

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	$V_{CC\text{max}}$	± 45	± 55	V
Operating Case Temperature	T_C	$\rightarrow$	85	$^{\circ}\text{C}$
Storage Temperature	T_{stg}	$\rightarrow$	-30 to +100	$^{\circ}\text{C}$

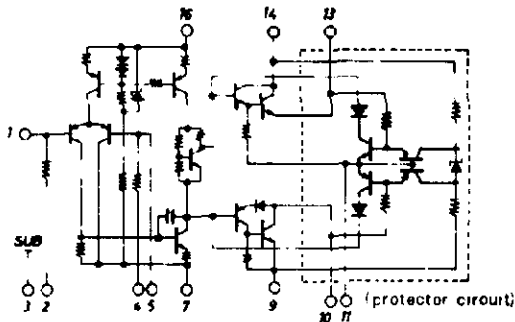
RECOMMENDED OPERATION CONDITION / $T_a=25^{\circ}\text{C}$

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

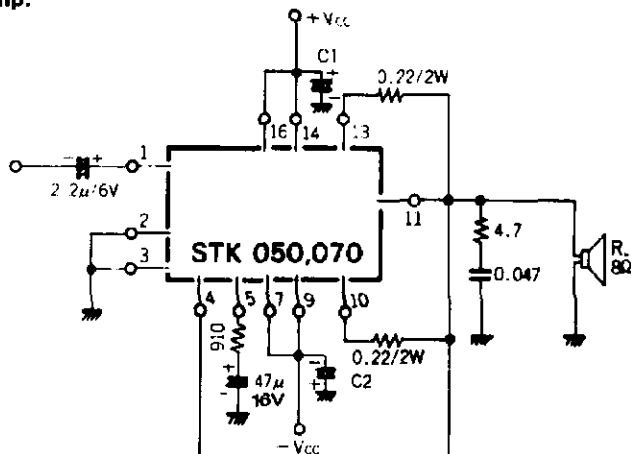
OPERATION CHARACTERISTICS / $T_a=25^{\circ}\text{C}$, in recommended condition, $R_g=600\text{ ohm}$, $f=1\text{kHz}$

			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	10 μ /50V	10 μ /63V