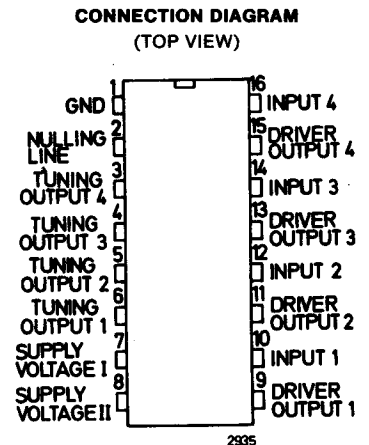
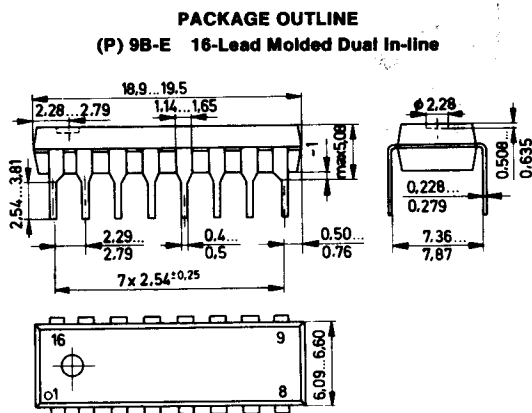


SAS560S, SAS570S

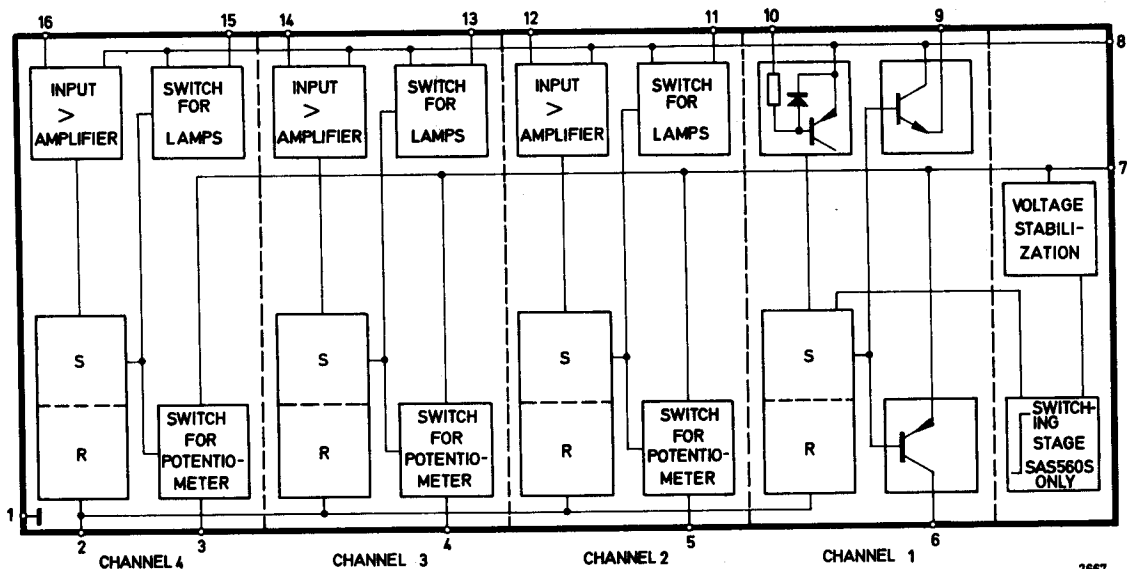
SWITCHING AMPLIFIERS FOR 4-CHANNEL TOUCH TUNING

- HIGH INPUT SENSITIVITY
- LOW SATURATION VOLTAGE OF SWITCHING TRANSISTORS
- LOW TEMPERATURE DRIFT OF THE OUTPUT SWITCHING TRANSISTOR FOR THE TUNING VOLTAGE
- SCHMITT-TRIGGER-CIRCUIT ENSURES FOR THE SAS560S SWITCHING OF STAGE 1 IN CASE OF SETTING OF SUPPLY VOLTAGE

GENERAL DESCRIPTION – The SAS560S and SAS570S are particularly suited for radio and TV sets, elevators etc. Each stage can be selected with very low current. Two outputs are available for each stage: one for tuning voltage and the other for channel indication and/or bandswitch. The high input sensitivity allows its use in equipments without mains isolation.



