KA22065 4.6W DUAL AUDIO POWER AMP

INTRODUCTION

The KA22065 is a monolithic intergrated circuit consisting of a 2-channel power amplifier with power on/off (stand-by switch)function. It is suitable for portable radio cassette recorder.
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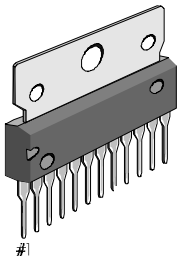
12 - SIPH - B



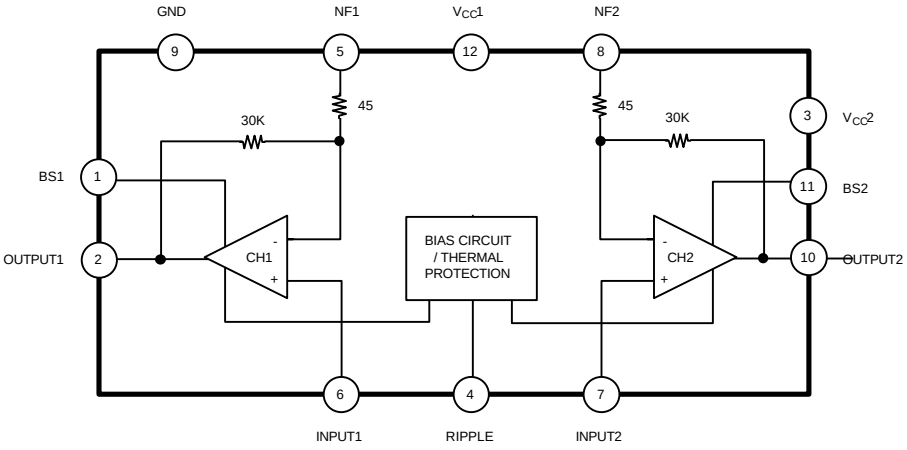
FEATURES

- 2-channel amplifier : 4.6W X 2(typ.)
- Low 9uiescent circuit current : I_{CC} = 21mA (typ.)
- High output (P_O = 4.6W, V_{CC} = 12V/8Ω)
- Small pop noise at power on
- Minimum external parts required
- Supply voltage : 6V to 15V
- Include the thermal protection circuit
- Connect H/S to GND

ORDERING INFORMATION

Device	Package	Operating Temperature
KA22065	12-SIPH-B	-20°C ~ +70°C

BLOCK DIAGRAM



SAMSUNG ELECTRONICS

ABSOLUTE MAXIMUM RATINGS

Characteristic	Symbol	Value	Unit
Supply Voltage	V_{CC}	20	V
Power Current (Channel)	I_O (peak)	2.5	A
Power Dissipation	P_D	12.5	W
Operating Temperature	T_{OPR}	-20 ~ +70	°C
Storage Temperature	T_{STG}	-40 ~ +150	°C

ELECTRICAL CHARACTERISTICS

(Ta = 25°C, V_{CC} = 9V, R_L = 4Ω,f = 1KHz, R_G = 600Ω, unless otherwise specified)

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Operating Supply Voltage	I_{CCQ}	V_I = 0		21	45	mA
Output Power	P_O1	THD = 10%	2.0	2.5		W
	P_O2	THD = 10%, V_{CC} = 12V	4.0	4.6		W
Total Harmonic Distortion	THD	P_O = 1W/CH		0.2	0.9	%
Voltage Gain (Closed Loop)	AV_1	R_f = 120Ω, V_O = 0.775V	43	45	47	dB
	AV_2	R_f = 0Ω, V_O = 0.775V	54.5	56.5	58.5	dB
Input Resistance	R_I		24	30	36	KΩ
Output Noise Voltage	V_{NO}	R_G = 10KΩ, BW = 20Hz-20KHz		0.3	1.0	mV
Ripple Rejection Ratio	RR	R_G = 600Ω, f = 120Hz	44	52		dB
Cross Talk	C.T	R_G = 10KΩ, V_O = 0dBm, f = 1KHz	40	50		dB
Input Offset Voltage	V_5,V_7			30	60	mV
Stand By Current	I_{SB}	SW1 off		1	20	μA

TEST AND APPLICATION CIRCUIT

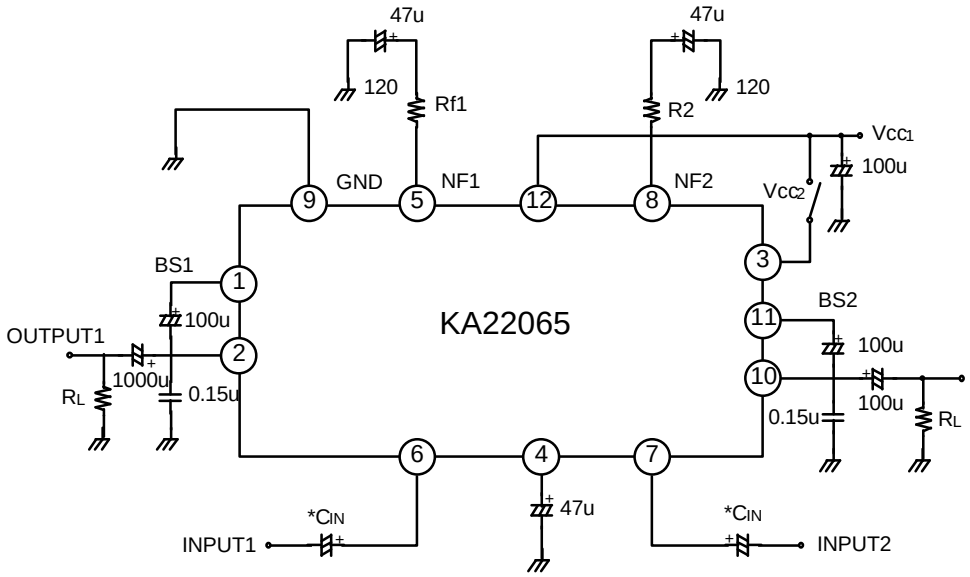


Fig. 2

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