

IMST

TENTATIVE

Thick Film Hybrid IC

STK392-120

Convergence Correction Amplifier

3 Channel / 1 Package

Output Current 4A

- Overview

The STK392-120 is a convergence correction amplifier one package hybrid IC for video projector.
This IC has three output amplifiers in the hybrid IC.
Consequently, total six circuits of vertical and horizontal amplifiers in each CRT (R, G, B) corresponds to two hybrid ICs (STK392-120 × 2).
- Application
 - ◆ Video Projector
(General Projection TV)
- Feature
 - ◆ 3 channel/1 package(18pins).
 - ◆ Higher maximum supply voltage($V_{cc\ max} = \pm 44V$)
 - ◆ Lower thermal resistance($\theta_{j-c} = 2.7^{\circ}C/W$)
 - ◆ Excellent thermal stability($T_c\ max = 125^{\circ}C$)
 - ◆ Power supplies of pre driver and output driver amplifier block are independent.
 - ◆ Capable of designing of high efficiency by substituting power supply of output block.
 - ◆ Lower rush current at power switch ON.
 - ◆ B class amplifier using pure complimentary circuit.

■ Electrical Characteristics

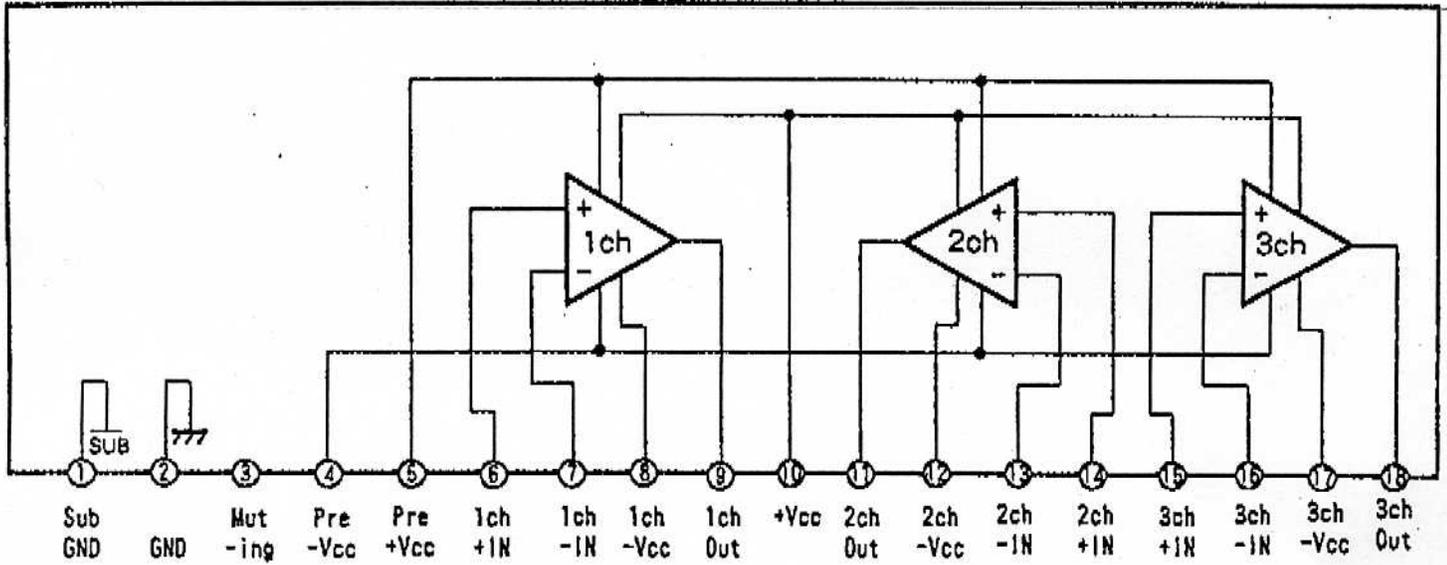
Absolute Maximum Ratings (Ta = 25 °C)

| Item | Symbol | Conditions | Ratings | Units |
|----------------------------|----------------|--------------------------------------|-------------|-------|
| Supply Voltage | Vcc | | ±44 | V |
| Maximum Collector Current | Ic | Tr6, 7, 13, 14, 20, 21 | ±4.0 | A |
| Thermal Resistance | θ_{j-c} | Tr6, 7, 13, 14, 20, 21 (Per a Tr) | 2.7 | °C/W |
| Junction Temperature | Tj | | 150 | °C |
| Operating Case Temperature | Tc | | 125 | °C |
| Storage Temperature | Tstg | | -30 to +125 | °C |

Operating Characteristics (Ta = 25 °C , Rg = 50 Ω)

| Item | Symbol | Conditions | | | Ratings | | | Units |
|----------------------|------------------|------------|--------|---|---------|------|------|-------|
| | | Vcc(V) | f(Hz) | | min. | typ. | max. | |
| Output Noise Voltage | V _o | ±35 | | | | | 0.2 | mVrms |
| Quiescence Current | I _{cco} | ±35 | | | 16 | 23 | 31 | mA |
| Neutral Voltage | V _n | ±35 | | | -50 | 0 | +50 | mV |
| Output Delay Time | t _d | ±35 | 15.75k | Triangular wave Input V _{out} =1.5V _r | | | 1 | μs |

■ Block Diagram



■ Case Outline

