

**D.P.P. (DARLINGTON POWER PACK) thick film hybrid IC**

CIRCUIT DRAWING  
No.6001~6003

**OUTPUT STAGE OF AF POWER AMP.**

**Features**

General output stage of power amplifier has a difficult and complex problem about heat sink designing and its setting. Sanyo's D.P.P. intends to decrease electronic parts and rationalize a manufacturing process by designing IC of only output stage of power amplifier.

- IMST system.
- Output stage for AF high power amplifier.
- Dual power supply.

- Darlington type pure / quasi-complementary circuit.
- These same pin assignment and pin interval lead to standardize a printed board.
- Metal substrate use IMST<sup>®</sup> makes good thermal stability.
- Able to design freely previous section of power amplifier. This leads tone control designing.

Type Number	Maximum Ratings at Ta=25°C										Operation Characteristics at Ta=25°C		
	Case Outline	Maximum Supply Voltage V <sub>CCmax.</sub>	Junction Temperature T <sub>J</sub>	Storage Temperature T <sub>stg</sub>	Thermal Resistance θ	Collector Current I <sub>C</sub>	Allowable Load Shorting Time t <sub>s</sub>	Supply Voltage at Rated Power at Output P <sub>L</sub> (80)	Output Power P <sub>o</sub> (fs=20 to 20kHz)	Total Harmonic Distortion THD (fs=20 to 20kHz)	Quiescent Current I <sub>qcc</sub>		
Pure-Complementary Circuit	Quasi-Complementary Circuit	V	°C	°C	°C/W	A	sec	V	W	%	mA		
<b>1-Channel Darlington Power Pack (Without emitter resistance)</b>													
STK0080		4006 ±65	150	-30 to +105	1.3	10	—	±46	80 min.	0.1 max.	40 typ, 80 max.		
STK0100		4006 ±75	150	-30 to +105	1.1	12	—	±50	100 min.	0.1 max.	40 typ, 80 max.		
<b>1-Channel Darlington Power Pack (With emitter resistance)</b>													
STK1030		4004 ±40	150	-30 to +105	2.4	5	2	±28.5	30 min.	0.02 max.	40 typ, 80 max.		
STK1040		4004 ±48	150	-30 to +105	1.8	7	2	±33	40 min.	0.02 max.	40 typ, 80 max.		
STK1050		4004 ±53	150	-30 to +105	1.8	7	2	±36	50 min.	0.02 max.	40 typ, 80 max.		
STK1060		4004 ±56	150	-30 to +105	1.6	10	—	±40	60 min.	0.02 max.	40 typ, 80 max.		
STK1070		4006 ±60	150	-30 to +125	1.3	10	—	±43	70 min.	0.02 max.	40 typ, 80 max.		
<b>2-Channel Darlington Power Pack (With emitter resistance)</b>													
STK2230		4015 ±48	150	-30 to +105	2.1	4	2	±30	30x2 min.	0.01 max.	35 typ, 80 max.		
STK2240		4015 ±54	150	-30 to +105	1.8	5	2	±33.5	40x2 min.	0.01 max.	35 typ, 80 max.		
STK2250		4015 ±59	150	-30 to +105	1.8	5	2	±37	50x2 min.	0.01 max.	35 typ, 80 max.		

**STK075 SERIES**

thick film hybrid IC

CIRCUIT DRAWING  
No.6004

**20 TO 35W MIN AF POWER AMP.**



**Features**

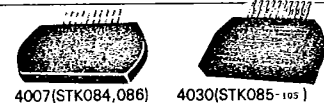
- © IMST, 1 Channel by 2 Power Supplies.
- AF output power STK 077: 20W min., STK 078: 24W min., STK 080: 30W min., STK 082: 35W min.
- Differential amp. constant current driving.
- Capable of tone controlling.
- STK 078-105 and STK 082-105 are for the use of T<sub>C</sub>=105°C.

**STK084, 085-105 086**

thick film hybrid IC

CIRCUIT DRAWING  
No.6005

**50 TO 70W MIN AF POWER AMP.**



**Features**

- © IMST, 1 Channel by 2 Power Supply.
- AF Output Power STK 084: 50 Wmin. STK 085-105: 60 Wmin. STK 086: 70 Wmin.
- Capable of setting protector for load shorting and tone controller.