



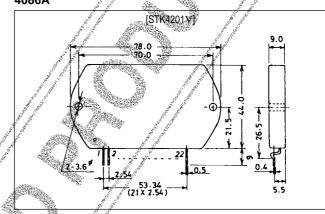
AF Power Amplifier (Split Power Supply) (60W + 60W min, THD = 0.08%)

Features

- The STK4201II series (THD=0.4%), STK4201V series (THD=0.08%) and STK4141X series (THD=0.02%) are pin-compatible. Once the PCB pattern is designed, you can easily satisfy the requirements for new sets simply by changing the IC.
- Built-in muting circuit to cut off various kinds of pop noise.
- Current mirror circuit application reduces distortion to 0.08%.

Package Dimensions

unit: mm **4086A**



Specifications

Maximum Ratings at Ta = 25°C

Parameter Symbol	Conditions Ratings	Unit
Maximum supply voltage V _{CC} max	±57	V
Thermal resistance	1.5	°C/W
Junction temperature	150	°C
Operating substrate temperature	125	°C
Storage temperature	-30 to +125	°C
Available time for load short-circuit t_s $V_{cc} = t_s$	$= \pm 39$ V, R _L = 8 Ω , Hz, P _O = 60W	s

Recommended Operating Conditions at Ta = 25°C

Parameter Symb	ol Conditions	Ratings	Unit
Recommended supply voltage V _{CC}		±39	V
Load resistance R _L		8	Ω

$\label{eq:characteristics} \begin{array}{ll} \textbf{Operating Characteristics} & \text{at Ta} = 25 ^{\circ}\text{C}, \, V_{CC} = \pm 39 \text{V}, \, R_L = 8 \Omega, \, Rg = 600 \Omega, \, VG = 40 \text{dB}, \\ & R_L : \text{non-inductive load} \end{array}$

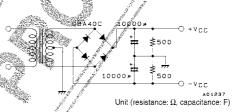
Parameter	Symbol	Conditions	min	typ	max	Unit
Quiescent current	I _{cco}	V _{CC} = ±47V	20	40	100	mA
Output power	Po	THD = 0.08%, f = 20Hz to 20kHz	60	A STATE OF THE STA		W Market
Total harmonic distortion	THD	P _O = 1.0W, f = 1kHz		11 3	9.08) o/g/
Frequency response	f _L , f _H	$P_0 = 1.0W, +0 dB$	Jig de de de	20 to 50k		Hz Hz
Input impedance	r _i	P _O = 1.0W, f = 1kHz		55	9,47	kΩ
Output noise voltage	V _{NO}	$V_{CC} = \pm 47V$, $Rg = 10k\Omega$			1.2-	mVrms
Neutral voltage	V _N	V _{CC} = ±47V	<i>f f</i> 70 <i>f</i>	0	4 70	mV
Muting voltage	V _M		-2	5	<i>≱</i> 410	V

Notes.

For power supply at the time of test, use a constant-voltage power supply unless otherwise specified.

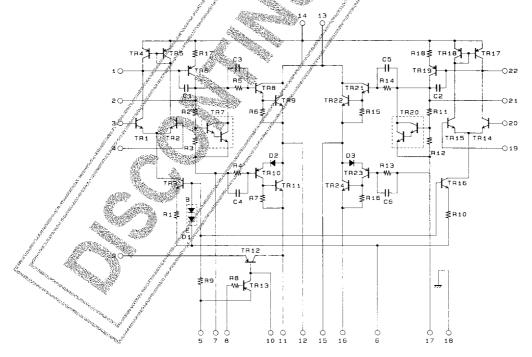
For measurement of the available time for load short-circuit and output noise voltage, use the specified transformer power supply shown right.

The output noise voltage is represented by the peak value on rms scale (VTVM) of average value indicating type. For AC power supply, use an AC stabilized power supply (50Hz) to eliminate the effect of flicker noise in AC primary line.



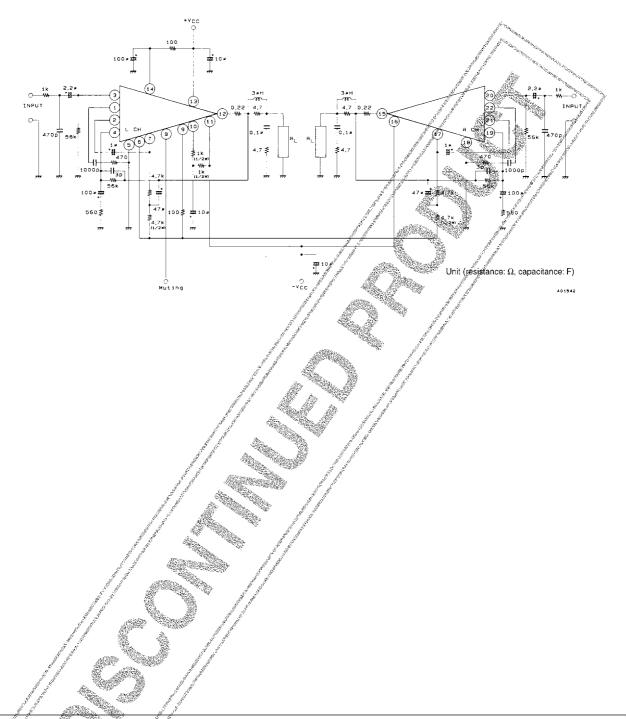
Specified Transformer Power Supply (Equivalent to MG-200)

Equivalent Circuit



A01541

Sample Application Circuit: 60W min 2channel AF Power Amplifier



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