

AN5742, AN5743

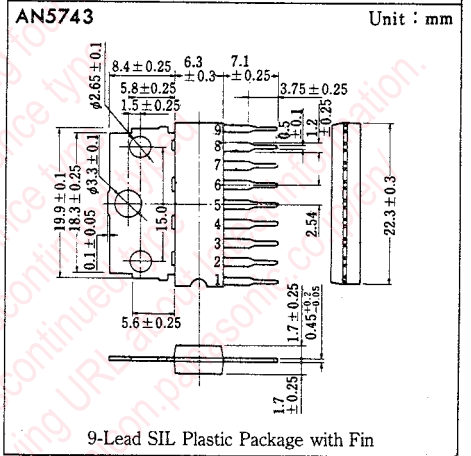
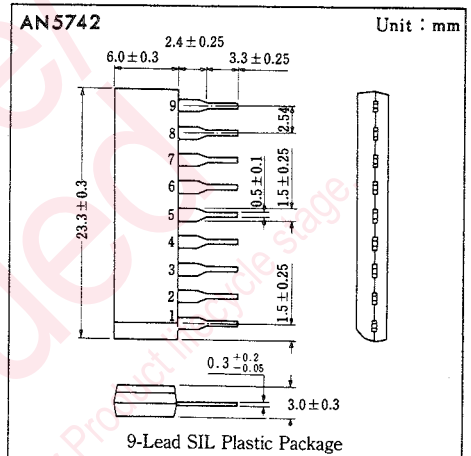
B/W TV Sound Output Circuits

Outline

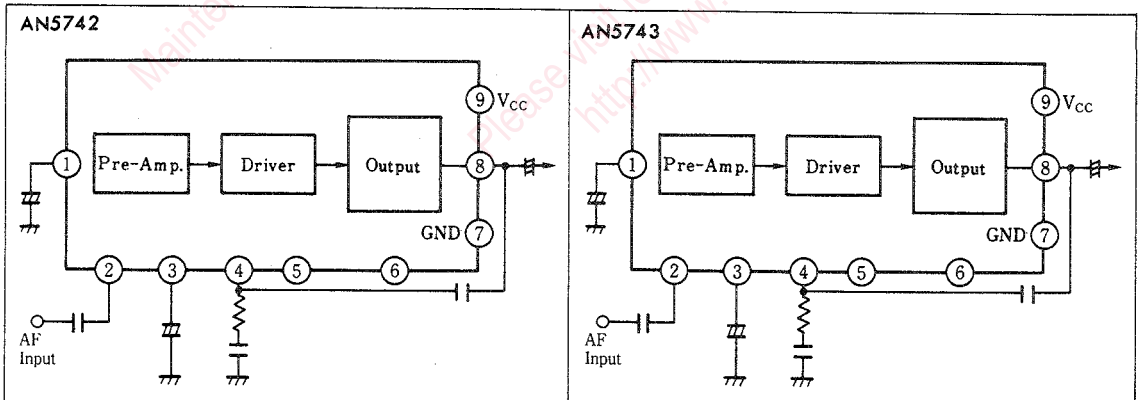
The AN5742 and the AN5743 are one of IC's for the AN5700 series 12V operating Black/White TV, respectively. They are integrated circuits for B/W TV sound output circuits.

Features

- Operation over wide range of supply voltage
- Small number of peripheral components ; Bootstrap condenser is unnecessary



Block Diagram



■ Pin

<AN5742>

<AN5743>

Pin No.	Pin Name
1	Decoupling
2	Input
3	Negative Feedback
4	Phase Compensation
5	Negative Feedback
6	NC
7	GND
8	Output
9	V _{cc}

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1	Decoupling
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■ Absolute Maximum Ratings (T_a=25°C)

