

## 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 × 2 (typ.)
- Low quiescent circuit current:  $I_{CC} = 21\text{mA}$  (typ.)
- High output ( $P_o = 4.6\text{W}$ ,  $V_{CC} = 12\text{V}/8\text{W}$ )
- 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

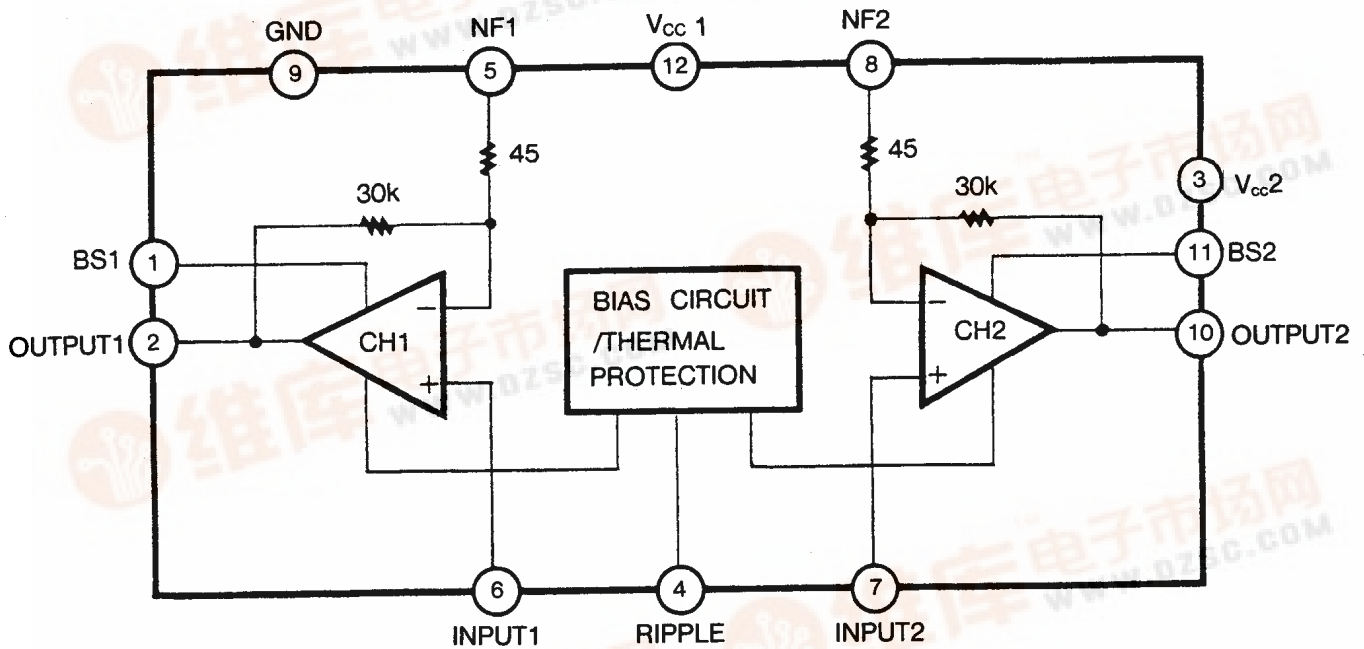


Fig. 1.

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

Characteristic	Symbol	Value	Unit
Supply Voltage	$V_{CC}$	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<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	$I_{CC}$	$V_i=0$		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	KΩ
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

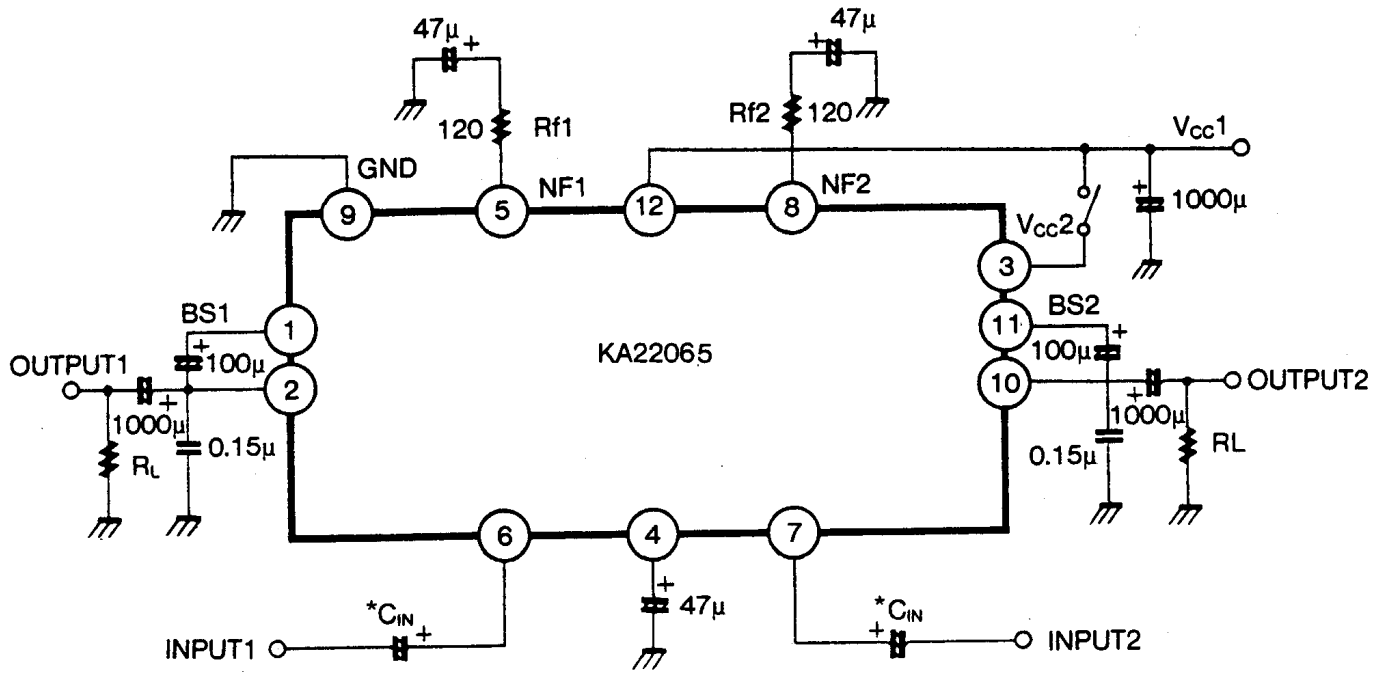


Fig. 2.