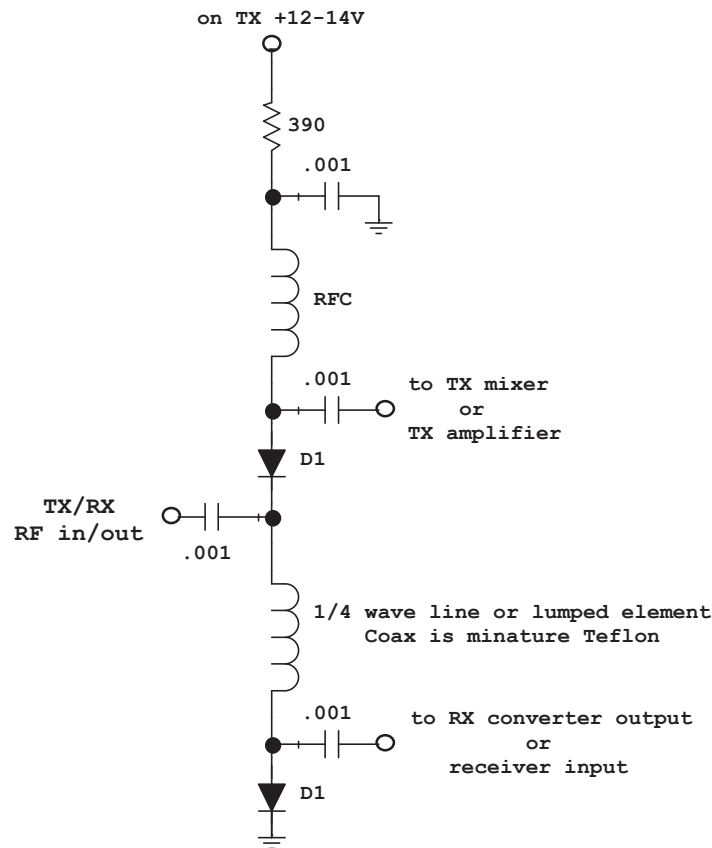


Pin Diode RF Switch

WA3JUF 1980

used to switch the transverter TX/RX IF
or - used as a TX/RX switch



D1: Transverter: UM9401, MPN3401, MPN3404,
MBD101. 10-15W T/R switch: BA182

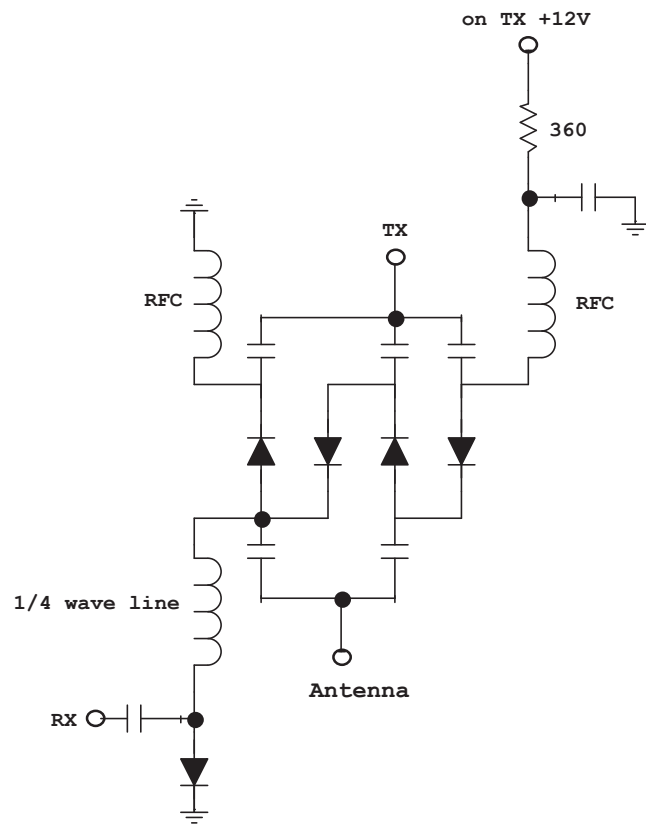
1/4 wave line: mini teflon
coax, shield grounded both
ends with short leads
28: 0.47uH molded (from memory, no doc)
144: 16" long, or equiv: 12t #24, 3/32" ID
222: 9" long
432: 6" long

RFC: 28: 100uH choke
144: 12t #24, 1/8" ID or Z-144
222: 8t #24, 1/8" ID or Z-220
432: 0.68uH molded choke

High power: 1000p SM coupling caps work best.

