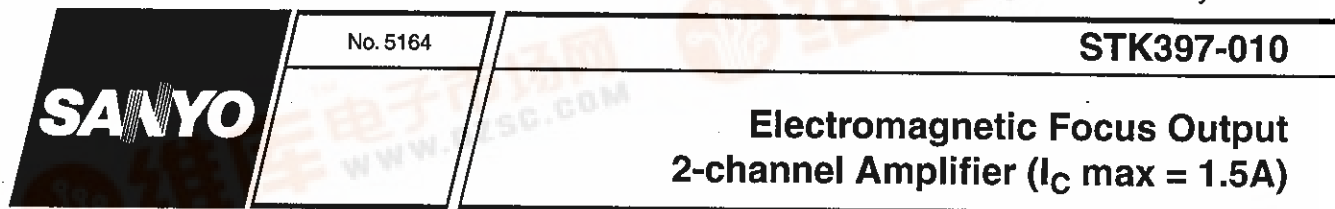


Thick Film Hybrid IC



## 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

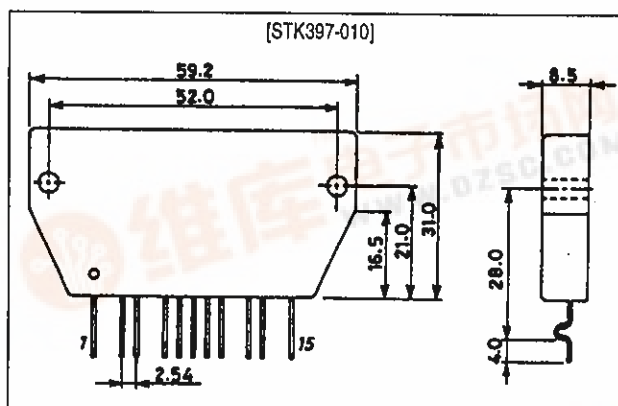
CRT-type color projection TVs

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

## Package Dimensions

unit: mm

4160



## Series Organization

Type No.	Maximum ratings			Electrical characteristics				Notes
	V <sub>CC</sub> max	I <sub>C</sub> max	θ <sub>j-c</sub>	V <sub>CC</sub>	Load inductance L	I <sub>op-p</sub> max (sawtooth wave)	Bandwidth (Hz)	
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

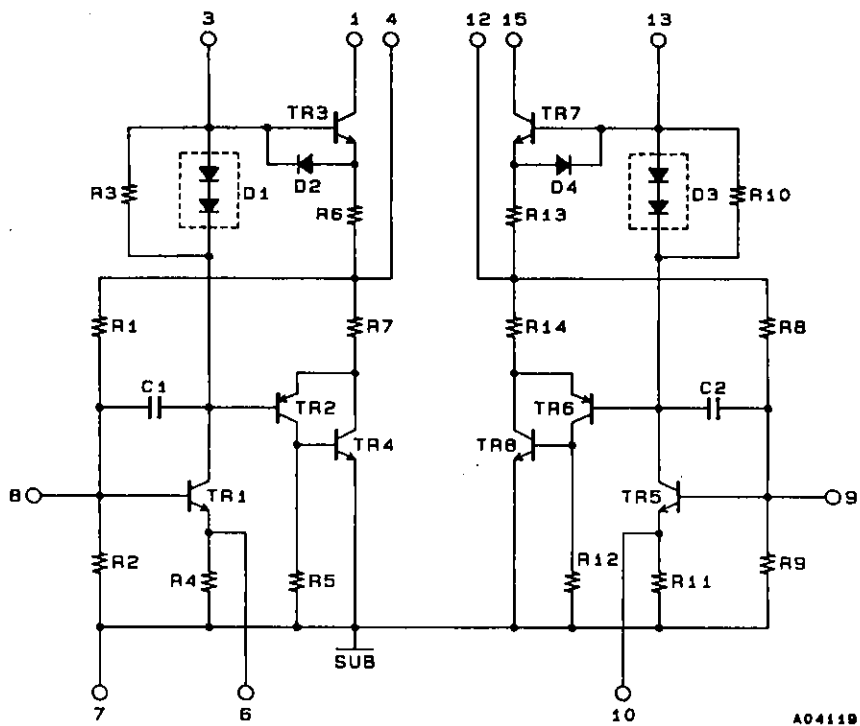
Parameter	Symbol	Conditions	Rated	Unit
Maximum supply voltage	V <sub>CC</sub> max		160	V
Maximum collector current	I <sub>C</sub> max	Transistors 3, 4, 7 and 8	1.5	A
Thermal resistance	θ <sub>j-c</sub>	Transistors 3, 4, 7 and 8, per device	3.0	°C/W
Junction temperature	T <sub>J</sub>		150	°C
Operating substrate temperature	T <sub>c</sub>		125	°C
Storage temperature	T <sub>stg</sub>		-30 to +125	°C

