

AN5862K, AN5862S

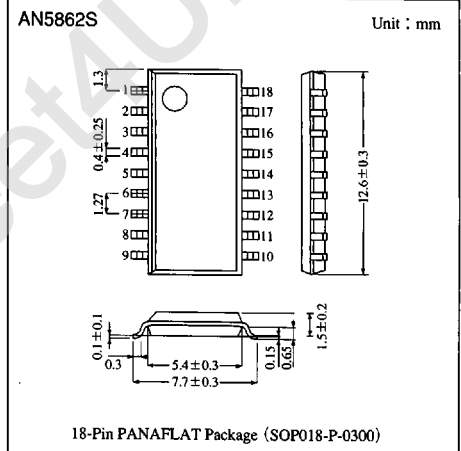
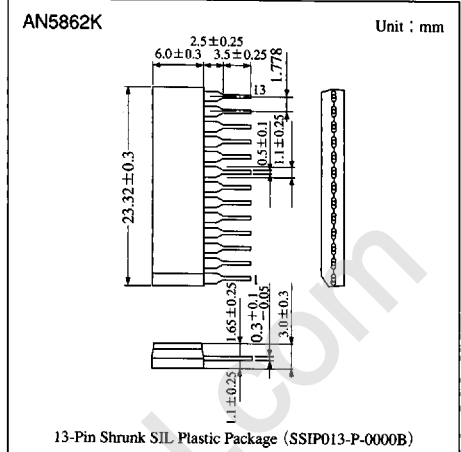
Analog Switch ICs for RGB Interface

Overview

The AN5862K and AN5862S are integrated circuits designed for analog switch of RGB signal processing.

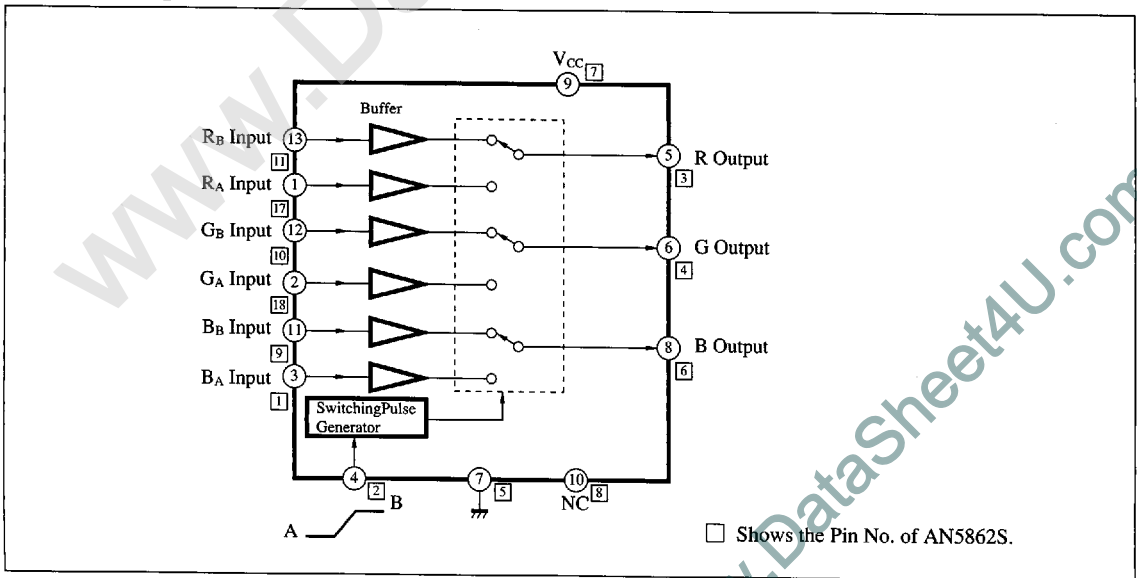
Features

- Wide band characteristics
- High speed switching characteristics ($t_{dr} (typ.)$, $t_{df} (typ.)$: 35ns)



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Block Diagram



Pin Descriptions

() shows the Pin No. of AN5862S.

