

**SANYO**

No. 5168

**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**

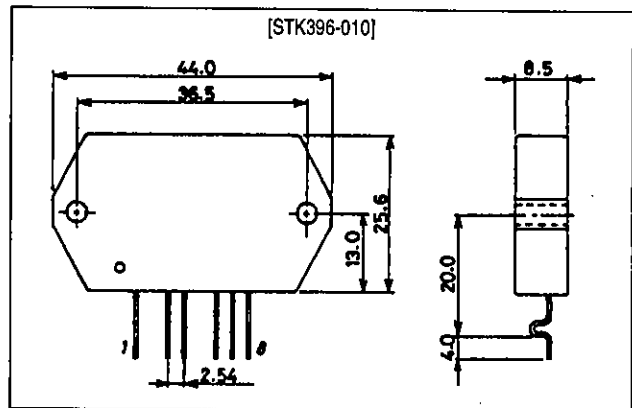
CRT-type color projection TVs

- 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	$\theta_{j-c}$	$V_{CC}$	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  $T_a = 25^\circ\text{C}$ 

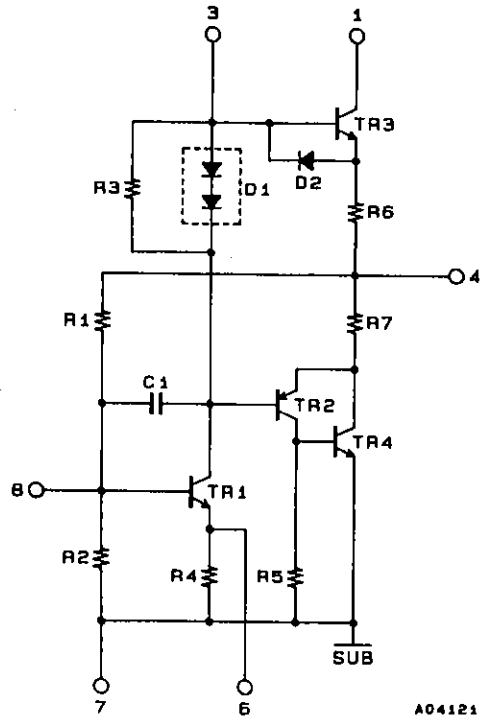
Parameter	Symbol	Conditions	Ratings	Unit
Maximum supply voltage	$V_{CC}$ max		160	V
Maximum collector current	$I_C$ max	Transistors 3 and 4	2	A
Thermal resistance	$\theta_{j-c}$	Transistors 3 and 4, per device	3.0	°C/W
Junction temperature	$T_j$		150	°C
Operating substrate temperature	$T_c$		125	°C
Storage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

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

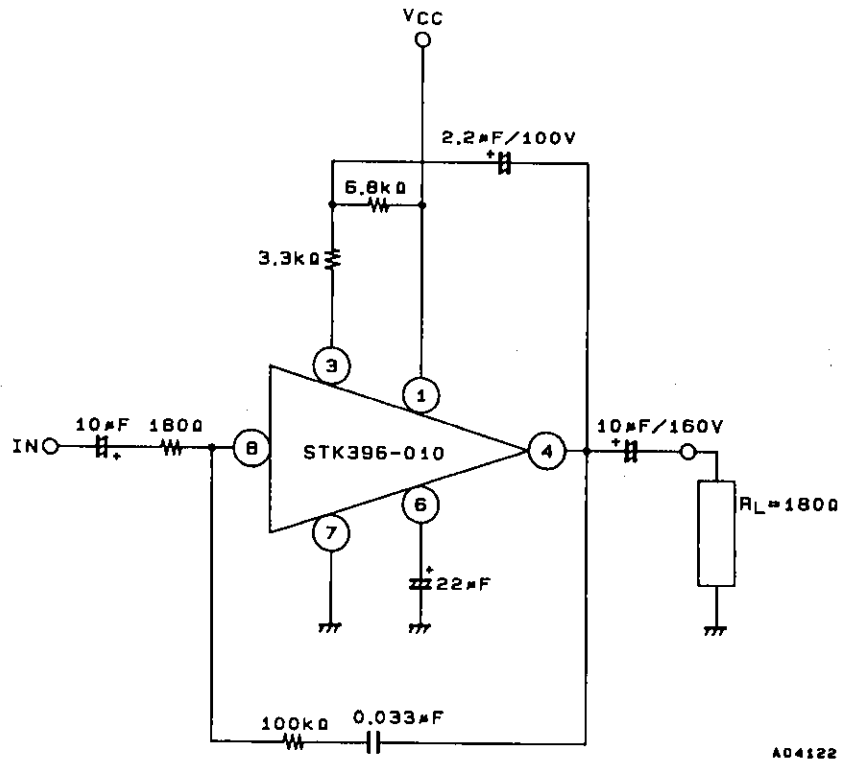
Parameter	Symbol	Conditions	min	typ	max	Unit
Output noise voltage	$V_{NO}$	$R_g = 0\Omega$	-	-	2.0	mVrms
Quiescent current	$I_{CCQ}$		-	20	50	mA
Neutral voltage	$V_N$		56	58	60	V
Frequency bandwidth	$f_L, f_H$	$\pm 6\text{dB}$	-	70 to 100k	-	Hz

