HIGH SPEED DRIVERS (continued)

H110/H210 — Voltage Source Output

The H110 series of drivers includes reverse voltage protection plus several additional components and test points which allow for greater versatility of application than the F311 series. The H110 series is pin compatible with the F311 series allowing direct replacement in old designs. In addition, the H110 and H210 offer extra output pins on the opposite side of the package which permits improved layout flexibility.

FEATURES

- Reverse Voltage Protection
- 11 ns maximum turn on time. (8 ns typical)
- 13 ns maximum turn off time. (10 ns typical)
- +10 ma positive output current with grounded cathode lead and TPR left unconnected.
- +15 ma positive output current with grounded cathode load and TPR is connected to TP.
- +25 ma positive output current with grounded cathode load and TPR is connected to output.
- −35 ma negative output current with grounded anode load and TPR left unconnected.
- −25 ma negative output current with grounded anode load when −12V supply is connected to zener pin and TPR is connected to output.
- −15 ma negative output current with grounded anode load when −12V supply is connected to zener pin and TPR is connected to TP.
- −10 ma negative output current with grounded anode load when −12V supply is connected to zener pin and TPR is left unconnected.
- It is suggested that when using very high pulse repetition rates (>10 MHz), the −12V supply be connected to the zener pin to reduce the power consumption created by the high switching currents.
- An extra diode is internally connected to TP to enable the user to adapt the driver to load configurations requiring simultaneous reverse voltage and negative current.
- Inputs are inverting when mode control is held low (0V) and non-inverting when mode control is held high (+5V).
- Useful for high pulse repetition rates to 20 MHz.
- H110 Package-14 lead, Reference Figure A.
- H210 Package-22 lead, Reference Figure B.

PIN FUNCTIONS

H110 (Single channel)

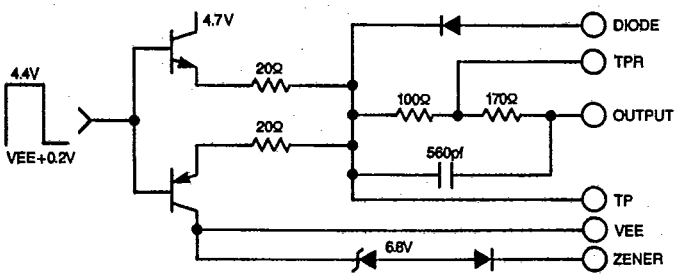
1. VEE (−5V to −15V)	8. N/C
2. Output	9. N/C
3. Ground	10. Diode
4. N/C	11. TP
5. Input	12. TPR
6. Mode control	13. Output
7. VCC (+5V ±0.5V)	14. Zener

H210 (Dual channel)

1. TP1	12. VCC (+5V ±0.5V)
2. Output 1	13. TP2
3. N/C	14. Output 2
4. Input 1	15. TPR2
5. Ground	16. Diode 2
6. Mode control 1	17. Diode 1
7. Mode control 2	18. TPR1
8. Input 2	19. Output 1
9. N/C	20. TP1
10. Output 2	21. Zener
11. TP2	22. VEE (−5V to −15V)

H310 (Three channel)

OUTPUT STAGE H110/H210



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