

## STK397-010

# Electromagnetic Focus Output 2-Channel Amplifier (Ic max = 1.5A)

#### Overview

The STK397-010 is a dynamic focus output amplifier IC developed for the electromagnetic focus in CRT-type projection color TVs. It can be used to drive 3 focus coils connected in series for high withstand voltage designs.

Whereas the STK396-010 has a single channel built-in, the STK397-010 has 2 channels built-in and with the addition of a DBF output can drive other correction coils

## **Applications**

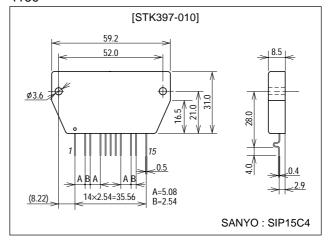
CRT-type color projection TVs

- General models
- High-quality TVs
- Ultrahigh definition projection displays

## **Package Dimensions**

unit:mm

4160



## **Series Organization**

Type No.	Maximum ratings			Electrical characteristics				
	V <sub>CC</sub> max	I <sub>C</sub> max	θј-с	Vcc	Load inductance L	lop-p max (sawtooth wave)	Band width (Hz)	Note
STK396-010	160V	2A	3.0°C/W	115V	1.8mH	0.6A	70 to 100k	1 channel
STK397-010	160V	1.5A	3.0°C/W	115V	1.8mH	0.6A	70 to 100k	2 channels

#### **Specifications**

#### **Maximum Ratings** at Ta = 25°C

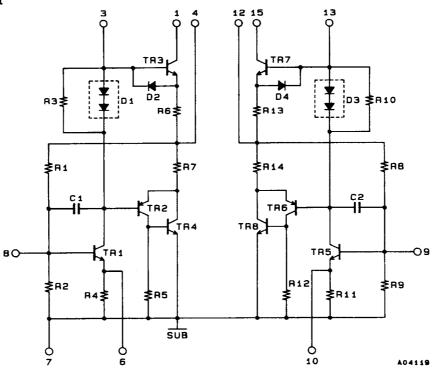
Parameter	Symbol	Conditions	Ratings	Unit
Maximum supply voltage	V <sub>CC</sub> max		160	V
Maximum collector current	I <sub>C</sub> max	Transistors 3, 4, 7, and 8	1.5	А
Thermal resistance	θ ј-с	Transistors 3, 4, 7, and 8, per device	3.0	°C/W
Junction temperature	Tj		150	°C
Operating temperature	Tc		125	°C
Storage temperature	Tstg		-30 to +125	°C

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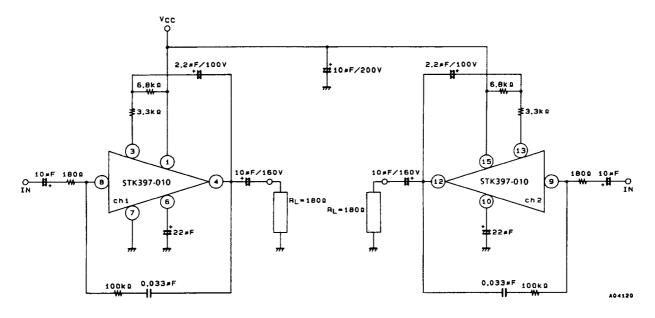
## Operating Characteristics at Ta = 25 °C, Rg=50 $\Omega$ , V<sub>CC</sub>= $\pm 115V$

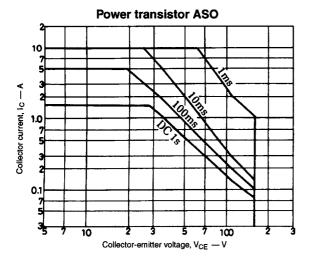
Parameter	Symbol	Conditions	Ratings			Unit
Farameter		Conditions	min	typ	max	Offic
Output noise voltage	V <sub>NO</sub>	Rg=0Ω, each channel			2.0	mVrms
Quiescent current	Icco			20	50	mA
Neutral voltage	٧N	Each channel	56	58	60	mV
Frequency bandwidth	f <sub>L</sub> , f <sub>H</sub>	±6dB, each channel		70 to 100k		Hz

### **Equivalent Circuit**



### **Test Circuit**





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