

SANYO	No. 4478A	STK4131V
	AF Power Amplifier (Split Power Supply) (20 W + 20 W min, THD = 0.08%)	

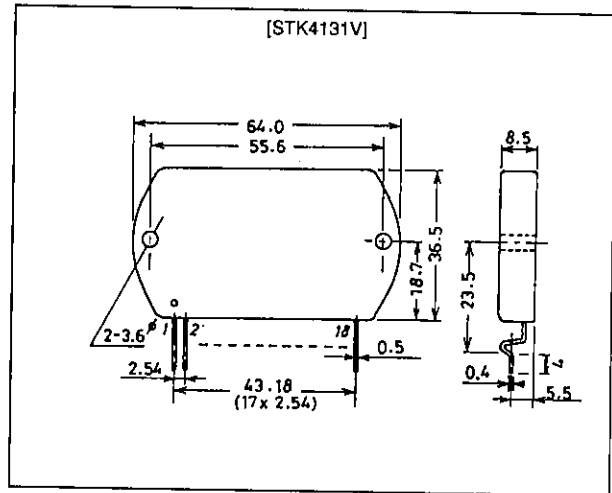
Features

- Built-in muting circuit cuts off various kinds of pop noises.
- Current mirror circuit provides low distortion (THD = 0.08%).
- Pin compatible with the STK4102II series, forming a series of products with output powers from 15 W/ch to 120 W/ch.

Package Dimensions

unit : mm

4040



Specifications

Maximum Ratings at Ta = 25°C

Parameter	Symbol	Condition	Rating	Unit
Maximum supply voltage	V _{CC} max		±37	V
Thermal resistance	θj-c		2.6	°C/W
Junction temperature	T _j max		150	°C
Operating case temperature	T _c		125	°C
Storage temperature	T _{stg}		-30 to +125	°C
Available time for load shorted	t _s	V _{CC} = ±24.5 V, R _L = 8 Ω, f = 50 Hz, P _O = 20 W	2	s

Recommended Operating Conditions at Ta = 25°C

Parameter	Symbol	Condition	Rating	Unit
Recommended supply voltage	V _{CC}		±24.5	V
Load resistance	R _L		8	Ω

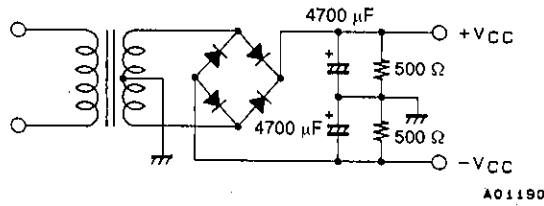
Operating Characteristics

at Ta = 25°C, V_{CC} = ±24.5 V, R_L = 8 Ω, R_g = 600 Ω, V_G = 40 dB, R_L: non-inductive load

Parameter	Symbol	Condition	Rating			Unit
			min	typ	max	
Quiescent current	I _{CCQ}	V _{CC} = ±29.5 V	20	40	100	mA
Output power	P _O (1)	THD = 0.08%, f = 20 Hz to 20 kHz	20			W
	P _O (2)	V _{CC} = ±21.5 V, THD = 0.2%, R _L = 4 Ω, f = 1 kHz	20			W
Total harmonic distortion	THD	P _O = 1 W, f = 1 kHz			0.08	%
Frequency response	f _L , f _H	P _O = 1 W, ⁺⁰ / ₋₃ dB		20 to 50 k		Hz
Input resistance	r _i	P _O = 1 W, f = 1 kHz		55		kΩ
Output noise voltage	V _{NO}	V _{CC} = ±29.5 V, R _g = 10 kΩ			1.2	mVrms
Neutral voltage	V _N	V _{CC} = ±29.5 V	-70	0	+70	mV
Muting voltage	V _M		-2	-5	-10	V

