

FEATURES

- Temperature Drift (25°C to 100°C)..... ~0.7V
- R, G, B Cut-Off and Brightness DC Control
- Supply Voltage..... 200V
- Clamp Gate Option
- Small Plastic Package

APPLICATION

- Microcomputer Controlled CRT Displays

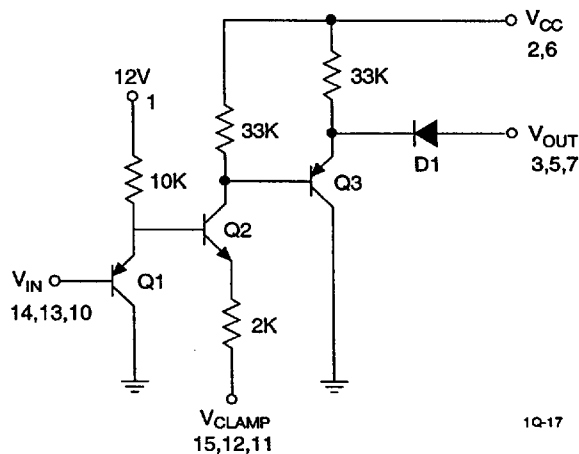
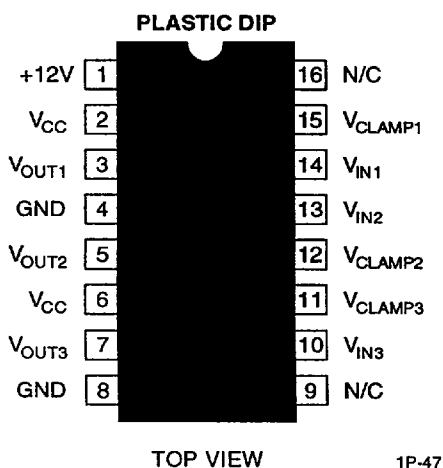
GENERAL DESCRIPTION

The CVA4502 is a 3 Channel Video cut-off IC designed to replace most of the discrete solution now being utilized for the "cut-off" function. The device is temperature compensated for low drift and can withstand 200V with a wide cut-off range up to 60V. A clamp gate option is provided to use as a sync. on Green. The CVA4502 has high impedance and can be interfaced with any DAC. The product is packaged in 16 Pin Plastic DIP.

ORDERING INFORMATION

Part	Package	Temperature Range
CVA4502N	Plastic DIP 16 Lead	-20°C to +100°C

PIN CONFIGURATION



ABSOLUTE MAXIMUM RATINGS

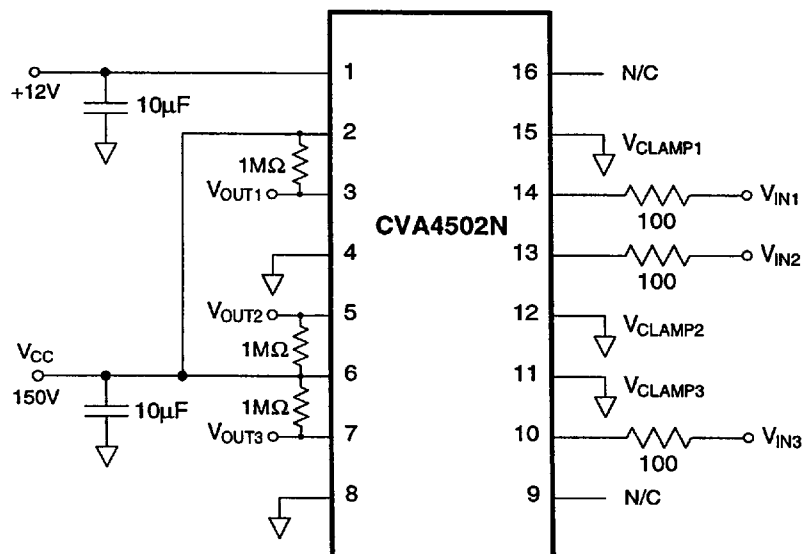
Supply Voltage..... 200V
 Storage Temperature Range..... -65°C to +150°C
 Lead Temperature (Soldering 10 seconds)..... 260°C

Power Dissipation..... 1W
 ESD Tolerance..... ±2000V

DC ELECTRICAL CHARACTERISTICS

The following specifications apply for Supply Voltage = 150V, see test circuit.

SYMBOL	CHARACTERISTICS	TYP	MIN	MAX	UNITS	CONDITIONS
I _{CC}	Supply Current	5		5.5	mA	V _{IN} = 5V
V _{OUT(LOW)}	Output Voltage	66	60	70	V	V _{IN} = 5V
V _{OUT(HIGH)}	Output Voltage	121	118	126	V	V _{IN} = 1V
Gain	Voltage Gain	13.8				ΔV _{OUT} /ΔV _{IN}

