

No. 5168

Thick Film Hybrid IC

STK396-010

**Electromagnetic Focus Output
1-channel Amplifier (I_C max = 2A)**

Overview

The STK396-010 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.

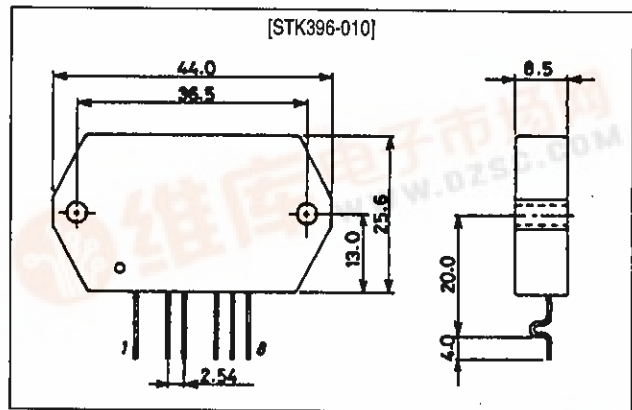
Applications

CRT-type color projection TVs

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

Package Dimensions

unit: mm
4159



Series Organization

Type No.	Maximum ratings			Electrical characteristics				Notes
	V_{CC} max	I_C max	θ_{j-c}	V_{CC}	Load Inductance L	I_{op-p} 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 $T_a = 25^\circ\text{C}$

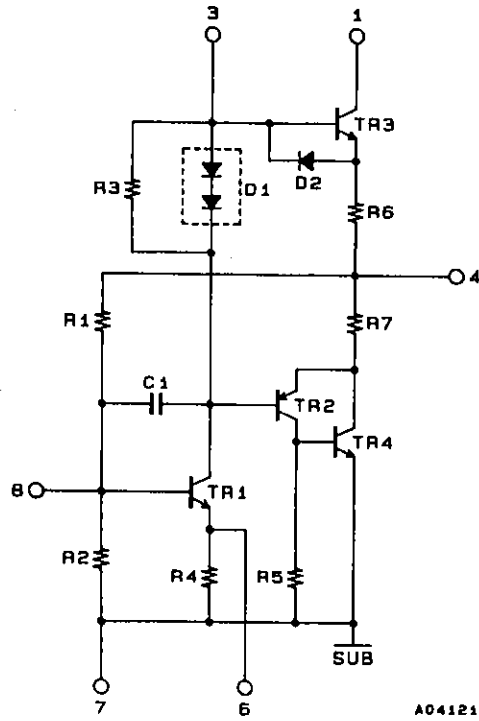
Parameter	Symbol	Conditions	Ratings	Unit
Maximum supply voltage	V_{CC} max		160	V
Maximum collector current	I_C max	Transistors 3 and 4	2	A
Thermal resistance	θ_{j-c}	Transistors 3 and 4, per device	3.0	°C/W
Junction temperature	T_J		150	°C
Operating substrate temperature	T_c		125	°C
Storage temperature	T_{stg}		-30 to +125	°C

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

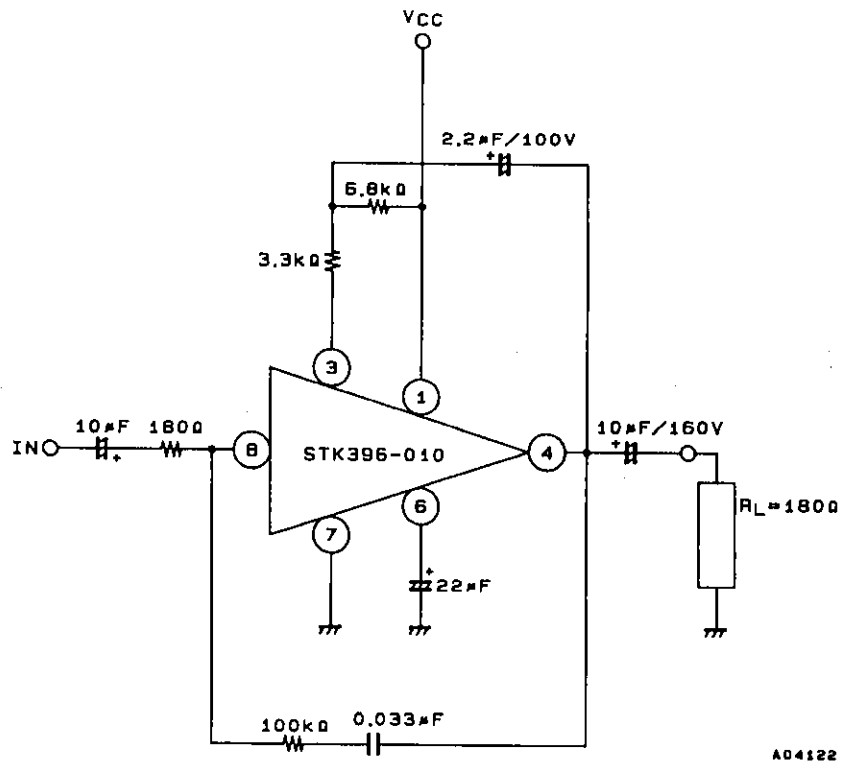
Parameter	Symbol	Conditions	min	typ	max	Unit
Output noise voltage	V_{NO}	$R_g = 0\Omega$	-	-	2.0	mVrms
Quiescent current	I_{CCO}		-	20	50	mA
Neutral voltage	V_N		56	58	60	V
Frequency bandwidth	f_L, f_H	$\pm 6\text{dB}$	-	70 to 100k	-	Hz

