



SANYO SEMICONDUCTOR

STK-084

STK-084 Thick Film Hybrid Integrated Circuit 50 Wmin. AF Power Amplifier

- Features
- . Output Power : 50 watts min. by 2 power supply.
 - . Constant current driven-differential amplifier.
 - . Attachable of load shorting protector circuit.
 - . Tone controllable.

Maximum Ratings at Ta=25°C

Maximum Supply Voltage	V _{CCmax}	±50	V
Output Collector Current	I _{Cmax}	7	A
Thermal Resistance	θ _{j-c} (ideal atate)	1.7	°C/W
Operating Case Temperature	T _C	85	°C
Storage Temperature	T _{stg}	-30 to +100	°C

Recommended Operation Condition at Ta=25°C

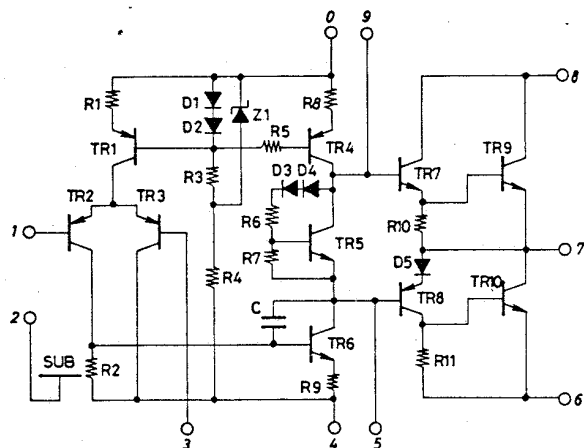
Recommended Supply Voltage	V _{CC}	±35	V
Load Resistance	R _L	8	ohm

Operation Characteristics/Ta=25°C, V_{CC}=±35V, R_L=8 ohm, R_g=600 ohm, V_G=26.4dB

		min	typ	max	unit
Quiescent Current	I _{CCO} V _{CC} =±42V		50	100	mA
Output Power	P _o (1) THD=0.2%, f=20-20k Hz	50			W
	P _o (2) THD=0.2%, f=1kHz		60		W
	P _o (3) V _{CC} =±42V, THD=0.2%, f=1kHz		70		W
Total Harmonic Distortion	THD(1) P _o =1-50 W, f=20-20k Hz			0.2	%
	THD(2) P _o =1W, f=1kHz		0.03		%
Frequency Response	f P _o =1W, ±0dB		10-100k		Hz
Input Resistance	r _i P _o =1W, f=1kHz		52k		ohm
Output Noise Voltage	V _{NO} V _{CC} =±42V*, R _g =10k ohm		0.3	0.5	mV _{rms}
Output Center Voltage	V _N V _{CC} =±42V	-70		+70	mV

- [Notice]
- . Use a regulated voltage supply for test without notice.
 - . Use an appointed transformer-driven voltage supply at the voltage with mark *.

Equivalent Circuit



Case Outline (unit:mm)