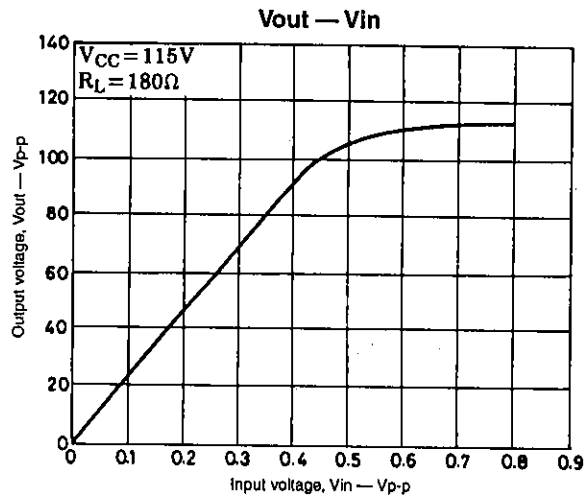
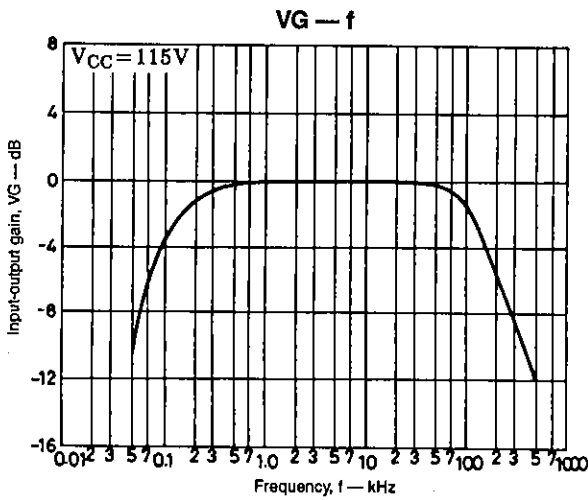
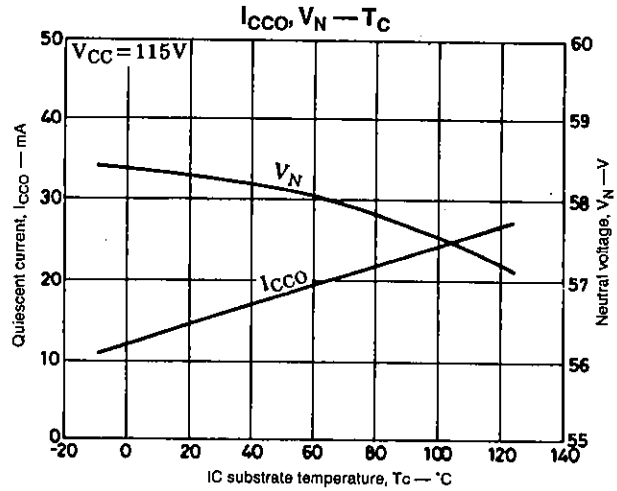
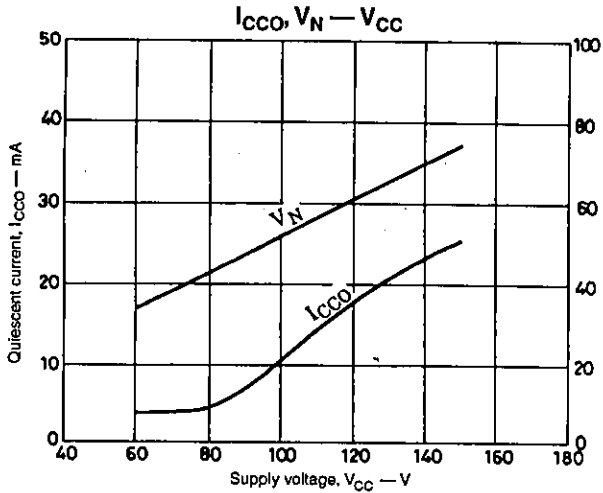
**SANYO Electric Co., Ltd. Semiconductor Business Headquarters**  
TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110 JAPAN

Equivalent Circuit



Test Circuit





- No products described or contained herein are intended for use in surgical implants, life-support systems, aerospace equipment, nuclear power control systems, vehicles, disaster/crime-prevention equipment and the like, the failure of which may directly or indirectly cause injury, death or property loss.
- Anyone purchasing any products described or contained herein for an above-mentioned use shall:
  - ① Accept full responsibility and indemnify and defend SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors and all their officers and employees, jointly and severally, against any and all claims and litigation and all damages, cost and expenses associated with such use;
  - ② Not impose any responsibility for any fault or negligence which may be cited in any such claim or litigation on SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors or any of their officers and employees, jointly or severally.
- Information (including circuit diagrams and circuit parameters) herein is for example only; it is not guaranteed for volume production. SANYO believes information herein is accurate and reliable, but no guarantees are made or implied regarding its use or any infringements of intellectual property rights or other rights of third parties.

This catalog provides information as of August, 1995. Specifications and information herein are subject to change without notice.