

**FEATURES**

- **Bandwidth** ..... **100MHz**
- **Ease of Use**
- **EMI Control Option**
- **OSD Option**

**APPLICATIONS**

- **CRT Driver for up to 82kHz Monitors with Resolution up to 1280 x 1024**

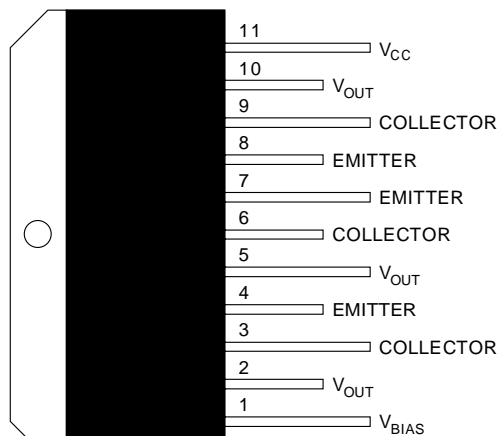
**DESCRIPTION**

The CVA2412AX is a very low cost solution for high resolution monitors. The device can be used with pre-amps, where the common emitter transistor is already a part of the pre-amp. With this device, OSD, peaking coil, and peaking capacitor options are available. A very small heat sink is required to pick-up ground from the standard TO220 package Tab. With 100MHz bandwidth, the device is an ideal low cost solution for 17" and 21" monitors.

**ORDERING INFORMATION**

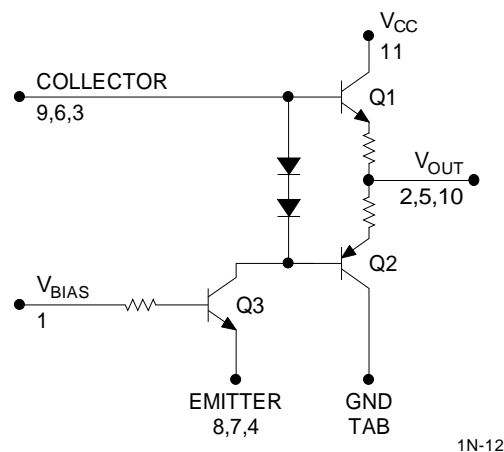
Part	Package	Temperature
CVA2412TAX	T11A	-20°C to +100°C

**CONNECTION DIAGRAM AND SIMPLIFIED SCHEMATIC**



TAB = GND  
TOP VIEW  
T11A PACKAGE

1B-22



1N-12

## ABSOLUTE MAXIMUM RATINGS

Supply Voltage . . . . . 85V      Operating Temperature . . . . . -20°C to +100°C  
 Storage Temperature . . . . . -25°C to +100°C      Lead Temperature . . . . . +300°C

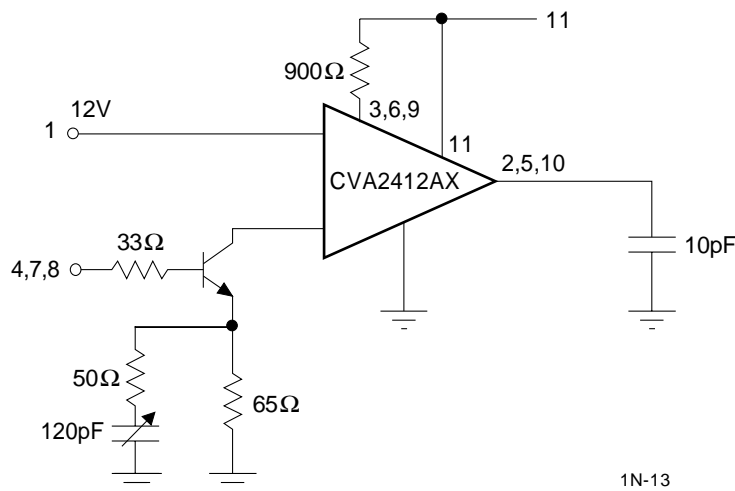
## DC ELECTRICAL CHARACTERISTICS $T_{CASE} = +25^{\circ}C$ (see test circuit)

SYMBOL	CHARACTERISTICS	MIN	TYP	MAX	UNITS
I <sub>CC</sub>	Supply Current @ 1MHz		34	50	mA
I <sub>CC</sub>	Supply Current @ 50MHz		58	65	mA
V <sub>OUT DC</sub>	Output DC Level	40	45	50	V
A <sub>v</sub>	Gain	11	13	15	V