BLOCK DIAGRAM



ABSOLUTE MAXIMUM RATINGS

Supply Voltage 1 (Note)	V ₇	36 V
Supply Voltage 2 (Note)	V ₈	26.5 V
Voltage	V ₂	6.0 V
Driver Current	I ₉ , I ₁₁ , I ₁₃ , I ₁₅	55 mA
Max. Driver Current, t _{max} ≤ 2 s	I ₉ , I ₁₁ , I ₁₃ , I _{15max}	100 mA
Tuning Current	I ₃ , I ₄ , I ₅ , I ₆	1.5 mA
Max. Tuning Current, t _{max} ≤ 2 s	I ₃ , I ₄ , I ₅ , I _{6max}	10 mA
Junction Temperature	T _j	150°C
Thermal Resistance (system-air)	R _{thsa}	120°C/W
Storage Temperature	T _s	-40°C to +125°C

RANGE OF OPERATION

Supply Voltage 1 (Note)	V ₇	11 to 35 V
Supply Voltage 2 (Note)	V ₈	5.0 to 25 V
Ambient Temperature in Operation	T _A	0°C to +70°C

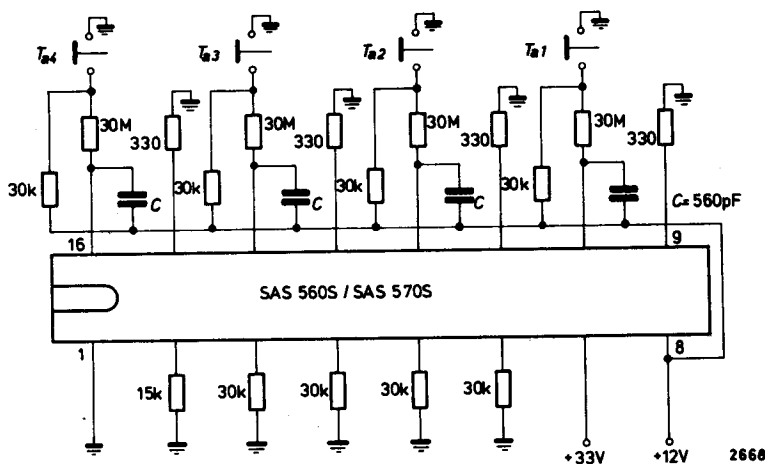
NOTE
Voltage is with respect to the ground pin.

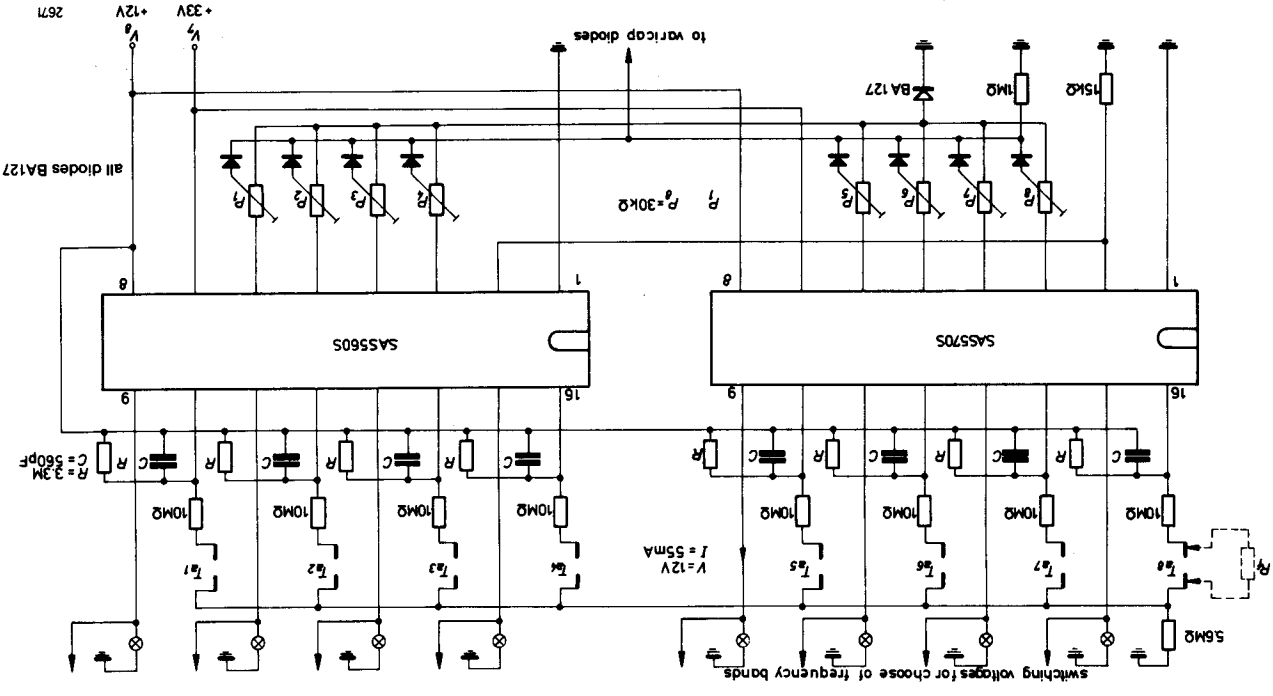
ELECTRICAL CHARACTERISTICS (V₇ = 33 V, V₈ = 12 V, T_A = 25°C, according to test circuit)