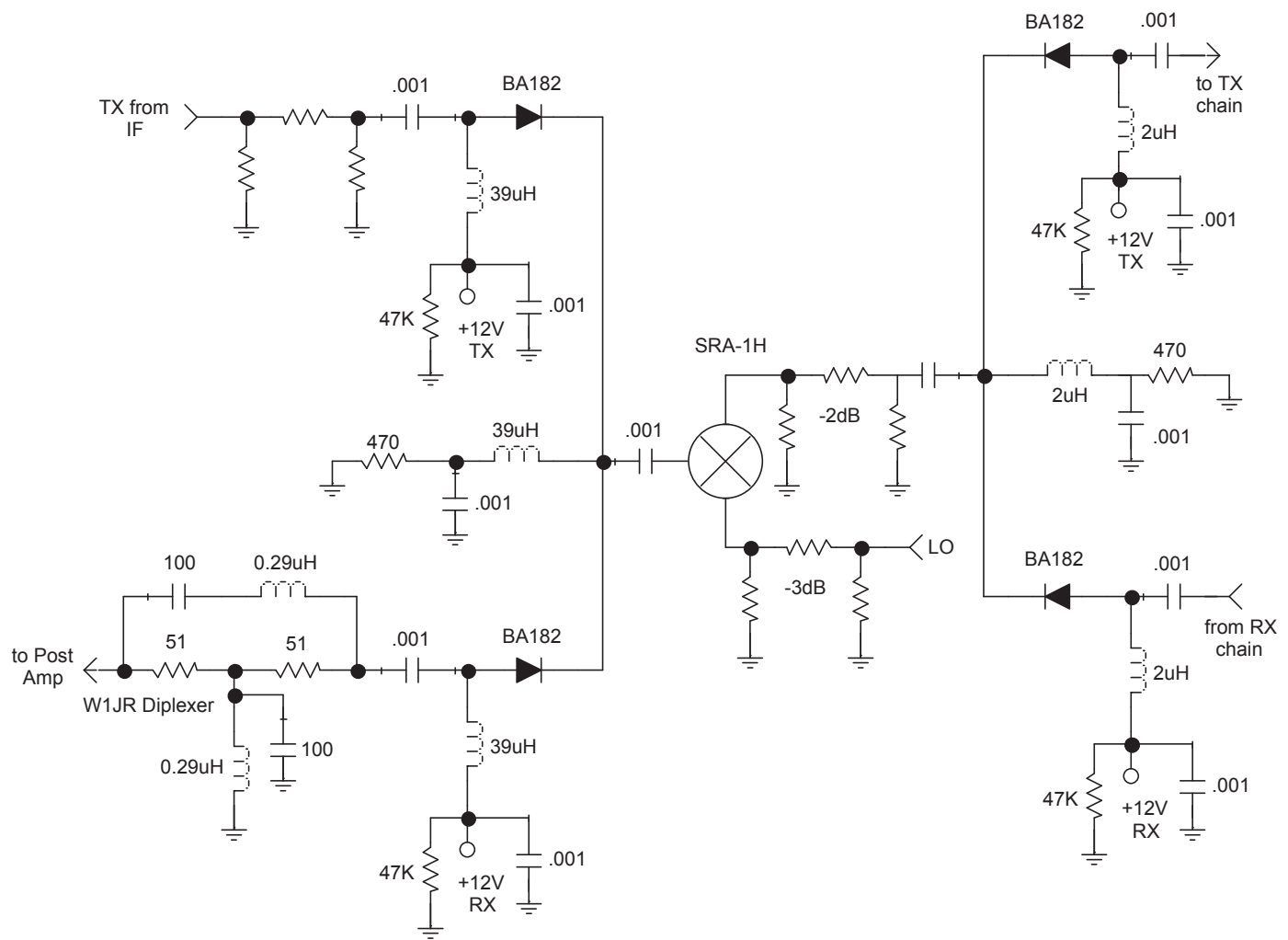
High Power Pin Diode RF Switch

WA3JUF 1980



D1-5 = BA182 diodes
Coupling caps = 1000pf SM
Tested @ 70 watts on 220 MHz

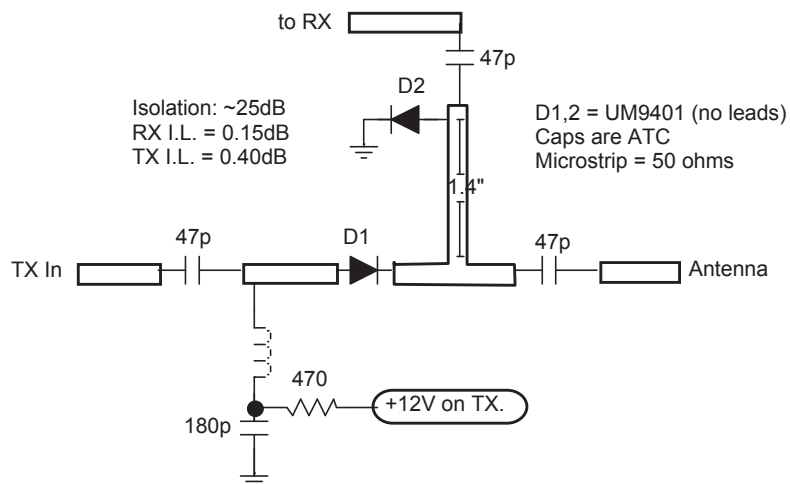
Single mixer 144 MHz Transverter IF and 2M RF switching WA3JUF 1984