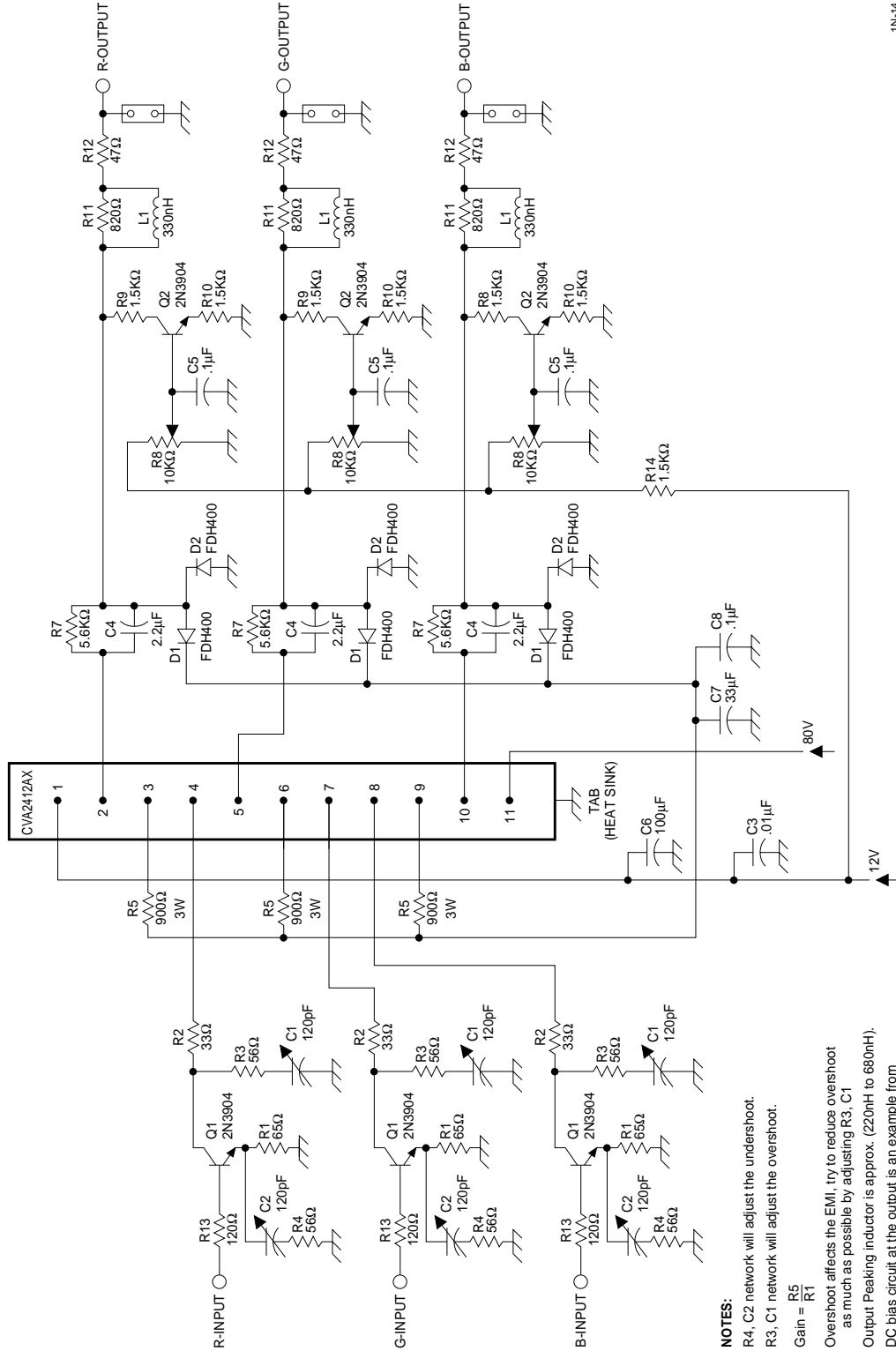
## AC ELECTRICAL CHARACTERISTICS $T_{CASE} = +25^{\circ}C$

SYMBOL	CHARACTERISTICS	MIN	TYP	MAX	UNITS
T <sub>r</sub>	Rise Time		4		ns
T <sub>f</sub>	Fall Time		4		ns
L <sub>e</sub>	Linearity		5		%
OS	Overshoot		100		MHz

## CONNECTION DIAGRAM AND SIMPLIFIED SCHEMATIC



**FIGURE 1. APPLICATION CIRCUIT**



**NOTES:**  
 R4, C2 network will adjust the undershoot.  
 R3, C1 network will adjust the overshoot.  
 Gain =  $R1$   
 Overshoot affects the EMI, try to reduce overshoot as much as possible by adjusting R3, C1  
 Output Peaking inductor is approx. (220nH to 680nH).  
 DC bias circuit at the output is an example from several DC bias circuits available.