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNITS
Voltage at Pin 2 (R _k = 15 kΩ) During Touching	V ₂₋₁	4.3	4.7	5.5	V
	V ₂₋₁	2.6	3.2	3.7	V
Saturation Voltage of Driver Outputs	V ₁₅₋₈ , V ₁₃₋₈		0.9	1.5	V
	V ₁₁₋₈ , V ₉₋₈		0.9	1.5	V
Saturation Voltage of Tuning Voltage Outputs	V ₃₋₇ , V ₄₋₇		0.15	0.5	V
	V ₅₋₇ , V ₆₋₇		0.15	0.5	V
Temperature Drift of Saturation Voltage of Tuning Outputs (T _A = 25 ... 55°C)	V ₃₋₇ , V ₄₋₇ ,		0.3	1.0	mV/°C
	V ₅₋₇ , V ₆₋₇		0.3	1.0	mV/°C
Current Consumption During Touching	I ₇	3.3	4.3	5.3	mA
	I ₇		4.7	5.7	mA
Current Consumption (without load)	I ₇	0.7	1.4	2.1	mA
Input Current	I ₁₀ , I ₁₂ , I ₁₄ , I ₁₆		100	300	nA
Reverse Current of Driver Outputs	I ₉ , I ₁₁ , I ₁₃ , I ₁₅			10	μA
Reverse Current of Tuning Voltage Outputs	I ₃ , I ₄ , I ₅ , I ₆			1.0	μA

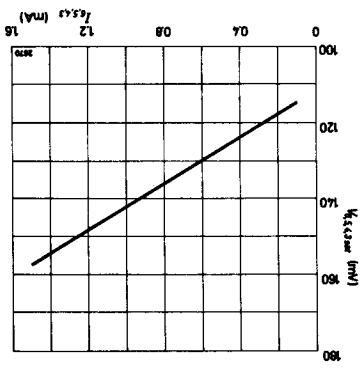
After simultaneous selection of more than one channel, only one channel will be selected. After switching off V₈, the last selected channel is stored so long as V₇ supply is maintained.
SAS560S only: On application of supply voltage V₇, channel 1 (outputs 6 and 9) is automatically selected.

TEST CIRCUIT

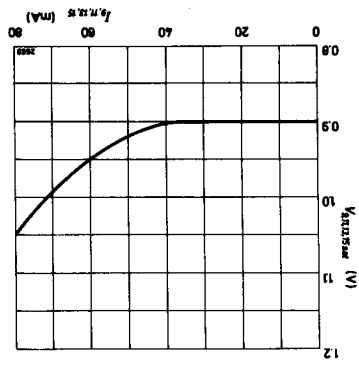




APPLICATION



SATURATION VOLTAGE OF DRIVER OUTPUTS VERSUS CURRENT OF THESE OUTPUTS



SATURATION VOLTAGE OF DRIVER OUTPUTS VERSUS CURRENT OF THESE OUTPUTS

TYPICAL PERFORMANCE CURVES