

IMST

TENTATIVE

Thick Film Hybrid IC

STK417-000series**2-channel High Efficiency AF Power Amplifier
50W × 2 ~ 100W × 2 (THD=0.4%)**

■ Function
2-channel High Efficiency AF Power Amplifier

■ Application
Audio use

■ Feature

- Low Power consumption
- Built-in switch circuit of Power Supply Voltage
- Built-in thermal detection
- Built-in anti AM noise circuit
- Pin Compatible STK407-000series and STK427-000series

* STK407-000series is Normal AF Power Amplifier

* STK427-000series is Other System High Efficiency AF Power Amplifier

■ Schedule

ES 1996.12

MP 1997.6

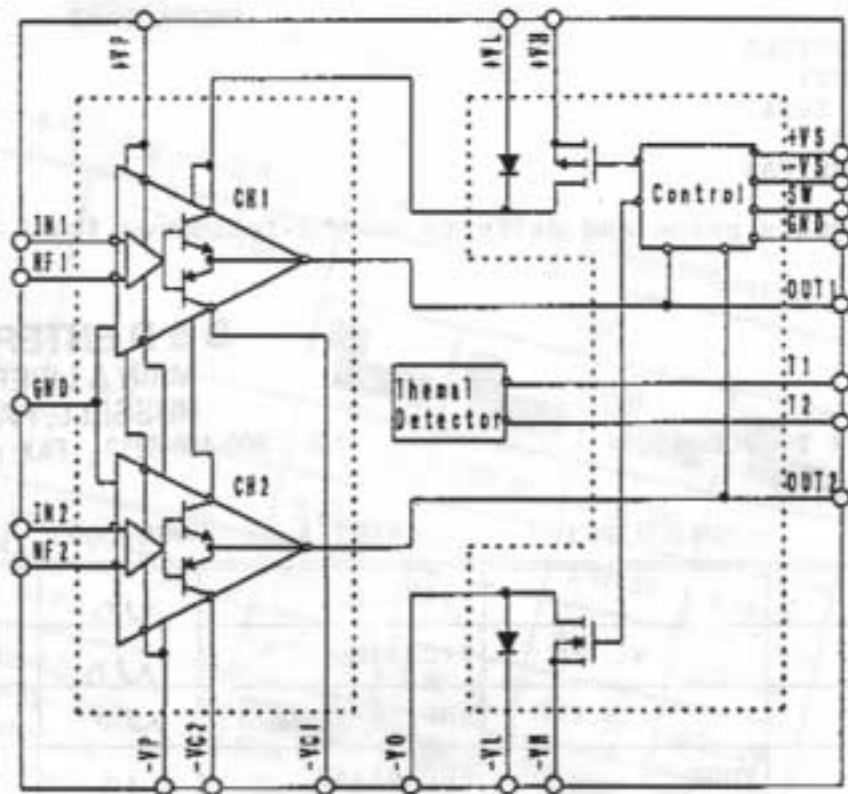
■ The composition of compatible series

$T_a = 25^\circ\text{C}$, $R_g = 600\ \Omega$, $V_G = 40\ \text{dB}$, R_L (Non-inductive Load)

