

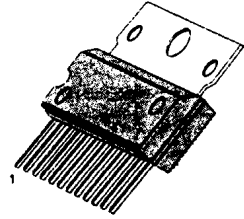
## 4.6W DUAL POWER AMP

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

### FEATURES

- 2-channel amplifier:  $4.6W \times 2$  (typ.)
- Low quiescent circuit current:  $I_{cc} = 21mA$  (typ.)
- High output ( $P_o = 4.6W$ ,  $V_{cc} = 12V/8W$ )
- Small pop noise at power on
- Minimum external parts required
- Supply voltage: 6 V to 15 V
- Includes the thermal protection circuit
- Connect H/S to GND

12-SIPH-B



### ORDERING INFORMATION

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

### BLOCK DIAGRAM

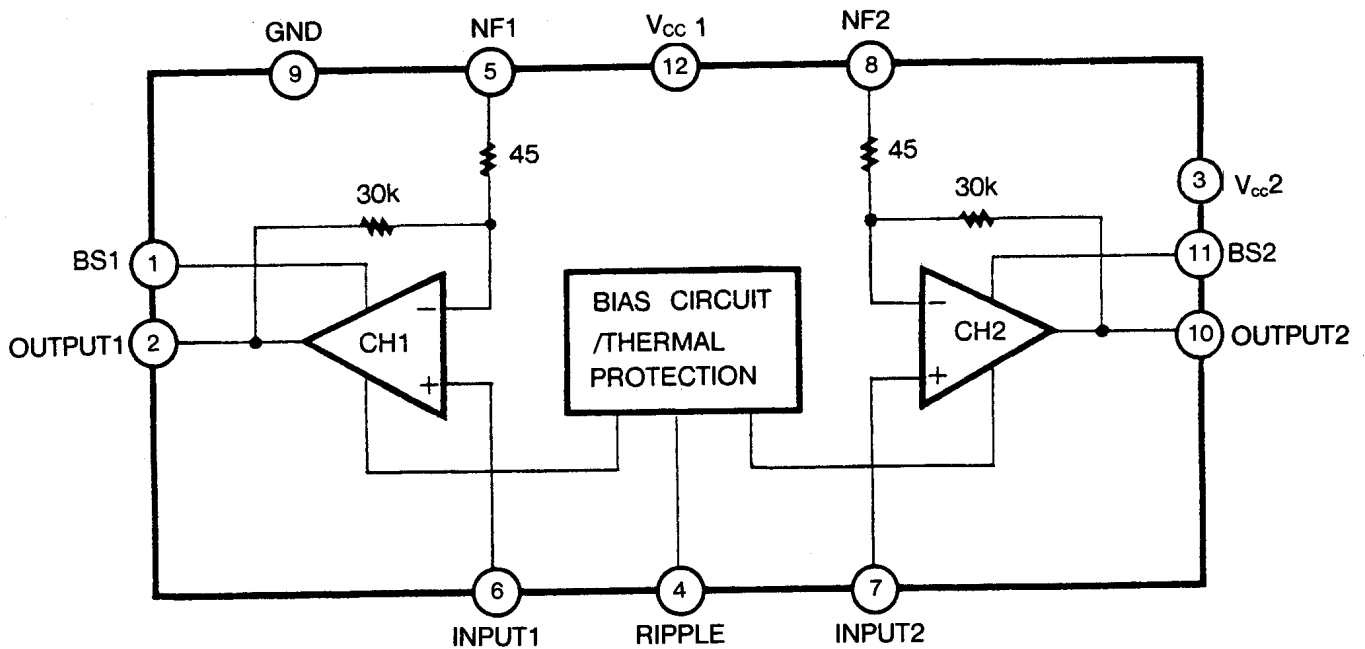


Fig. 1.

**ABSOLUTE MAXIMUM RATINGS (Ta=25°C)**

Characteristic	Symbol	Value	Unit
Supply Voltage	V <sub>CC</sub>	20	V
Output Current (Channel)	I <sub>o</sub> (peak)	2.5	A
Power Dissipation	P <sub>d</sub>	12.5	W
Operating Temperature	T <sub>opr</sub>	-20~+70	°C
Storage Temperature	T <sub>stg</sub>	-40~+150	°C

**ELECTRICAL CHARACTERISTICS**(Ta=25°C, V<sub>CC</sub>=9V, R<sub>L</sub>=4Ω, f=KHz, R<sub>g</sub>=600Ω, unless otherwise specified)

