

# STK 050,070

high hybrid IC

50, 70Wmin AF POWER AMP



## Features

- © IMST, 1 Channel by 2 Power Supplies.
- AF output power of STK 050: 50W min.  
AF output power of STK 070: 70W min.
- With constant current driven differential amp.  
Direct coupled.
- Superior DC stability, low distortion.
- Protection circuit unrelated to error operation or tone distortion.

## MAXIMUM RATINGS / $T_a=25^{\circ}\text{C}$

		STK 050	STK 070	unit
Maximum Supply Voltage	$V_{CCmax}$	$\pm 45$	$\pm 55$	V
Operating Case Temperature	$T_C$	$\rightarrow$	85	$^{\circ}\text{C}$
Storage Temperature	$T_{stg}$	$\rightarrow$	-30 to +100	$^{\circ}\text{C}$

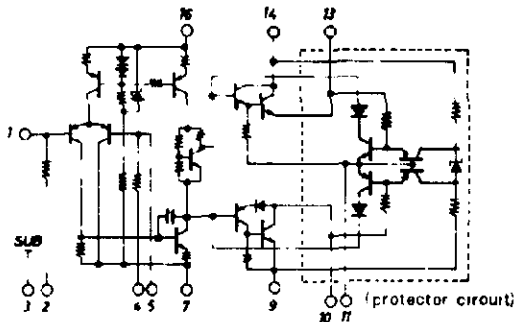
## RECOMMENDED OPERATION CONDITION / $T_a=25^{\circ}\text{C}$

		STK 050	STK 070	unit
Recommended Supply Voltage	$V_{CC}$	$\pm 35$	$\pm 42$	V
Load Resistance	$R_L$	$\rightarrow$	8	ohm

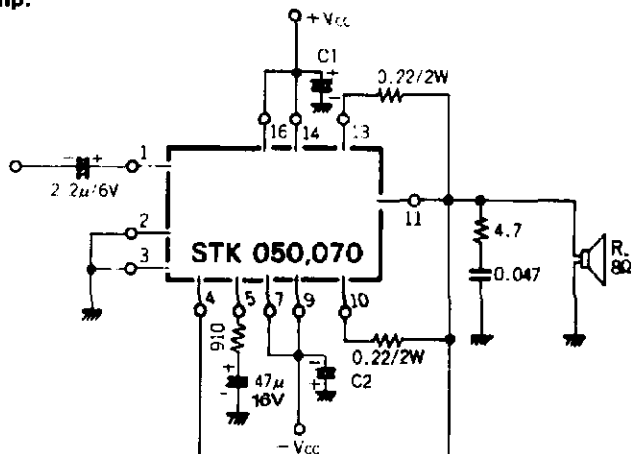
## OPERATION CHARACTERISTICS / $T_a=25^{\circ}\text{C}$ , in recommended condition, $R_g=600\text{ ohm}$ , $f=1\text{kHz}$

			STK 050	STK 070	unit
Quiescent Current	$I_{cco}$	STK-050: $V_{CC}=\pm 35\text{V}$ STK-070: $V_{CC}=\pm 50\text{V}$	$\rightarrow$	60	mA max
Output Power	$P_o$	THD=0.2%	50	—	Wmin
		THD=0.5%, $f=20\text{ to }20\text{k Hz}$	—	70	Wmin
Voltage Gain	VG	$P_o=0.1\text{W}$	$\rightarrow$	30.5	dB
Total Harmonic Distortion	THD	$P_o=0.1\text{W}$	$\rightarrow$	0.2	%max
Input Resistance	$r_i$	$P_o=0.1\text{W}$	$\rightarrow$	30k	ohm
Power Bandwidth	PBW	THD=0.5%, $P_o=50\text{W}$	20 to 20k	—	Hz
Frequency Response	f	$P_o=0.1\text{W}$ $^{+0}_{-3}\text{ dB}$	—	10 to 100k	Hz

## EQUIVALENT CIRCUIT



## APPLICATION: AF Power Amp.



	STK 050	STK 070
C1	10μ/50V	10μ/63V