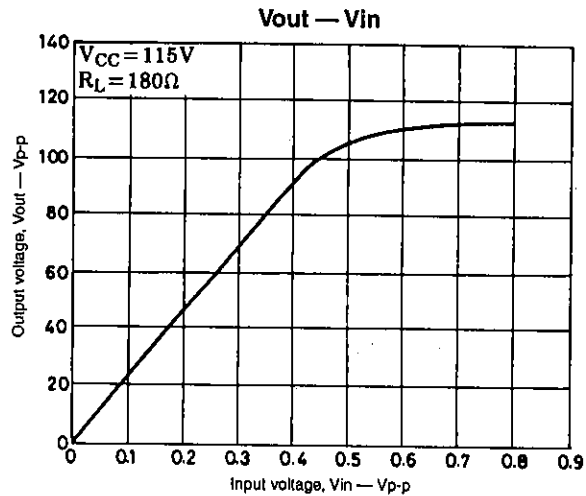
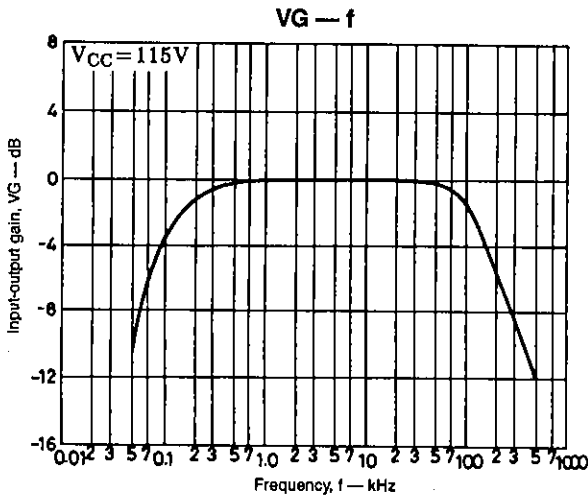
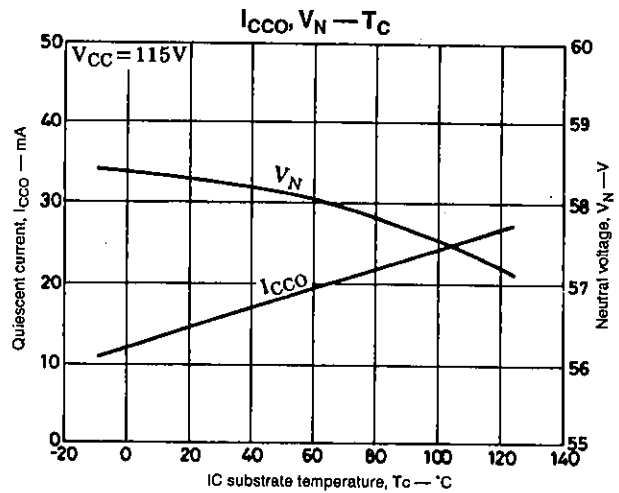
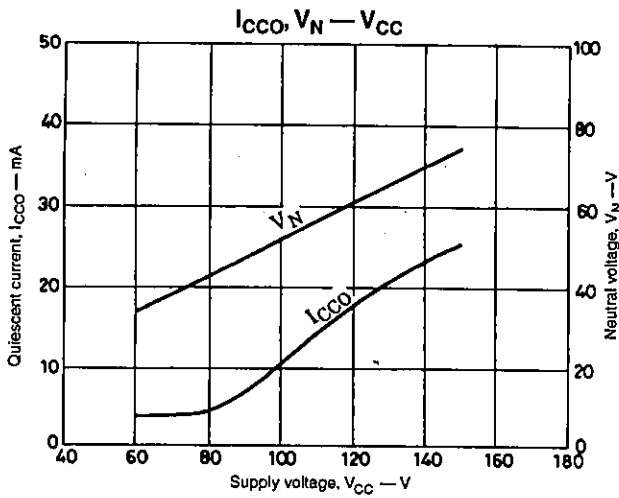
STK396-010

Equivalent Circuit



Test Circuit





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