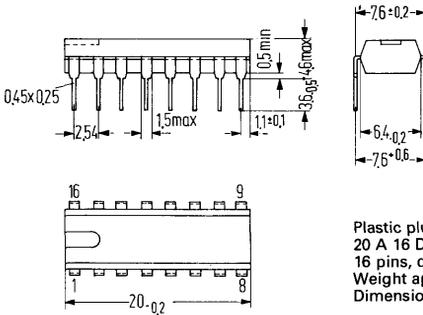


The monolithic integrated circuits SAS 560 S and SAS 570 S are particularly suited for radio and TV sets, elevators etc. Each stage can be selected with very low current. Two outputs are available for each stage: one for tuning voltage and the other for channel indication and/or bandswitch. The high input sensitivity allows its use in equipments without mains isolation.

- 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 SAS 560 S switching of stage 1 in case of setting of supply voltage

Type	Ordering code
SAS 560 S	Q67000-S30
SAS 570 S	Q67000-S31

### Package outlines



Plastic plug-in package  
20 A 16 DIN 41866  
16 pins, dual-in-line  
Weight approx. 1.2 g  
Dimensions in mm

### Absolute maximum ratings

Supply voltage 1	$V_7$	36	V
Supply voltage 2	$V_8$	26.5	V
Voltage	$V_2$	6	V
Driver current	$I_9, I_{11}, I_{13}, I_{15}$	55	mA
Max. driver current, $t_{max} \leq 2s$	$I_9, I_{11}, I_{13}, I_{15max}$	100	mA
Tuning current	$I_3, I_4, I_5, I_6$	1.5	mA
Max. tuning current, $t_{max} \leq 2s$	$I_3, I_4, I_5, I_{6max}$	10	mA
Junction temperature	$T_j$	150	°C
Thermal resistance (system-air)	$R_{thsa}$	120	°K/W
Storage temperature	$T_s$	-40 to +125	°C

### Range of operation

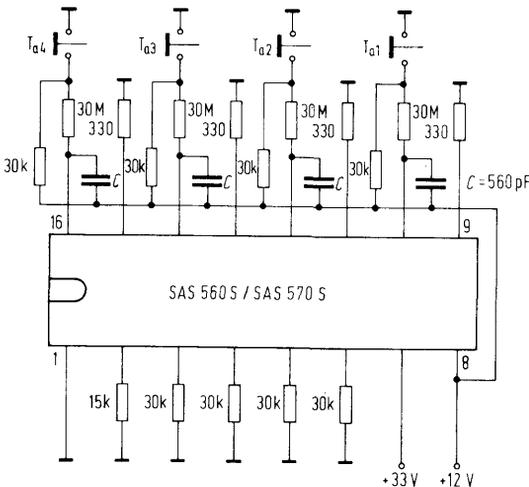
Supply voltage 1	$V_7$	11 to 35	V
Supply voltage 2	$V_8$	5 to 25	V
Ambient temperature in operation	$T_{amb}$	0 to +70	°C

**Electrical characteristics** ( $V_7 = 33\text{ V}$ ,  $V_8 = 12\text{ V}$ ,  $T_{\text{amb}} = 25^\circ\text{C}$ , according to test circuit)

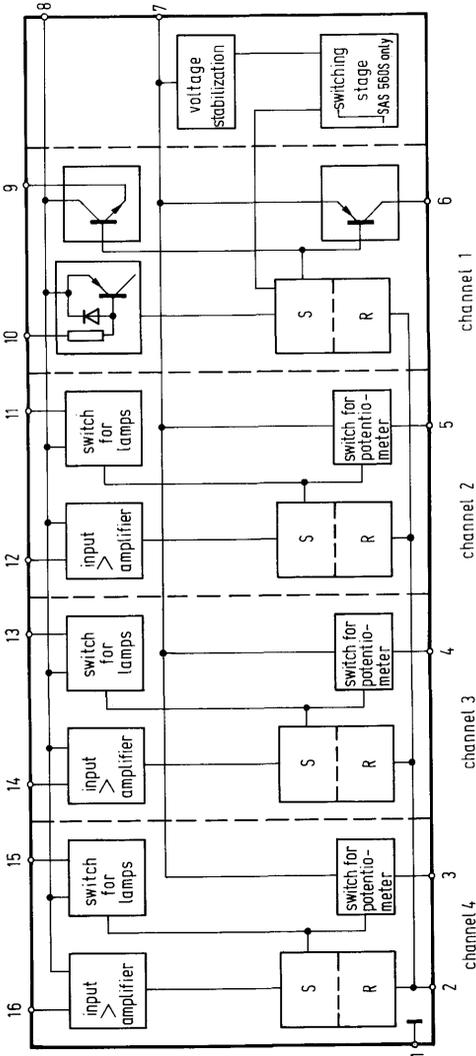
		min	typ	max		
Voltage at pin 2 ( $R_k = 15\text{ k}\Omega$ )	during touching					
	after touching	$V_{2-1}$	4.3	4.7	5.1	V
Saturation voltage of driver outputs		$V_{2-1}$	2.6	3.2	3.7	V
		$V_{15-8}$ , $V_{13-8}$		.9	1.5	V
Saturation voltage of tuning voltage outputs		$V_{11-8}$ , $V_{9-8}$		.9	1.5	V
		$V_{3-7}$ , $V_{4-7}$		.15	.5	V
Temperature drift of saturation voltage of tuning outputs	$V_{5-7}$ , $V_{6-7}$		.15	.5	V	
( $T_{\text{amb}} = 25 \dots 55^\circ\text{C}$ )		$V_{3-7}$ , $V_{4-7}$		.3	1	mV/deg
		$V_{5-7}$ , $V_{6-7}$		.3	1	mV/deg
Current consumption during touching			3.3	4.3	5.3	mA
	after touching	$I_7$		4.7	5.7	mA
Current consumption (without load)	$I_7$	.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	$\mu\text{A}$	
Reverse current of tuning voltage outputs	$I_3$ , $I_4$ , $I_5$ , $I_6$			1	$\mu\text{A}$	