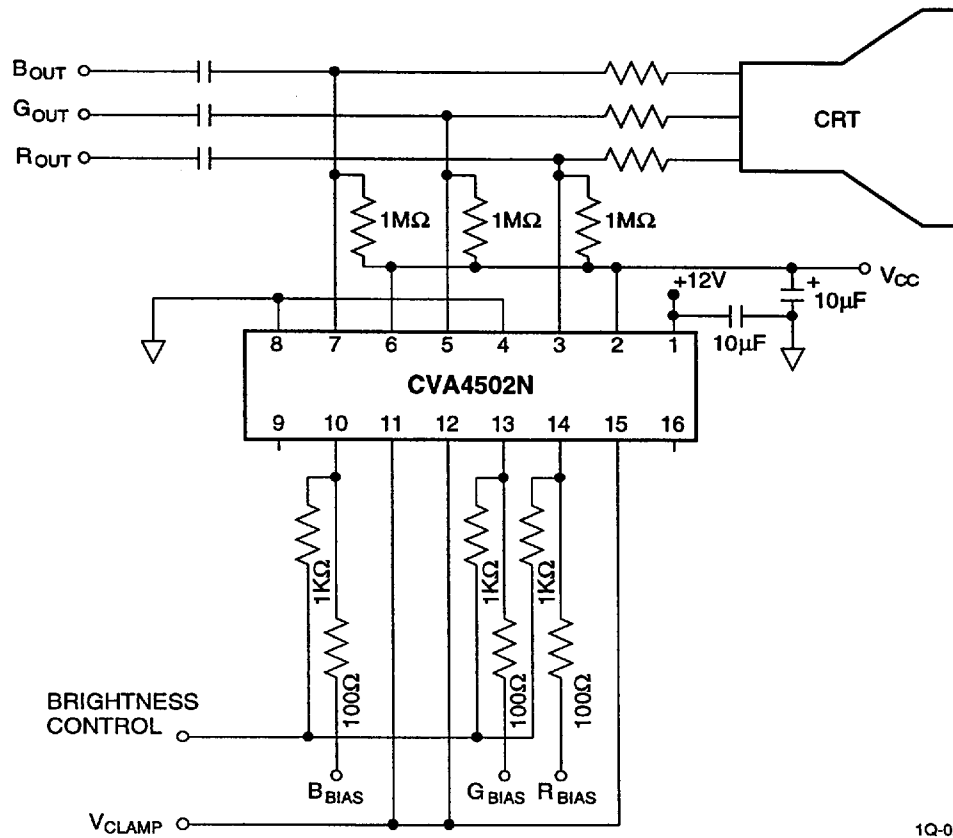
TEST CIRCUIT


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APPLICATION CIRCUIT



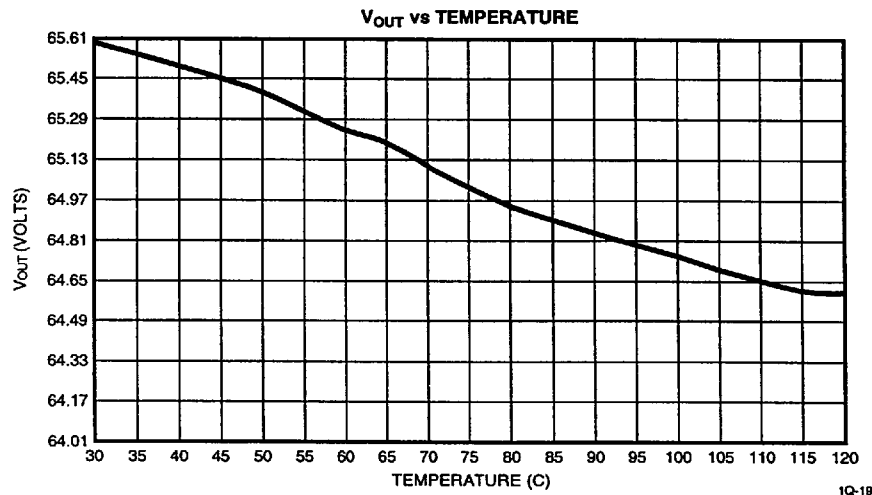
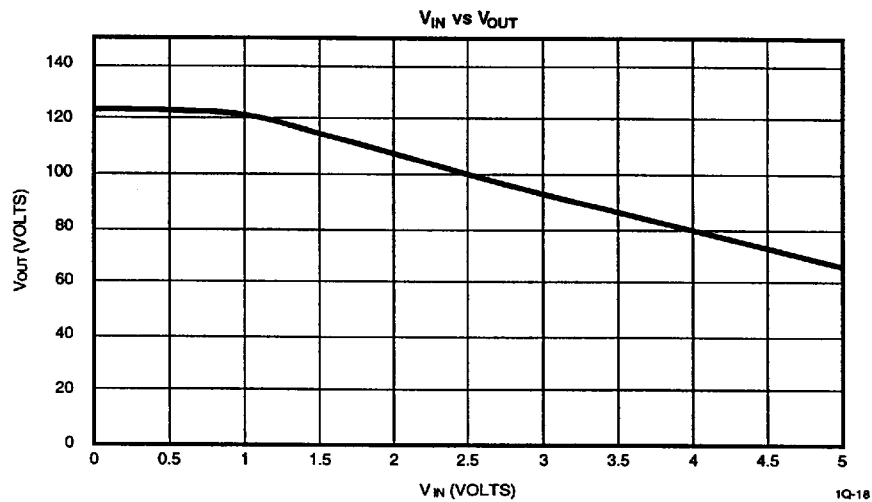
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CHARACTERISTICS



APPLICATION

The CVA4502 is internally compensated for temperature drift, using a high impedance buffer V_{OUT} is virtually unchanged over a large temperature range. From 25°C to 100°C, V_{OUT} drift typically is 0.7V. In the actual application the monitor temperature runs an ambient of 60°C. The CVA4502 can be driven directly from any DAC, gain is internally set to 14.

A 1 megohm resistor is necessary to connect between V_{OUT} to V_{CC} however, the resistor value can be decreased to optimize the frequency response.

A Clamp Gate is provided as an option. This can be used for sync. Green or otherwise be grounded.

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