

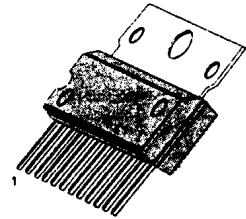
4.6W DUAL POWER AMP

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	$-20 \sim +70^{\circ}C$

BLOCK DIAGRAM

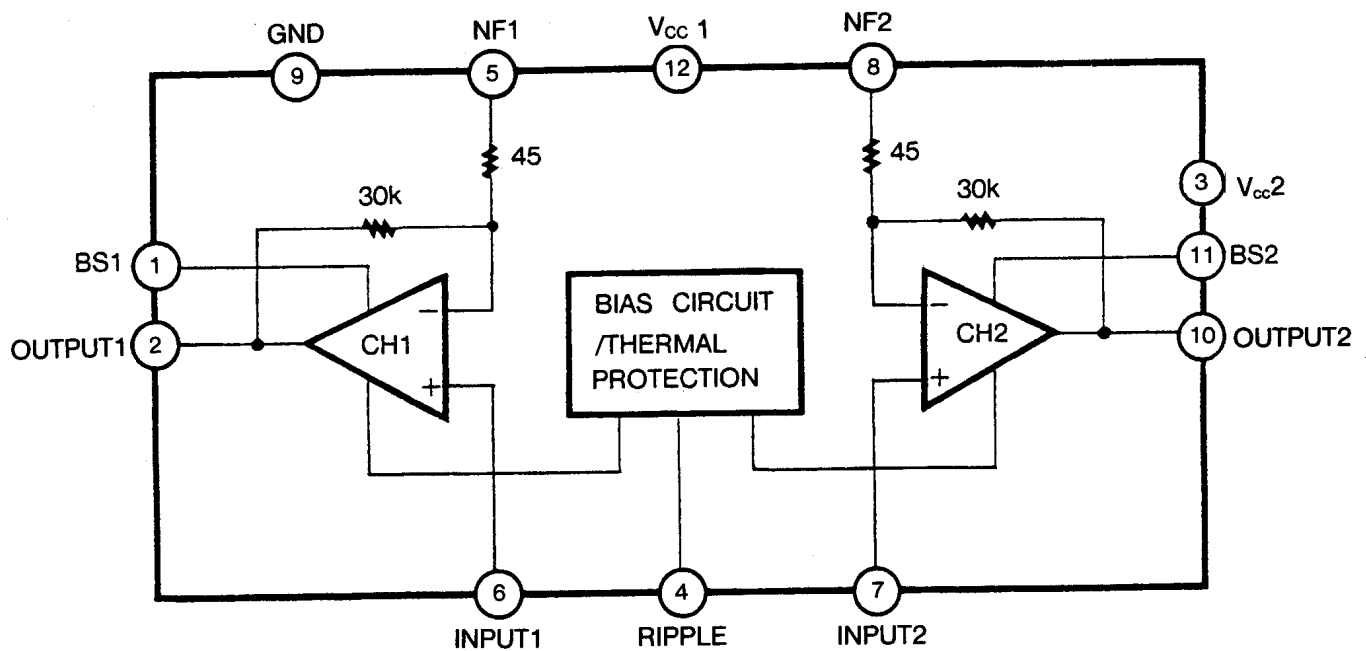


Fig. 1.

ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Characteristic	Symbol	Value	Unit
Supply Voltage	V_{CC}	20	V
Output 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, $V_{CC}=9V$, $R_L=4\Omega$, $f=KHz$, $R_g=600\Omega$, unless otherwise specified)

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Quiescent Circuit Current	I_{CC}	$V_i=0$		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	$R_f=120\Omega$, $V_O=0.775V$	43	45	47	dB
	AV_2	$R_f=0\Omega$, $V_O=0.775V$	54.5	56.5	58.5	dB
Input Resistance	R_i		24	30	36	$K\Omega$
Output Noise Voltage	V_{NO}	$R_g=10K\Omega$, BW=20Hz-20KHz		0.3	1.0	mV
Ripple Rejection Ratio	R R	$R_g=600\Omega$, $f=120Hz$	44	52		dB
Cross Talk	C.T	$R_g=10K\Omega$, $V_O=0dBm$, $f=1KHz$	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

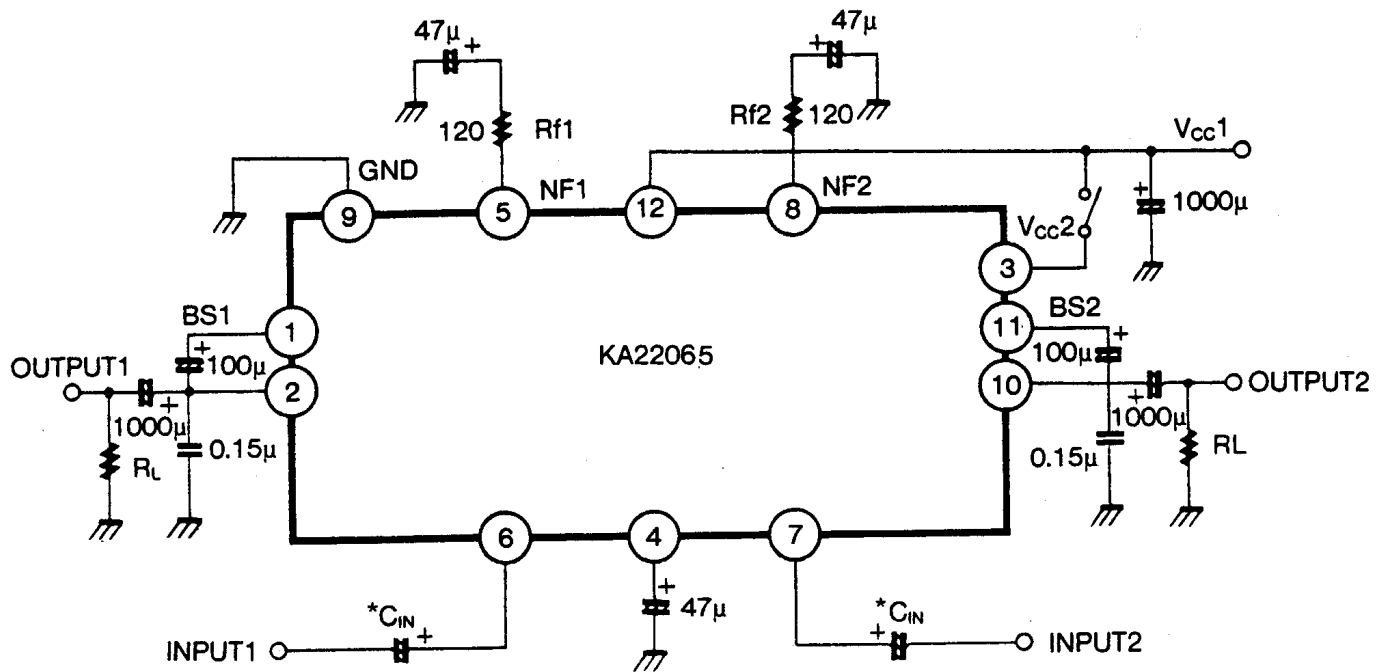


Fig. 2.