

LINEAR MONOLITHIC INTEGRATED CIRCUITS

IC's For Radio, Audio

Electrical Characteristics (Ta=25°C)										
Type No.	Function	Maximum Ratings (Ta=25°C)	Item	Symbol	Condition	min.	typ.	max.	Unit	
AN7120	2.1W Audio Power Amplifier	VCC (V7-10)=18V ICC(Peak)=2A PD=1.2W PD=2.25W* Topr=-20~+70℃ Tstg=-40~+150℃ *With heat sink	(VCC=9V, RL=4Ω, f=1kHz)							
			Quiescent Current	ICQ	Vi=0	10	27	50	mA	
			Open Loop Voltage Gain	Gvo	Vi=1mV		62		dB	
			Closed Loop Voltage Gain	Gvc	Vi=5mV	42	45	48	dB	
			Output Power	Po	THD=10%	1.7	2.1		W	
					RL=8Ω, THD=10%		1.4		W	
			Total Harmonic Distortion	THD	Vi=5mV		0.5	1.5	%	
			Output Noise Voltage	Vno	Rg=10kΩ		0.4	1	mV	
			Input Impedance	Zi			25		kΩ	
AN7130	4.2W Audio Power Amplifier	VCC(V9-2)=18V ICC=3A PD=10W (Ta=30℃ θj-c=12℃/W) Topr=-30~+75℃ Tstg=-40~+150℃	(VCC=13.2V, RL=4Ω, f=1kHz)							
			Quiescent Current	ICQ	Vi=0	10	20	50	mA	
			Closed Loop Voltage Gain	Gvc	Vi=5mV	43	46	49	dB	
			Output Power	Po	THD=10%	3.7	4.2		W	
			Total Harmonic Distortion	THD	Vi=5mV		0.4	1.5	%	
			Output Noise Voltage	Vno	Rg=10kΩ		0.5	1.2	mV	
			Input Impedance	Zi			25		kΩ	
AN7131 AN7140	5W Audio Power Amplifier	VCC(V9-2)=24V*1 VCC(V9-2)=20V*2 ICC=4A PD=10W (Ta=30℃) Topr=-30~+75℃ Tstg=-40~+150℃ *1 Without signal (AN7131 only) *2 Operation	(VCC=13.2V, RL=4Ω, f=1kHz)							
			Quiescent Current	ICQ	Vi=0	AN7131	7	20	45	mA
						AN7140	15	30	55	mA
			Voltage Gain	Gv	Vi=3mV	51.5	53.5	55.5	dB	
			Output Power	PO(max)	THD=10%	4.5	5		W	
			Total Harmonic Distortion	THD	Vi=3mV	AN7131		0.3	1	%
						AN7140		0.15	1	%
			Output Noise Voltage	Vno	Rg=10kΩ		1.5	3	mV	
			Input Impedance	Zi			30		kΩ	

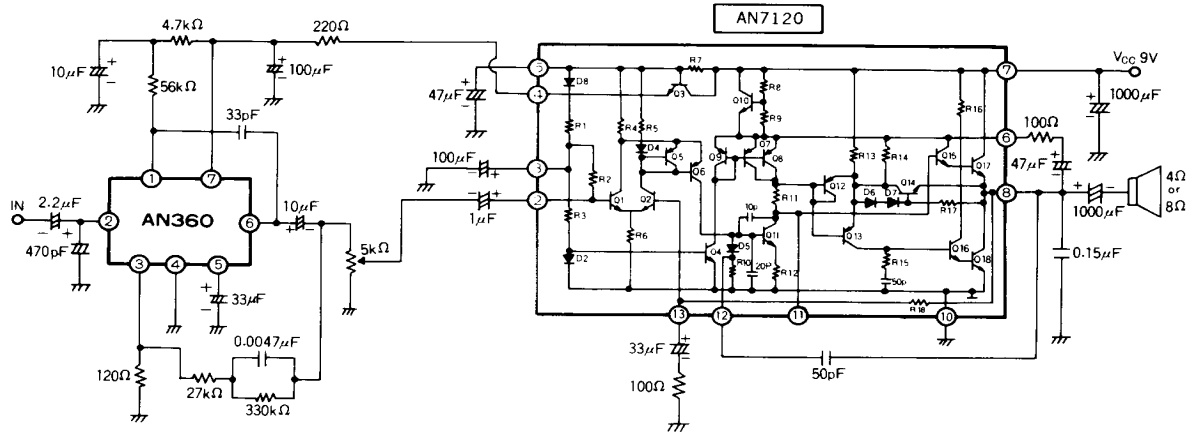
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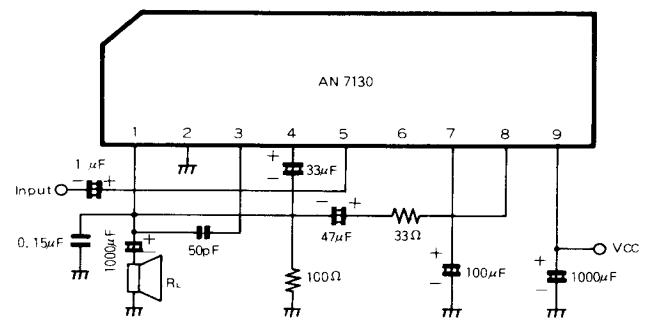
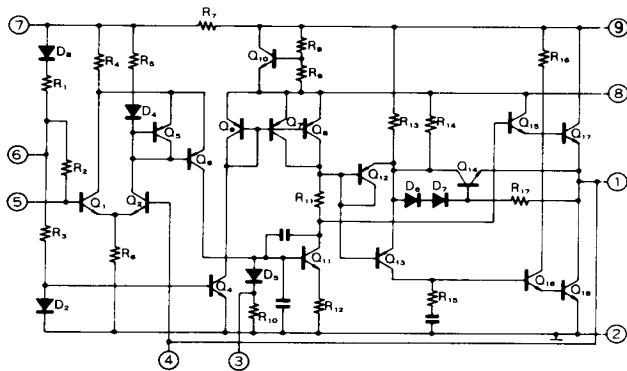
Circuit Diagram

Application Circuit

AN7120 (Package I-17,14-Lead Plastic DIL with Fin)



AN7130 (Package I-8,9-Lead Plastic SIL with Fin)



AN7131, AN7140

(Package I-8,9-Lead Plastic SIL with Fin)

