

SANYO	No. 4548A	STK4028 II
	AF Power Amplifier (Split Power Supply) (30 W min, THD = 0.4 %)	

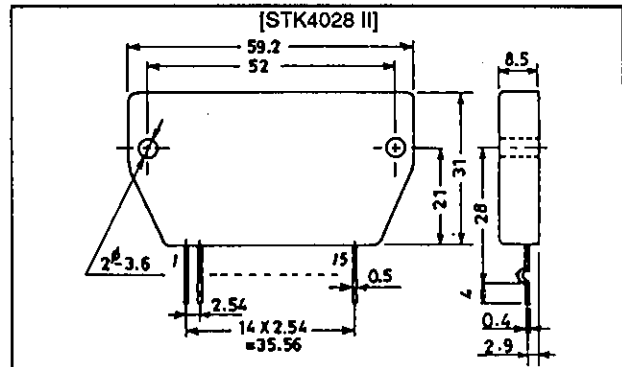
Features

- Compact packaging supports slimmer set designs
- Series designed for 20 up to 200 W and pin-compatibility
- Simpler heat sink design facilitates thermal design of slim stereo sets
- The pulse noises associated with turning the power on and off have been reduced by the adoption of fixed current circuits
- Supports addition of electronic circuits for thermal shutdown and load-short protection circuit as well as pop noise muting which occurs when the power supply switch is turned on and off

Package Dimensions

unit: mm

4033



Specifications

Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Maximum supply voltage	V _{CC} max		±42	V
Thermal resistance	θ _{j-c}		2.1	°C/W
Junction temperature	T _j		150	°C
Operating substrate temperature	T _c		125	°C
Storage temperature	T _{stg}		-30 to +125	°C
Available time for load shorted	t _s *1	V _{CC} = ±27.5 V, R _L = 8 Ω, f = 50 Hz, P _O = 30 W	2	s

Recommended Operating Conditions at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Recommended supply voltage	V _{CC}		±27.5	V
Load resistance	R _L		8	Ω

Operating Characteristics at Ta = 25°C, V_{CC} = ±27.5 V, R_L = 8 Ω, V_G = 40 dB, R_g = 600 Ω, 100 kHz LPF on, R_L (noninductive)

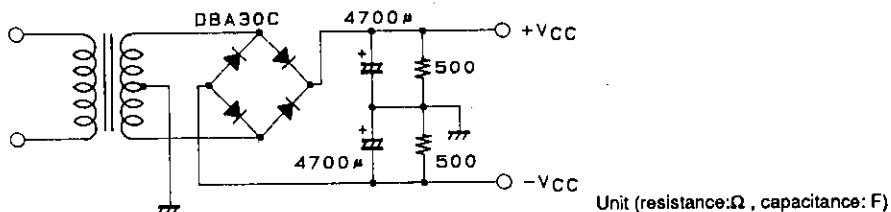
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Quiescent current	I _{CCO}	V _{CC} = ±33 V	10	20	50	mA
Output power	P _O (1)	THD = 0.4%, f = 20 Hz to 20 kHz	30			W
	P _O (2)	V _{CC} = ±25 V, THD = 1.0%, R _L = 4 Ω, f = 1 kHz	35			W
Total harmonic distortion	THD	P _O = 1.0 W, f = 1kHz			0.3	%
Frequency response	f _L , f _H	P _O = 1.0 W, ⁺⁰ / ₋₃ dB		20 to 50k		Hz
Input resistance	r _i	P _O = 1.0 W, f = 1kHz		55		kΩ
Output noise voltage	V _{NO} *2	V _{CC} = ±33 V, R _g = 10 kΩ			1.2	mVrms
Neutral voltage	V _N	V _{CC} = ±33 V	-70	0	+70	mV

Note: Use rated power supply for test unless otherwise specified.

*1. Use the transformer power supply shown on the next page when measuring the available time for load shorted and the output noise voltage.