Pin No.	Pin name	Pin No.	Pin name
1 (17)	R _A input	8 (6)	B output
2 (18)	G _A input	9 (7)	V _{CC}
3 (5)	B _A input	10 (8)	NC
4 (2)	Switching pulse input	11 (9)	B _B input
5 (3)	R output	12 (10)	G _B input
6 (4)	G output	13 (11)	R _B input
7 (5)	GND		

Note) In case of AN5862S, Pin No. ①, ②, ③, ④, ⑤, are NC

Absolute Maximum Ratings (T_a=25°C)

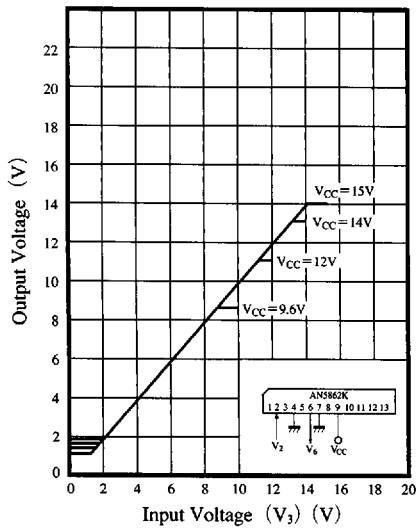
Parameter		Symbol	Rating		Unit
Voltage	Supply voltage	V _{CC}	14.4		V
	Circuit voltage	V ₉₋₇ (V ₇₋₅)	0	14.4	V
		V _{1,2,3,11,12,13-7} (V _{17,18,19,10,11-5})	0	V ₉₋₇ (V ₇₋₅)	V
		V ₄₋₇ (V ₂₋₅)	0	6	V
Circuit current		I _{5,6,8} (I _{3,4,6})	-10	2	mA
Power dissipation (T _a =70°C)	AN5862K	P _D	660		mW
	AN5862S		420		
Temperature	Operating ambient temperature	T _{opr}	-20 to +70		°C
	Storage temperature	AN5862K	-50 to +150		°C
			AN5862S	-50 to +125	

Note) () is for the AN5862S

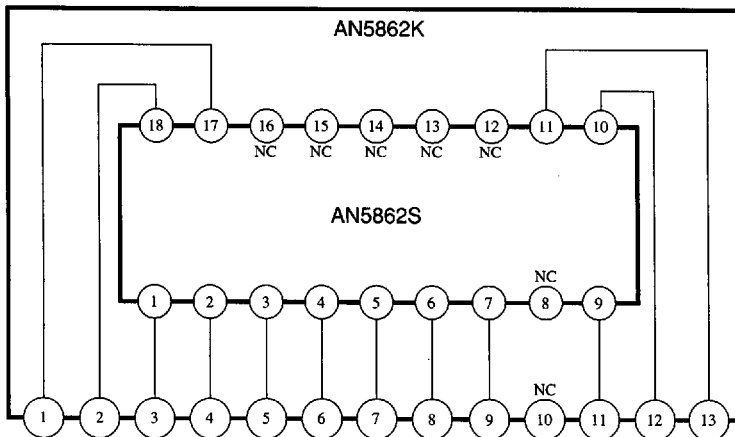
Electrical Characteristics (T_a=25°C)

Parameter	Symbol	Condition	min	typ	max	Unit
Operating supply voltage range	V _{CC(opr.)}		9.6	—	14.4	V
Total circuit current	I _{tot}	V _{CC} =12V	21	28	35	mA
Signals input/output dynamic range (Upper)	D.R. _{max.}	V _{CC} =12V	—	—	10.5	V
Signals input/output dynamic range (Lower)	D.R. _{min.}	V _{CC} =12V	1.7	—	—	V
Output terminal sink enable current	I _{sinc}	V _{CC} =12V, Input voltage 6V	—	—	0.8	mA
Signals voltage amplification	A _v	f _{in} =1MHz, 1V _{P-P}	0.9	1	1.1	times
Signals frequency characteristics	f _{-3dB}	e _{in} =1V _{P-P}	20	—	—	MHz
Switching crosstalk	CT _{A/B}	f _{in} =1MHz, 1V _{P-P}	—	—	-40	dB
Signal rise time	t _r	f _{in} =1MHz, 1V _{P-P}	—	20	40	ns
Signal fall time	t _f	f _{in} =1MHz, 1V _{P-P}	—	20	40	ns
Signal rise delay time	t _{dr}	f _{in} =1MHz, 1V _{P-P}	—	10	30	ns
Signal fall delay time	t _{df}	f _{in} =1MHz, 1V _{P-P}	—	10	30	ns
Switching delay time	t _{dr(A/B)}	Switching pulse 1V _{P-P}	—	40	60	ns
Switching pulse standard input	t _{df(A/B)}	Switching pulse 1V _{P-P}	—	40	60	ns
Switching pulse standard input	V _{SWP}	V _{CC} =12V	—	1	—	V _{O-P}

Input/Output Characteristics



Pinning comparing table of the AN5862K and AN5862S



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