| Item | Condition | Type | | | |
|--------------------------|--|--|--|--|--|
| | | ST1 917-09C | ST4 917-10C | ST7 917-12C | ST9 917-13C |
| Max.Voltage VH1 | $R_L=6\ \Omega, 8\ \Omega$ | $\pm 50.0\text{V}$ | $\pm 53.0\text{V}$ | $\pm 61.0\text{V}$ | $\pm 67.0\text{V}$ |
| Max.Voltage VH2 | $R_L=4\ \Omega$ | $\pm 40.0\text{V}$ | $\pm 42.0\text{V}$ | $\pm 46.0\text{V}$ | $\pm 48.0\text{V}$ |
| Max.Voltage VL1 | $R_L=6\ \Omega, 8\ \Omega$ | $\pm 27.5\text{V}$ | $\pm 29.0\text{V}$ | $\pm 33.5\text{V}$ | $\pm 37.0\text{V}$ |
| Max.Voltage VL2 | $R_L=4\ \Omega$ | $\pm 19.0\text{V}$ | $\pm 20.5\text{V}$ | $\pm 23.5\text{V}$ | $\pm 26.0\text{V}$ |
| Output Power 1 [min.] | $R_L=6\ \Omega$ $f=20\sim 20\text{kHz}$ $\text{THD}=0.4\%$ | $P_O= 50\text{W}$ ($V_H=\pm 34.0\text{V}$) | $P_O= 60\text{W}$ ($V_H=\pm 36.0\text{V}$) | $P_O= 80\text{W}$ ($V_H=\pm 42.0\text{V}$) | $P_O= 100\text{W}$ ($V_H=\pm 46.0\text{V}$) |
| Output Power 2 [typ.] | $R_L=6\ \Omega$ $f=1\text{kHz}$ $\text{THD}=10\%$ | $P_O= 75\text{W}$ ($V_H=\pm 31.0\text{V}$) | $P_O= 90\text{W}$ ($V_H=\pm 33.0\text{V}$) | $P_O= 120\text{W}$ ($V_H=\pm 38.0\text{V}$) | $P_O= 150\text{W}$ ($V_H=\pm 42.0\text{V}$) |
| Output Power 3 [typ.] | $R_L=8\ \Omega$ $f=1\text{kHz}$ $\text{THD}=10\%$ | $P_O= 70\text{W}$ ($V_H=\pm 33.0\text{V}$) | $P_O= 80\text{W}$ ($V_H=\pm 35.0\text{V}$) | $P_O= 100\text{W}$ ($V_H=\pm 40.0\text{V}$) | $P_O= 130\text{W}$ ($V_H=\pm 44.0\text{V}$) |
| Output Power 4 [typ.] | $R_L=4\ \Omega$ $f=1\text{kHz}$ $\text{THD}=10\%$ | $P_O= 70\text{W}$ ($V_H=\pm 25.0\text{V}$) | $P_O= 80\text{W}$ ($V_H=\pm 26.5\text{V}$) | $P_O= 100\text{W}$ ($V_H=\pm 30.0\text{V}$) | $P_O= 120\text{W}$ ($V_H=\pm 32.0\text{V}$) |
| THD 1 [max.] | $R_L=6\ \Omega$ $f=20\sim 20\text{kHz}$ $P_O=1.0\text{W}$ | $\text{THD}=0.4\%$ ($V_H=\pm 34.0\text{V}$) | $\text{THD}=0.4\%$ ($V_H=\pm 36.0\text{V}$) | $\text{THD}=0.4\%$ ($V_H=\pm 42.0\text{V}$) | $\text{THD}=0.4\%$ ($V_H=\pm 46.0\text{V}$) |
| THD 2 [typ.] | $R_L=6, 8\ \Omega$ $f=1\text{kHz}$ | $\text{THD}=0.01\%$ ($P_O= 5\text{W}$) | $\text{THD}=0.01\%$ ($P_O= 6\text{W}$) | $\text{THD}=0.01\%$ ($P_O= 8\text{W}$) | $\text{THD}=0.01\%$ ($P_O=10\text{W}$) |
| THD 3 [typ.] | $R_L=4\ \Omega$ $f=1\text{kHz}$ | $\text{THD}=0.04\%$ ($P_O= 5\text{W}$) | $\text{THD}=0.04\%$ ($P_O= 6\text{W}$) | $\text{THD}=0.04\%$ ($P_O= 8\text{W}$) | $\text{THD}=0.04\%$ ($P_O=10\text{W}$) |

※ Specifications and information herein are subject to change without notice.

■ Equivalent Block Diagram



■ Case Outline

STK417-090 to STK417-130