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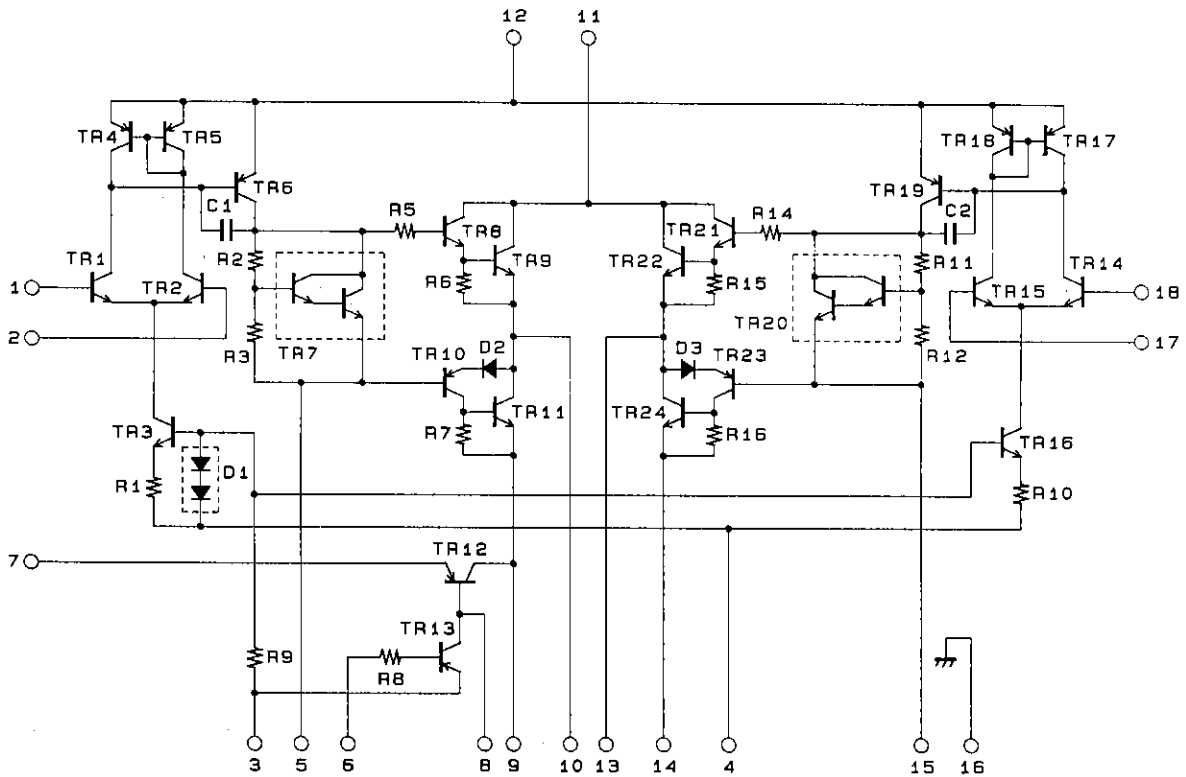


Specified Transformer Power Supply (RP-25 equivalent)

Notes

- Use a constant voltage power supply for the test power supply unless otherwise noted.
- Use the transformer power supply shown in the figure above when measuring the available time for load shorted and the output noise voltage.
- The output noise voltage is the peak value measured with an averaging rms scale volt meter (VTVM). A 50 Hz AC stabilized power supply should be used to eliminate the effects of AC primary line flicker noise when an AC power supply is used.

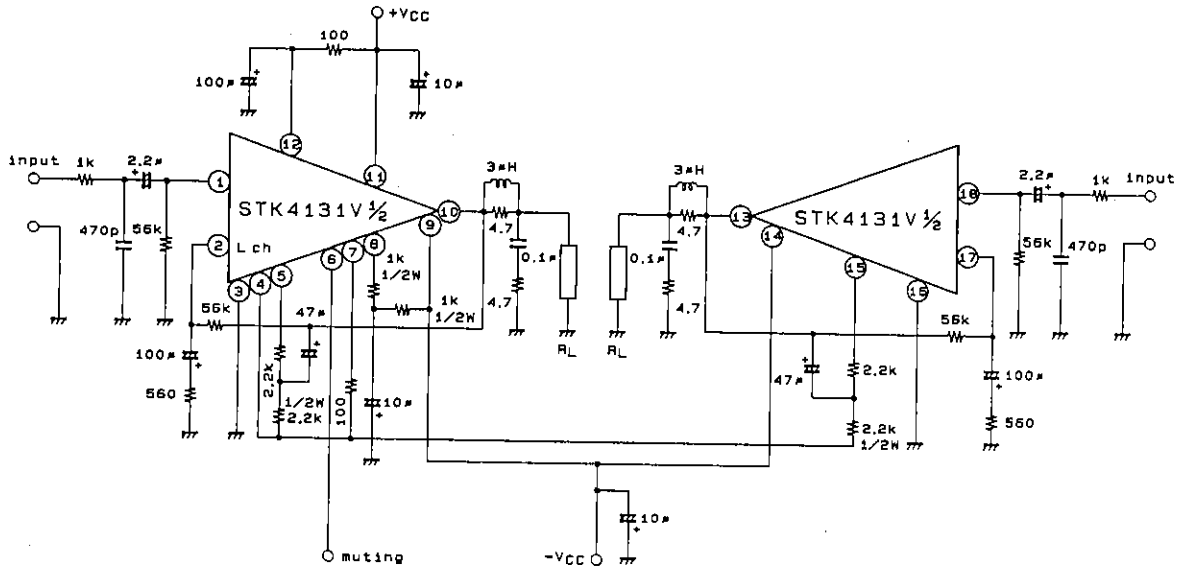
Equivalent Circuit



A01191

STK4131V

Sample Application Circuit: 20 W (minimum) 2-channel AF power amplifier



AD1193

Unit (resistance: Ω , capacitance: F)

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