## STK397-010

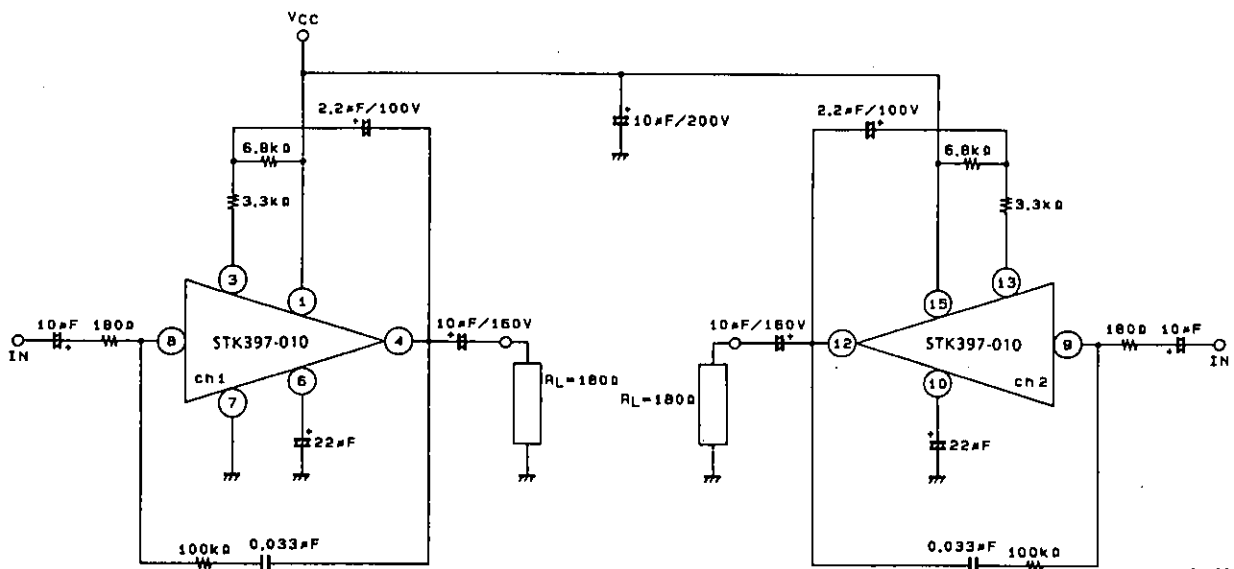
**Operating Characteristics** at  $T_a = 25^\circ\text{C}$ ,  $R_g = 50\Omega$ ,  $V_{CC} = \pm 115\text{V}$

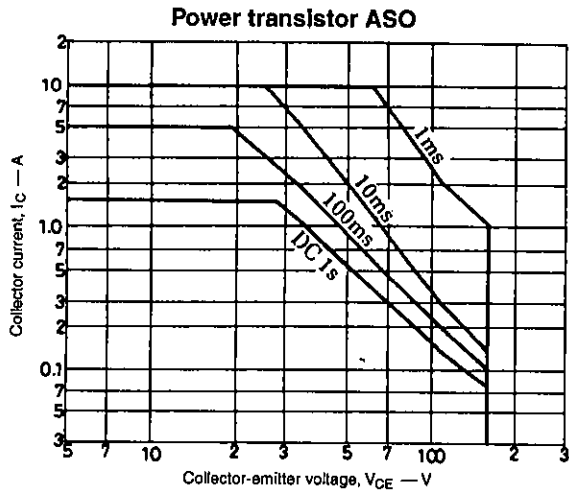
Parameter	Symbol	Conditions	min	typ	max	Unit
Output noise voltage	$V_{NO}$	$R_g = 0\Omega$ , each channel	-	-	2.0	mVrms
Quiescent current	$I_{CCO}$		-	20	50	mA
Neutral voltage	$V_N$	Each channel	56	58	60	V
Frequency bandwidth	$f_L, f_H$	$\pm 6\text{dB}$ , each channel	-	70 to 100k	-	Hz

### Equivalent Circuit



### Test Circuit





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