

No. 5164

STK397-010

Electromagnetic Focus Output 2-channel Amplifier ( $I_C$  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**

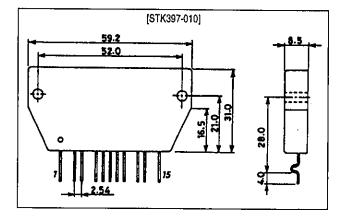
CRT-type color projection TVs

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

#### **Package Dimensions**

unit: mm

4160



#### **Series Organization**

Туре №.	Maximum ratings			Electrical characteristics				
	V <sub>CC</sub> max	I <sub>C</sub> max	<b>Ө</b> ј-с	V <sub>cc</sub>	Load inductance L	lop-p max (sawtooth wave)	Bandwidth (Hz)	Notes
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**

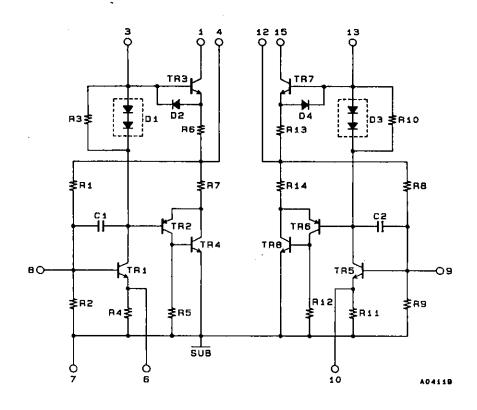
#### Maximum Ratings at Ta = 25°C

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

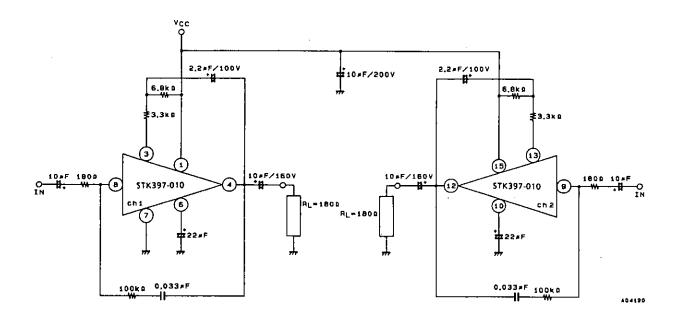
# Operating Characteristics at Ta = 25°C, Rg = $50\Omega$ , $V_{CC} = \pm 115V$

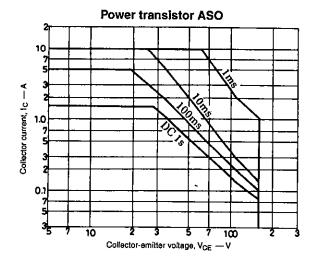
Parameter	Symbol	Conditions	mln	typ	max	Unit
Output noise voltage	V <sub>NO</sub>	$Rg = 0\Omega$ , each channel	<del>-</del>	-	2.0	mVrms
Quiescent current	I <sub>cco</sub>		-	20	50	mA
Neutral voltage	· V <sub>N</sub>	Each channel	56	58	60	V
Frequency bandwidth	f <sub>L</sub> , f <sub>H</sub>	±6dB, each channel	_	70 to 100k		Hz

## **Equivalent Circuit**



## **Test Circuit**





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