

HIGH SPEED DRIVERS

T-52-13-90

These drivers contain internal spiking capacitors to provide large current spikes during the time that the driver is switching states. This rapidly forces the removal of the stored charge of the PIN diode and its associated biasing circuitry. Some circuit environments are sensitive to the ringing created by the extremely fast switching current spikes and although all drivers contain internal power supply bypass filtering capacitors, it may, in some instances, be necessary to add additional external capacitance (.1-10 uf).

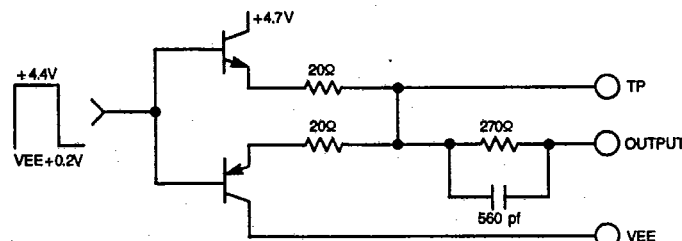
F311/F2311/F3311/F4311 — Voltage Source Output

FEATURES

- Reverse Voltage Protection
- 10 ns maximum turn on time. (6 ns typical)
- 12 ns maximum turn off time. (8 ns typical)
- +10 ma positive output current (grounded cathode load configuration)
- -35 ma negative output current (grounded anode load configuration)
- Test points are brought out to enable the user to modify the positive and negative output currents with appropriate external resistors, diodes, and capacitors
- Useful for high-pulse repetition rates to 20 MHz
- Inputs are inverting when mode control is held low (0V) and non-inverting when mode control is held high (+5V).

- F311 Package 14 lead-reference Figure A
- F2311 Package 22 lead-reference Figure B
- F3311/F4311 Package-22 lead Reference Figure C

OUTPUT STAGE F311/F2311/F3311/F4311



PIN FUNCTIONS

F311 (Single Channel)

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

F3311 (Three Channel)

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|----------------------|-----------------------|
| 1. Ground | 12. VEE (-5V to -15V) |
| 2. Input 1 | 13. N/C |
| 3. Mode control 1 | 14. N/C |
| 4. Input 2 | 15. N/C |
| 5. Mode control 2 | 16. Output 3 |
| 6. Input 3 | 17. TP3 |
| 7. Mode control 3 | 18. N/C |
| 8. N/C | 19. Output 2 |
| 9. N/C | 20. TP2 |
| 10. VCC (+5V ± 0.5V) | 21. Output 1 |
| 11. Ground | 22. TP1 |

F2311 (Dual Channel)

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

F4311 (Four Channel)

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|----------------------|-----------------------|
| 1. Ground | 12. VEE (-5V to -15V) |
| 2. Input 1 | 13. N/C |
| 3. Mode control 1 | 14. Output 4 |
| 4. Input 2 | 15. TP4 |
| 5. Mode control 2 | 16. Output 3 |
| 6. Input 3 | 17. TP3 |
| 7. Mode control 3 | 18. N/C |
| 8. Input 4 | 19. Output 2 |
| 9. Mode control 4 | 20. TP2 |
| 10. VCC (+5V ± 0.5V) | 21. Output 1 |
| 11. Ground | 22. TP1 |