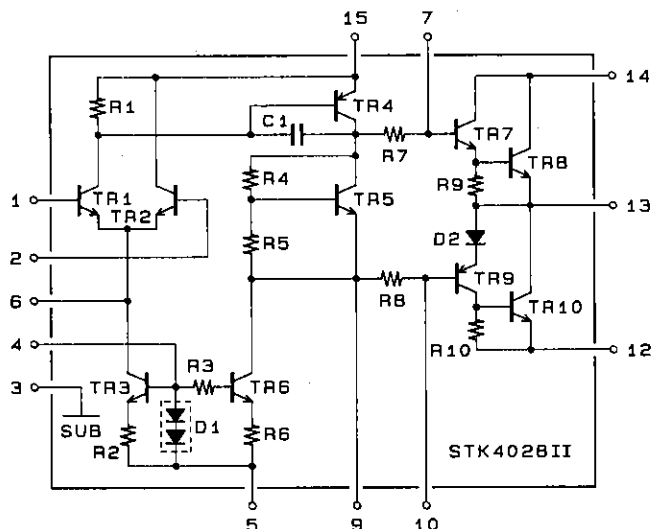
*2. Output noise voltage represents the peak value on the rms scale (VTVM). The noise voltage waveform does not include the pulse noise.

STK4028II

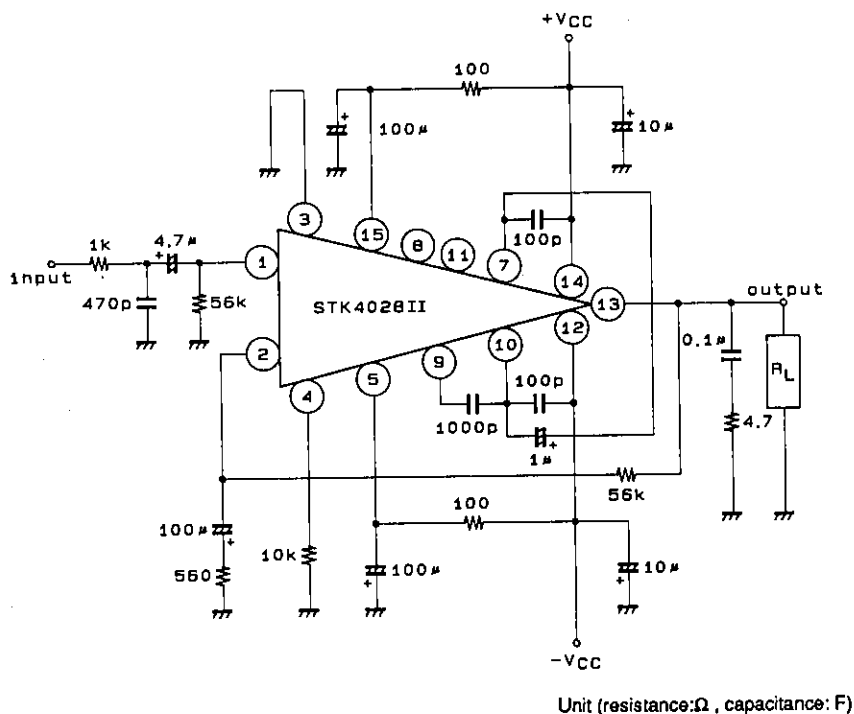


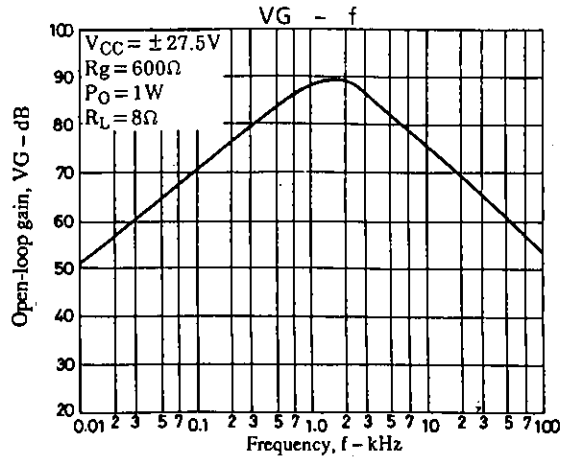
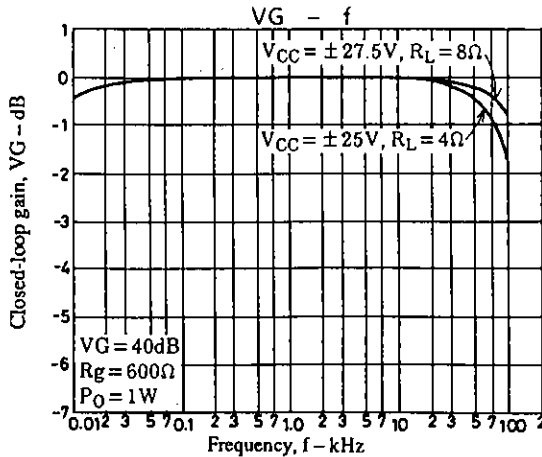
