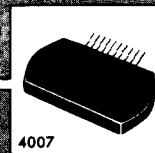


# STK-075, 077, 078, 080, 082, 083

thick film hybrid IC

15 to 40W min AF POWER AMP



### Features

- © IMST, 1 Channel by 2 Power Supplies.
- AF output power STK-075: 15W min., STK-077: 20W min., STK-078: 24W min., STK-080: 30W min., STK-082: 35W min. STK-083: 40W min.
- Differential amp. constant current driving.
- Capable of tone controlling.
- STK-078-105 and STK-082-105 are for the use of  $T_C=105^{\circ}\text{C}$ .

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

	STK-075	STK-077	STK-078	STK-080	STK-082	STK-083	unit
Maximum Supply Voltage $V_{CC\text{max}}$	±28	±32	±35	±39	±43	±46	V
Operating Case Temperature $T_C$	→	→	→	→	85	90	$^{\circ}\text{C}$
Storage Temperature $T_{\text{stg}}$	→	→	→	→	→	-30 to +100	$^{\circ}\text{C}$
Allowable Load Shorting Time (in appointed condition) $t_s$	→	→	→	→	→	2	sec

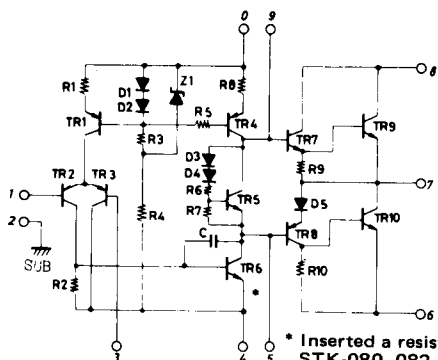
### RECOMMENDED OPERATION CONDITION / $T_a=25^{\circ}\text{C}$

	STK-075	STK-077	STK-078	STK-080	STK-082	STK-083	unit
Recommended Supply Voltage $V_{CC}$	±20	±22	±25	±27	±30	±32	V
Load Resistance $R_L$	→	→	→	→	→	8	ohm

### OPERATION CHARACTERISTICS / $T_a=25^{\circ}\text{C}$ , recommended operating condition, $R_g=600\text{ohm}$ , $V_G=26.4\text{dB}$

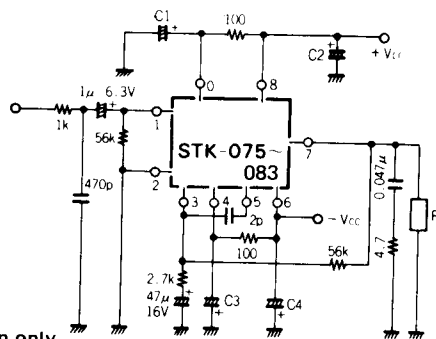
	STK-075	STK-077	STK-078	STK-080	STK-082	STK-083	unit
Quiescent Current $I_{\text{cco}}$	→	→	→	→	→	100mA max	
Output Power $P_o(1)$ THD=0.3%, f=20 to 20kHz	15	20	—	—	—	—	Wmin
$P_o(2)$ THD=0.2%, f=20 to 20kHz	—	—	24	30	35	40	Wmin
Distortion THD f=20 to 20kHz, rated output power	0.3	0.3	0.2	0.2	0.2	0.2	%max
Frequency Response f $P_o=1\text{W}$ , -1dB	→	→	→	→	→	10 to 100k	Hz
Input Resistance $r_i$ $P_o=1\text{W}$ , f=1kHz	→	→	→	→	→	52k	ohm

### EQUIVALENT CIRCUIT



\* Inserted a resistor in only STK-080, 082, 083.

### APPLICATION



	STK-075, 77, 78	STK-080, 82, 83
C1	220 $\mu$ /35V	220 $\mu$ /50V
C2	10 $\mu$ /35V	10 $\mu$ /50V
C3	220 $\mu$ /35V	220 $\mu$ /50V
C4	10 $\mu$ /35V	10 $\mu$ /50V

See the operation characteristics on this specification.