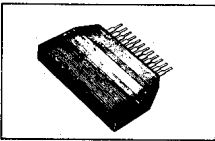


No.965

STK1050 II



Thick Film Hybrid Integrated Circuit
50W MIN AF POWER AMP. OUTPUT STAGE
(D.P.P.) WITH BUILT-IN EMITTER RESISTANCE

Features

1. Built-in emitter resistance
2. Allowable power rating of resistor is 5W min. which is capable of meeting the requirements for any load
3. Allowable peak current is 15A min. which is capable of covering any peak current at abnormality mode such as load short
4. Meets the requirements for various safety standards in the world
5. Easy to make PCB design because of built-in emitter resistance
6. Capable of forming quasi class A bias circuit by connecting peripheral circuit externally

Maximum Ratings at Ta=25°C

Parameter	Symbol	Value	Unit
Maximum Supply Voltage	V_{CCmax}	± 55	V
Thermal Resistance	θ_{j-c}	1.6	°C/W
Collector Current	I_C	6	A
Junction Temperature	T_J	150	°C
Storage Temperature	T_{stg}	-30 to +105	°C
Available Time for Load Shorted	t_s	$V_{CC}=\pm 38V^*, f=50Hz, R_L=8ohm, P_o=50W$	1 sec

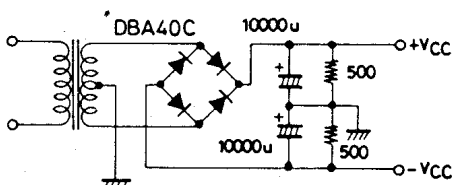
Recommended Operating Conditions at Ta=25°C

Parameter	Symbol	Value	Unit
Recommended Supply voltage	V_{CC}	± 38	V
Load Resistance	R_L	8	ohm

Operating Characteristics at Ta=25°C, $V_{CC}=\pm 38V, R_L=8ohm, R_g=600ohm, V_G=36.7dB$, at specified test circuit (based on Sample Application Circuit)

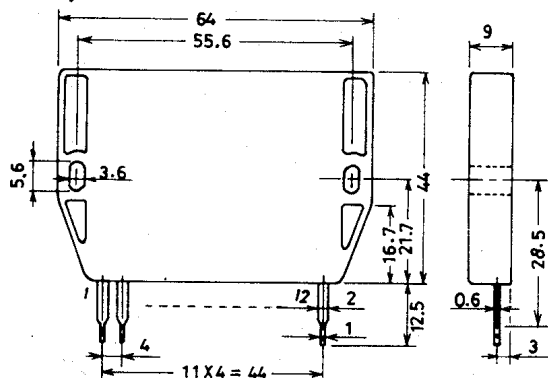
Parameter	Symbol	Conditions	min	typ	max	Unit
Quiescent Current	I_{cco}	$V_{CC}=\pm 43V$	20	40	70	mA
Output Power	P_o	THD=0.01%, f=20Hz to 20kHz	50			W
Total Harmonic Distortion	THD(1)	$P_o=50W, f=20Hz$ to 20kHz	0.005		0.01	%
	THD(2)	$P_o=1W, f=20Hz$ to 20kHz			0.01	%
Power Bandwidth	PBW	$P_o=25W, f=50kHz$		0.05		%
Emitter Resistance	R_E		0.18	0.22	0.30	ohm

*:For measuring available time for load shorted, use the specified transformer power supply shown below.



Specified Transformer Power Supply
(Equivalent to Tango MG-200)

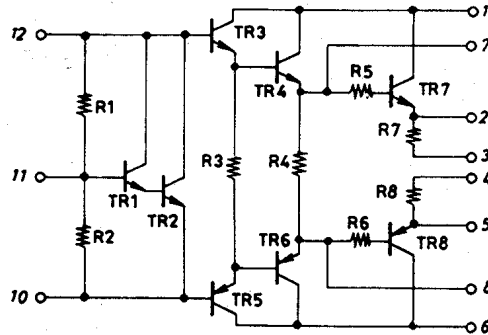
Case Outline 4020 (unit:mm)



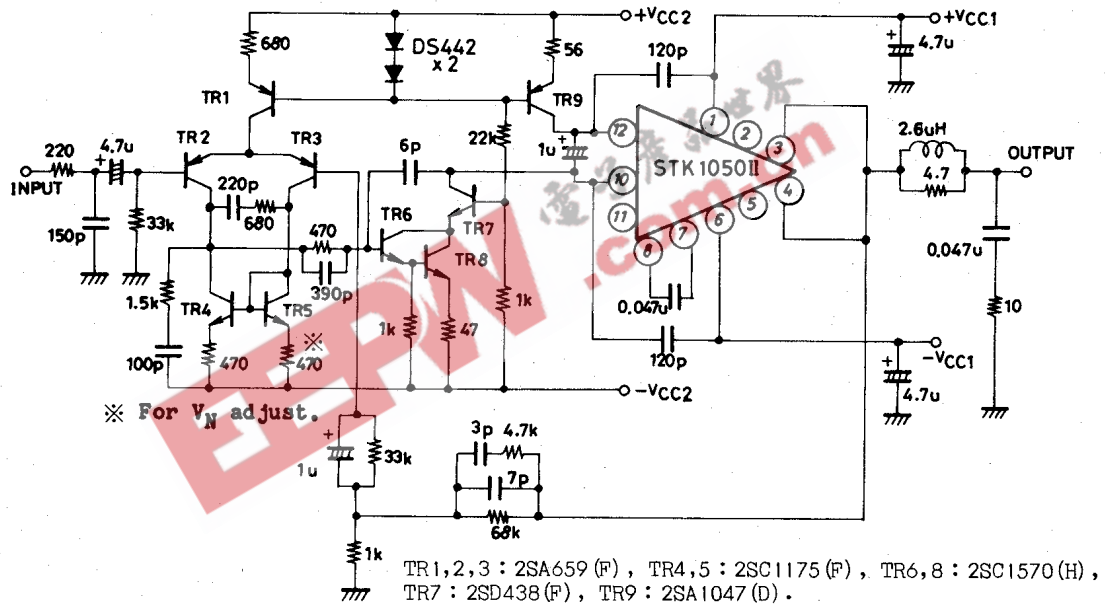
These specifications are subject to change without notice.

STK1050II

Equivalent Circuit



Sample Application Circuit : 50W min AF Power Amp.



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