After simultaneous selection of more than one channel, only **one** channel will be selected. After switching off  $V_8$ , the last selected channel is stored so long as  $V_7$  supply is maintained.  
**SAS 560 S only:** On application of supply voltage  $V_7$ , channel 1 (outputs 6 and 9) is automatically selected.

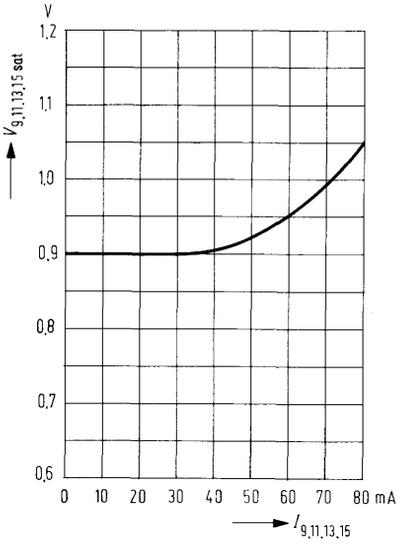
**Test circuit**



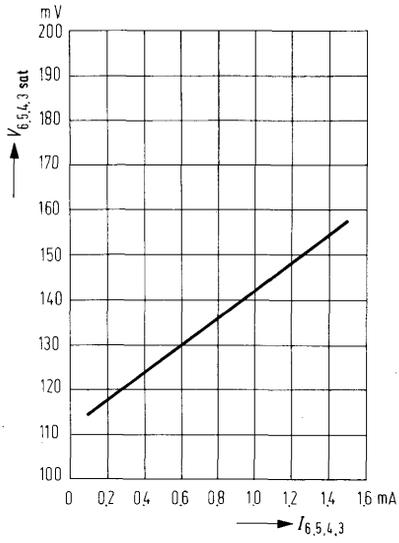
Block circuit diagram



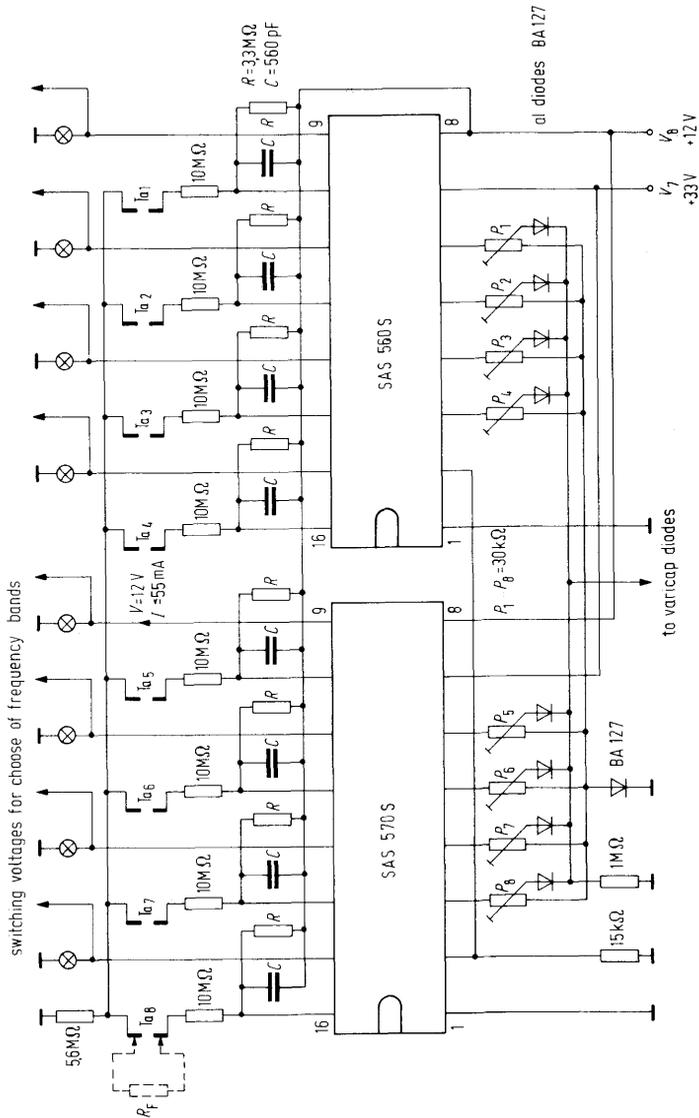
Saturation voltage of driver outputs  
versus current of these outputs



Saturation voltage of tuning voltage  
outputs versus current of these outputs



Application circuit I



Application circuit II as ring counter circuit

