MHz 500mV _{P-P}	0.72	0.83	0.9	times
Ratio of demodulated signals (G-Y)/(B-Y)	G/B	⑦=4.43MHz 100mV _{P-P} ⑰=4.44MHz 500mV _{P-P}	0.31	0.37	0.42	times
Phase difference between (R-Y) and (B-Y) signals	∠R	⑦=4.43MHz 100mV _{P-P} ⑰=4.44MHz 500mV _{P-P} ∠B=0	86.5	90.0	93.5	deg.
Phase difference between (G-Y) and (B-Y) signals	∠G	⑦=4.43MHz 100mV _{P-P} ⑰=4.44MHz 500mV _{P-P} ∠B=0	229	236	244	deg.
PAL color killer level	e _{K(PAL)}	Color bar 150mV _{P-P} , (=0dB) Color center	38	43	48	dB
NTSC color killer level	e _{K(NTSC)}	Color bar 150mV _{P-P} , (=0dB) Color center, Tint center	39	44	49	dB
DC output voltage	E _{C-Y}	No signal input	6.9	7.35	7.8	V
Tint center	θ	Color bar 150mV _{P-P} , Color typ, Tint typ	—	0	±7	deg.
Tint variable range	Δθ	Color typ, Tint max. to min.	±35	±45	±55	deg.

■ Electrical Characteristics (cont.) (Ta=25°C)

Parameter	Symbol	Condition	min	typ	max	Unit
APC pull-in range	f_{APC}	Color bar 150mV _{P-P} , burst frequency variable	±500	±800	—	Hz
Free-run frequency supply voltage dependency	$\Delta f_o/V_{CC}$	No input, Pin ⑫ for non connection, V _{CC} =12V±20%	—	—	120	Hz
Free-run frequency ambient temperature dependency	$\Delta f_o/T_a$	No input, Pin ⑫ for non connection, T _a =-20 to +70°C	—	1.5	2.5	Hz/deg.
PAL/NTSC system changeover level	V _{19 PAL}	Pin ⑨ control voltage	5.6	6.1	6.6	V
NTSC/M-NTSC system changeover level	V _{19 NTSC}	Pin ⑨ control voltage	1.9	2.2	2.5	V

■ Application Circuit



This datasheet has been downloaded from:

www.DatasheetCatalog.com

Datasheets for electronic components.



LittleDiode supplies new, hard to find or obsolete electronic components and semiconductors all over the world.

With over two million different components listed you are sure to find the part you need.

Feel free to visit us today at our online store:

LittleDiode.com

Looking forward to providing you with the best possible service.