

# STK4101 II SERIES

thick film hybrid IC

2-CHANNEL AF POWER AMP.

## Applications

- STK4101II: 6W min AF power amp.
- STK4111II: 10W min AF power amp.
- STK4121II: 15W min AF power amp.
- STK4131II: 20W min AF power amp.
- STK4141II: 25W min AF power amp.
- STK4151II: 30W min AF power amp.
- STK4161II: 35W min AF power amp.
- STK4171II: 40W min AF power amp.
- STK4181II: 45W min AF power amp.
- STK4191II: 50W min AF power amp.

## Feature

- Built-in muting transistor

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

	STK 4101II	STK 4111II	STK 4121II	STK 4131II	STK 4141II	STK 4151II	STK 4161II	STK 4171II	STK 4181II	STK 4191II	unit	
Supply Voltage	$V_{CC}$ max	$\pm 20.5$	$\pm 26$	$\pm 30.5$	$\pm 34.5$	$\pm 39$	$\pm 42$	$\pm 45$	$\pm 48$	$\pm 50$	$\pm 52.5$	V
Thermal Resistance	$\theta_{j-c}$	5	4	2.6	2.6	2.6	2.1	2.1	1.8	1.8	1.8	$^\circ\text{C/W}$
Junction Temperature	$T_j$	→	→	→	→	→	→	→	→	→	150	$^\circ\text{C}$
Operating Case Temperature	$T_c$	→	→	→	→	→	→	→	→	→	125	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	→	→	→	→	→	→	→	→	→	-30 to +125	$^\circ\text{C}$
Available Time of Load Shorted	t	→	→	→	→	→	→	→	→	→	2	sec

## RECOMMENDED OPERATING CONDITIONS / $T_a=25^\circ\text{C}$

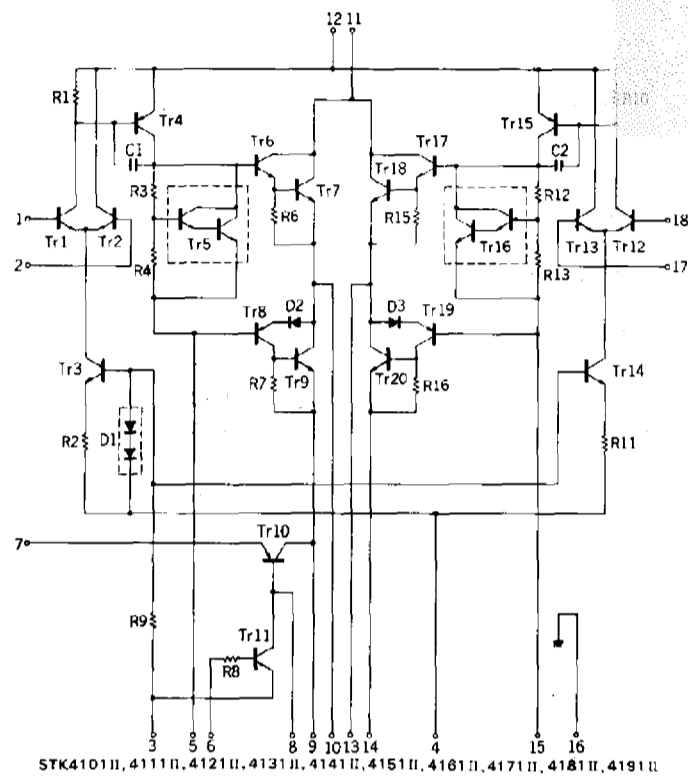
	STK 4101II	STK 4111II	STK 4121II	STK 4131II	STK 4141II	STK 4151II	STK 4161II	STK 4171II	STK 4181II	STK 4191II	unit
Recommended Supply Voltage	$\pm 13.2$	$\pm 17$	$\pm 20$	$\pm 23$	$\pm 26$	$\pm 27.5$	$\pm 30$	$\pm 32$	$\pm 33.5$	$\pm 35$	V
Load Resistance	→	→	→	→	→	→	→	→	→	→	8 ohm

## OPERATING CHARACTERISTICS / $T_a=25^\circ\text{C}$ , recommended operating condition $R_g=600\text{ohm}$ , $V_G=40\text{dB}$ ,

		RL: noninductive load										unit
		STK 4101II	STK 4111II	STK 4121II	STK 4131II	STK 4141II	STK 4151II	STK 4161II	STK 4171II	STK 4181II	STK 4191II	
Output Power	$P_o$	6	10	15	20	25	30	35	40	45	50	W min
Total Harmonic Distortion	THD	→	→	→	→	→	→	→	→	→	0.3	% max
Frequency Characteristic	$f_L, f_H$	→	→	→	→	→	→	→	→	→	20 to 50k	Hz
Input Impedance	$r_i$	→	→	→	→	→	→	→	→	→	55k	ohm
Output Noise Voltage	$V_{NO}$	→	→	→	→	→	→	→	→	→	1.2	mVrms max
Quiescent Current	$I_{CCO}$	→	→	→	→	→	→	→	→	→	100	mA max
Middle Point Voltage	$V_N$	→	→	→	→	→	→	→	→	→	-70 to +70	mV
Muting Voltage	$V_M$	→	→	→	→	→	→	→	→	→	-5	V

STK

**EQUIVALENT CIRCUIT**



**APPLICATION**