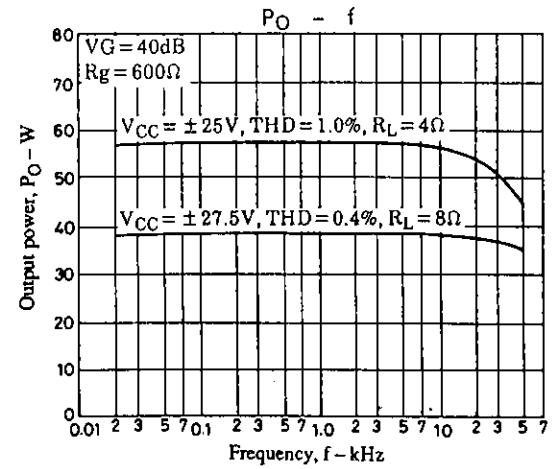
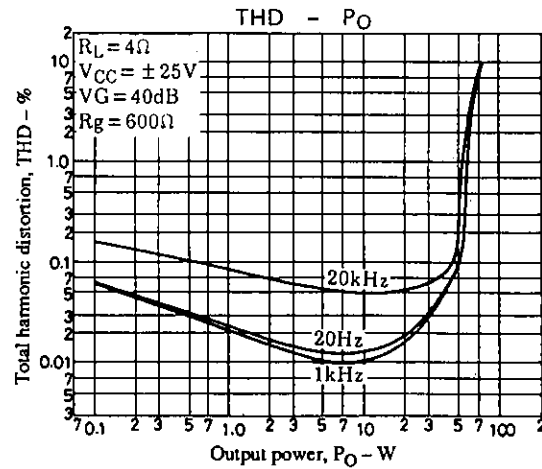
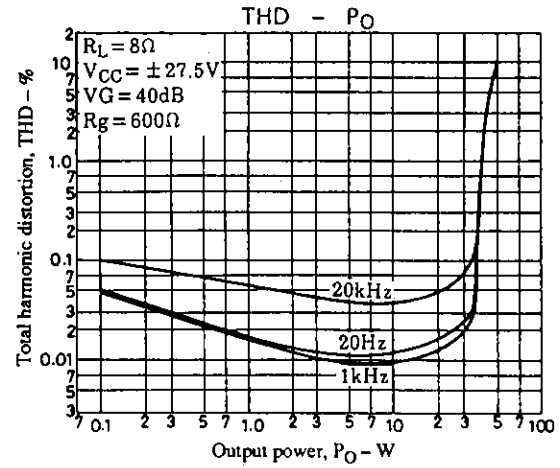
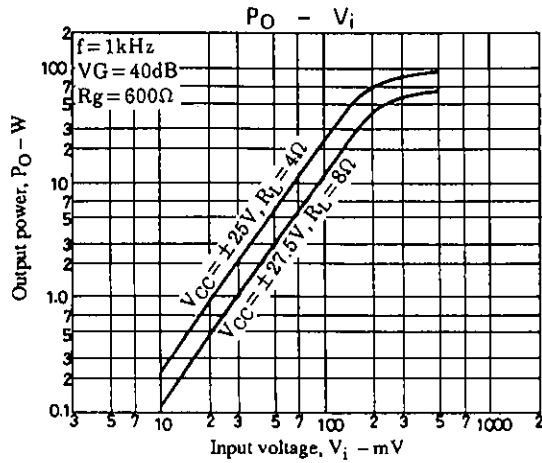
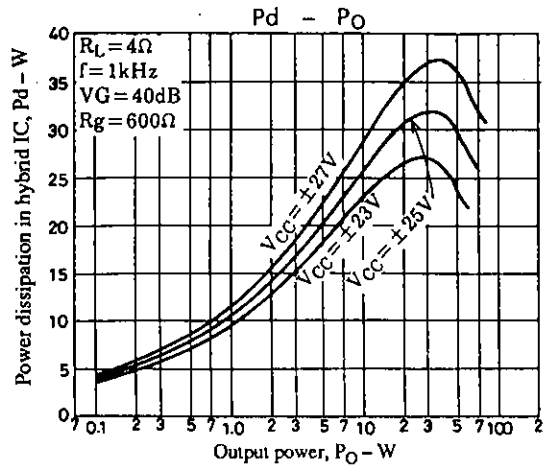
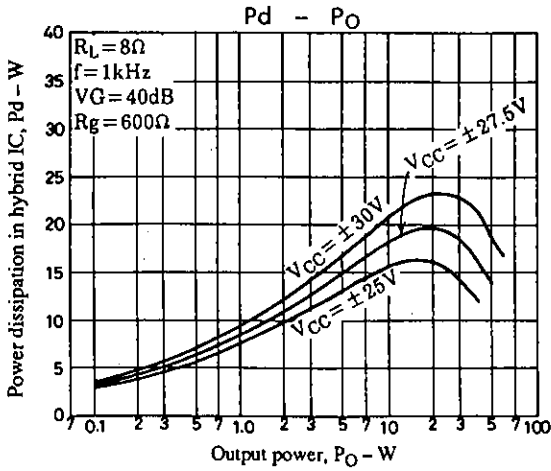
Specified Transformer Power Supply
(RP-25 equivalent)

