

CASE: GULL WING  
STK 433, 435,  
436, 437, 439,  
441, 443

thick film hybrid IC



2 CHANNEL 5 to 25W min.  
AF POWER AMP

### Features

- © IMST, 2 Channels by 1 Power Supply.
- Small shock noise because of direct coupling emitter feedbacked.
- STK 433-105, 435-105, 436-105 and 441-105 are for the use of  $T_C=105^\circ\text{C}$ .
- AF output power STK 433: 5W min., STK 435: 7W min., STK 436: 10W min., STK 437: 10W min., STK 439: 15W min., STK 411: 20W min., STK 443: 25W min.

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

		STK 433	STK 435	STK 436	STK 437	STK 439	STK 441	STK 443	unit
Maximum Supply Voltage (pin 7 to 4 or 12)	V <sub>CC</sub> max	32	39	50	50	56	63	70	V
Operating Case Temperature	T <sub>C</sub>	90	90	90	90	85	85	85	°C
Storage Temperature	T <sub>stg</sub>	→	→	→	→	→	→	→	-30 to 100°C
Allowable Load Shorting Time (in appointed condition)	t <sub>s</sub>	→	→	→	→	→	→	2	sec

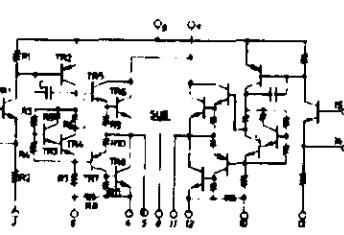
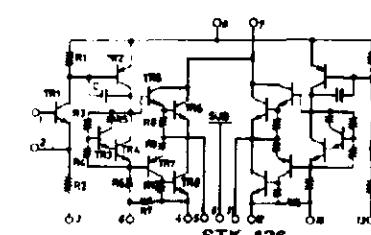
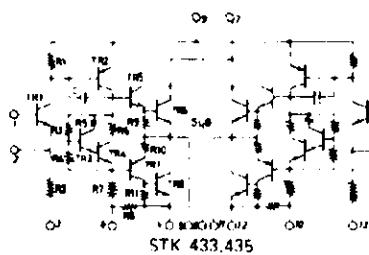
### RECOMMENDED OPERATION CONDITION/ $T_a=25^\circ\text{C}$

		STK 433	STK 435	STK 436	STK 437	STK 439	STK 441	STK 443	unit
Recommended Supply Voltage	V <sub>CC</sub>	23	27	32	33	39	44	49	V
Load Resistance	R <sub>L</sub>	→	→	→	→	→	→	8	ohm

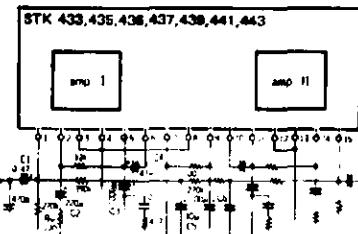
### OPERATION CHARACTERISTICS/ $T_a=25^\circ\text{C}$ , recommended condition, R<sub>g</sub>=600 ohm, V<sub>G</sub>=40dB

		STK 433	STK 435	STK 436	STK 437	STK 439	STK 441	STK 443	unit
Quiescent Current	I <sub>cco</sub>	→	→	→	→	→	→	→	120 mAmax
Output Power	P <sub>o</sub>	THD=1% f=1kHz	5	7	10	10	15	20	25 Wmin
Distortion	THD	Po=0.1W, f=1kHz	0.5	0.5	0.3	0.2	0.2	0.3	0.3 %max
Input Resistance	r <sub>i</sub>	Po=0.1W	110k	110k	120k	110k	110k	110k	ohm

### EQUIVALENT CIRCUIT



### APPLICATION: AF Power Amp.



STK 433	STK 435	STK 436	STK 437	STK 439	STK 441	STK 443
C1 18V	25V	35V	35V	35V	30V	35V
C2 10V	25V	25V	25V	25V	25V	35V
C3 18V	25V	35V	35V	35V	50V	50V
C4 18V	18V	25V	25V	25V	35V	50V
C5 25V	25V	35V	35V	35V	35V	50V
C6 25V	25V	50V	50V	50V	63V	80V

See the operation characteristics on this specification