

# STK-040, 041, 043

thick film hybrid IC

10, 15, 20W min AF POWER AMP



These are scheduled to be discontinued in the near future.

### Features

- © IMST, 2 Channel by 2 Power Supply.
- AF Output Power STK-040: 10 W min.  
STK-041: 15 W min.  
STK-043: 20 W min.
- STK-043-105 are for the use of  $T_C=150^\circ\text{C}$ .

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

		STK-040	STK-041	STK-043	unit
Maximum Supply Voltage	$V_{CC}$ max	$\pm 25$	$\pm 29$	$\pm 32.5$	V
Operating Case Temperature	$T_C$	$\rightarrow$	90	$\leftarrow$	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	$\rightarrow$	-30 to +100	$\leftarrow$	$^\circ\text{C}$
Allowable Load Shorting Time	$t_s$ recommended operation condition, rated power output $f=50\text{Hz}$	$\rightarrow$	2	$\leftarrow$	sec

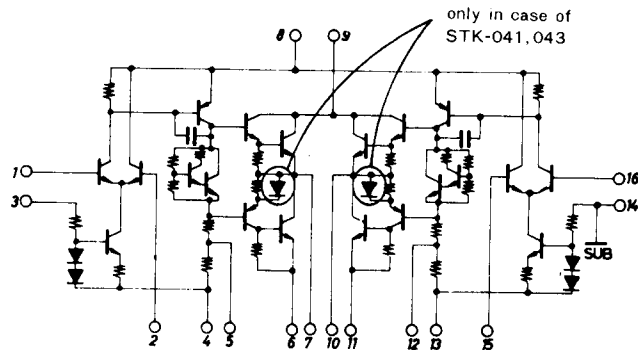
### RECOMMENDED OPERATION CONDITION / $T_a=25^\circ\text{C}$

		STK-040	STK-041	STK-043	unit
Recommended Supply Voltage	$V_{CC}$	$\pm 16.5$	$\pm 20$	$\pm 22$	V
Load Resistance	$R_L$	$\rightarrow$	8	$\leftarrow$	ohm

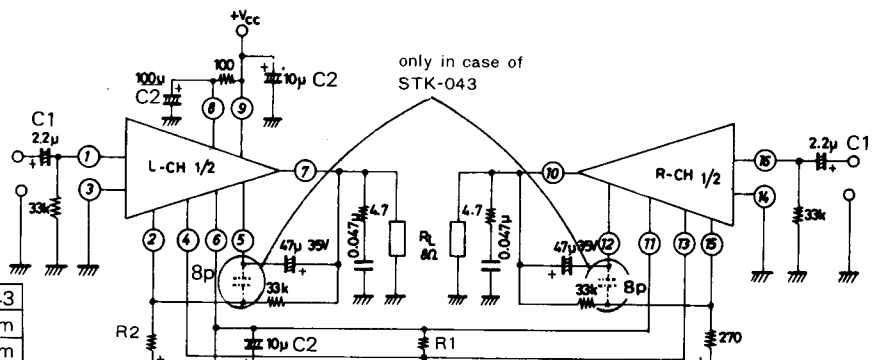
### OPERATION CHARACTERISTICS / $T_a=25^\circ\text{C}$ , recommended $V_{CC}$ supplied, $R_L=8$ ohm, $R_g=600$ ohm $VG=41.5$ dB (STK-040), $38.5$ dB (STK-041, 043)

			STK-040	STK-041	STK-043	unit
Quiescent Current	$I_{cco}$		$\rightarrow$	120	$\leftarrow$	mA max
Output Power	$P_O$	THD=0.9 %, $f=1$ kHz	10	—	—	W min
		THD=0.5 %, $f=20$ to $20$ kHz	—	15	—	W min
		THD=0.5 %, $f=1$ kHz	—	—	20	W min
Distortion	THD	$P_o=1\text{W}$ , $f=1$ kHz	$\rightarrow$	0.2	$\leftarrow$	% max
Frequency Response	—	$P_o=0.1$ W, -3 dB	$\rightarrow$	20 to 50k	$\leftarrow$	Hz
Input Resistance	$r_i$	$P_o=0.1$ W	$\rightarrow$	32k	$\leftarrow$	ohm

### EQUIVALENT CIRCUIT



### APPLICATION: 10, 15, 20W min 2 Channel AF Power Amp.



	STK-040	STK-041	STK-043
R1	560 ohm	100 ohm	100 ohm
R2	270 ohm	390 ohm	390 ohm