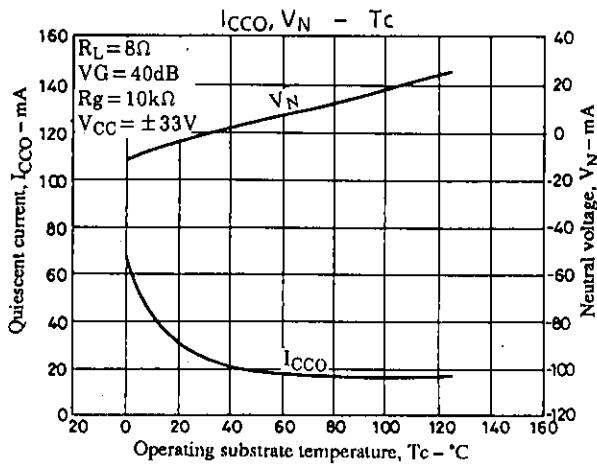
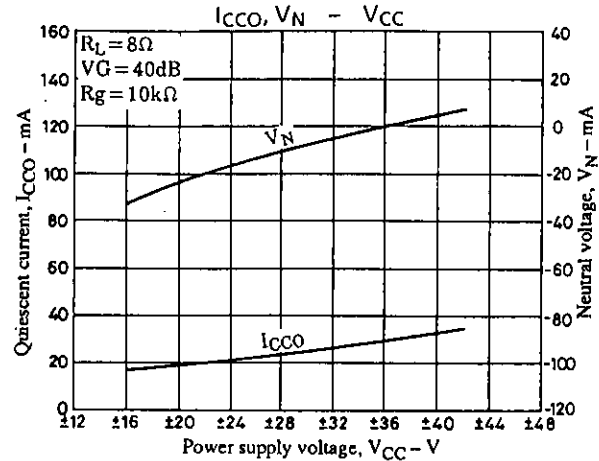
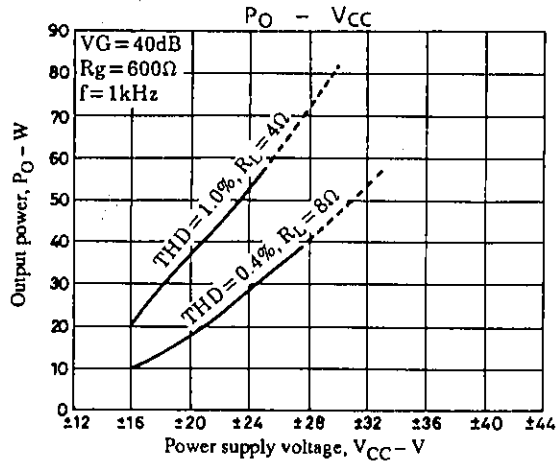
Equivalent Circuit



Sample Application Circuit: 30 W min AF Power Amplifier







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