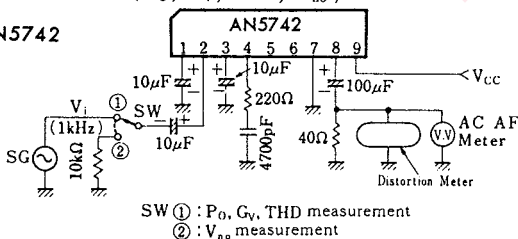
Item	Symbol	Rating	Unit
Supply voltage	V _{cc}	13.2	V
Supply Current	I _{cc}	2	A
Power Dissipation	AN5742	400	mW
	AN5743	1.3	W
Temperature	Operating Ambient Temperature	T _{opr}	-40 ~ +70 °C
	Storage Temperature	T _{stg}	-20 ~ +150 °C

■ Electrical Characteristics (T_a=25°C)

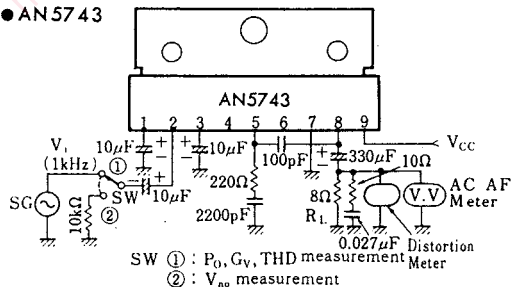
Item	Symbol	Test Circuit	Condition	min.	typ.	max.	Unit	
Total Circuit Current	I _{tot}		V _{cc} =11V	AN5742	8.5	12.5	16.5	mA
				AN5743	9	13	17	mA
Max. Output	P _o	1	V _{cc} =11V, THD=10% f=1kHz	AN5742	270	340		mW
				AN5743	0.85	1.3		W
Voltage Gain	G _v	1	V _{cc} =11V, V _i =100mV _{rms} , f=1kHz	AN5742	22	24	26	dB
				AN5743	25	27	29	dB
Total Harmonic Distortion	THD	1	V _{cc} =11V, V _i =100mV _{rms} , f=1kHz	AN5742		0.15	0.6	%
				AN5743		0.4	1.5	%
Output Noise Voltage	V _{no}	1	V _{cc} =11V, R _s =10kΩ			1	mV _{rms}	
Input Resistance	R _i				10		kΩ	

Test Circuit 1 (P_o, G_v, THD, V_{no})

● AN5742

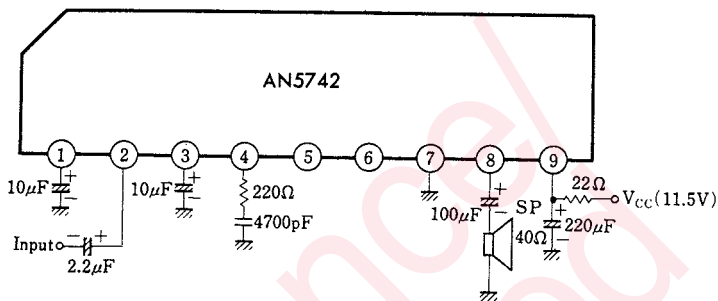


● AN5743

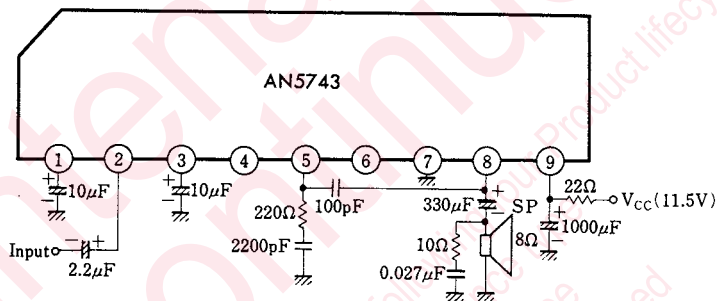


■ Application Circuit

(1) AN5742



(2) AN5743



Main Discontinued
 Maintenance/Discontinued includes following product lifecycle stage.
 planned maintenance type
 maintenance type
 planned discontinued type
 discontinued type
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