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Quiescent Circuit Current	I <sub>CC</sub>	V <sub>i</sub> =0		21	45	mA
Output Power	P <sub>O1</sub>	THD=10%	2.0	2.5		W
	P <sub>O2</sub>	THD=10%, V <sub>CC</sub> =12V	4.0	4.6		W
Total Harmonic Distortion	THD	P <sub>O</sub> =1W/CH		0.2	0.9	%
Voltage Gain (Closed Loop)	AV <sub>1</sub>	R <sub>f</sub> =120Ω, V <sub>O</sub> =0.775V	43	45	47	dB
	AV <sub>2</sub>	R <sub>f</sub> =0Ω, V <sub>O</sub> =0.775V	54.5	56.5	58.5	dB
Input Resistance	R <sub>i</sub>		24	30	36	KΩ
Output Noise Voltage	V <sub>NO</sub>	R <sub>g</sub> =10KΩ, BW=20Hz-20KHz		0.3	1.0	mV
Ripple Rejection Ratio	R R	R <sub>g</sub> =600Ω, f=120Hz	44	52		dB
Cross Talk	C.T	R <sub>g</sub> =10KΩ, V <sub>O</sub> =0dBm, f=1KHz	40	50		dB
Input Offset Voltage	V <sub>5</sub> ,V <sub>7</sub>			30	60	mV
Stand By Current	I <sub>sb</sub>	SW1 Off		1	20	μA

# TEST AND APPLICATION CIRCUIT

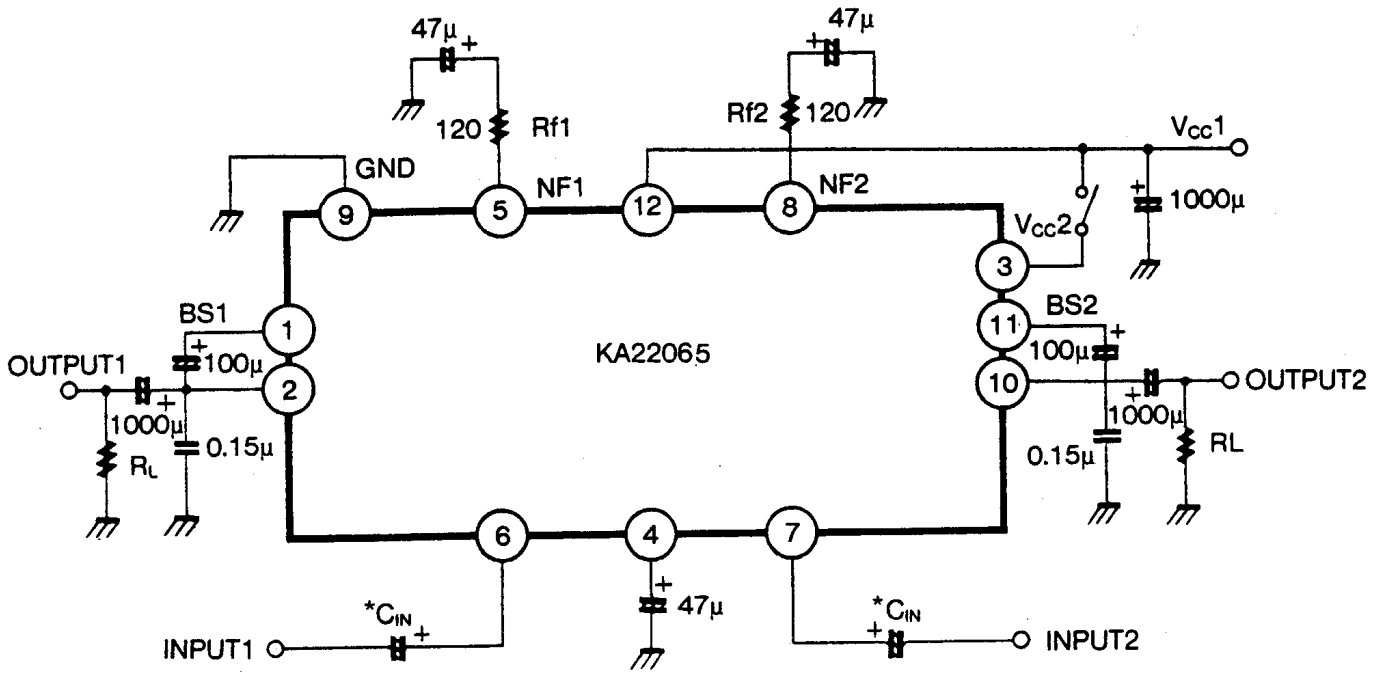


Fig. 2.