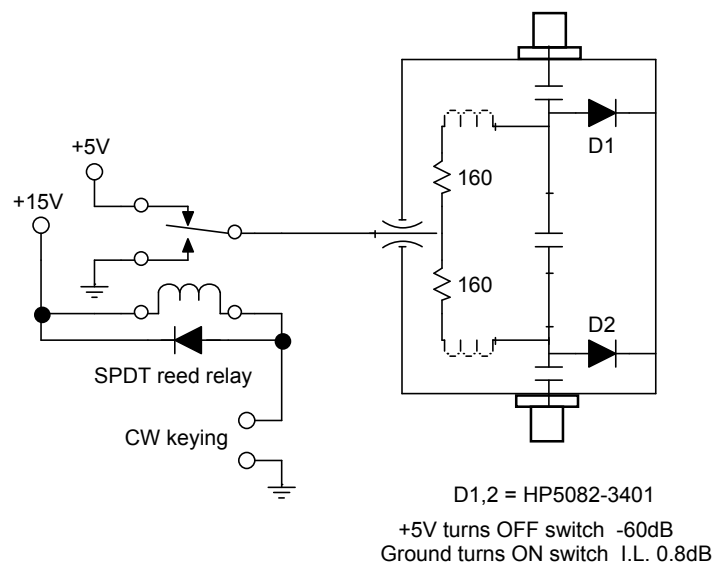
903 MHz Pin Diode T/R Switch

WA3JUF 1987

from Unitrode notes

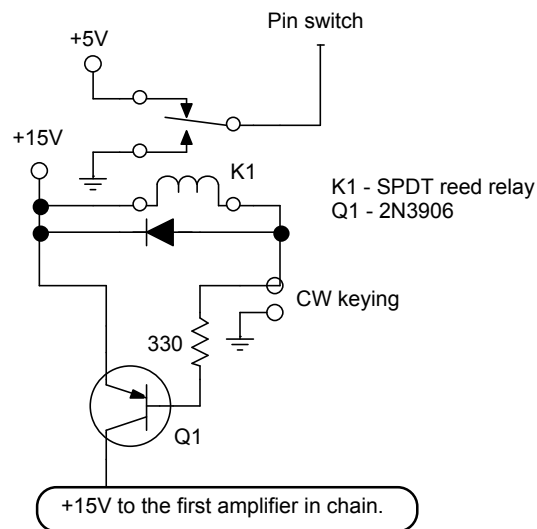


2304-MHz Beacon Pin Diode switch for CW keying WA3JUF 1992



For beacons it is best to use linear amplifier stages that eliminates the Class C output drop-out in non-temperature controlled environments.

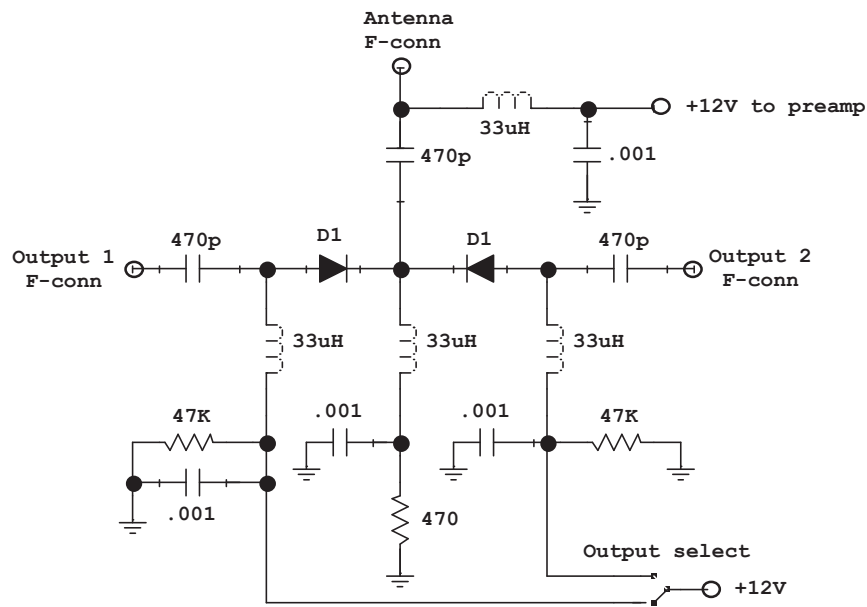
This however increases the key-up feedthru level. If more isolation is needed to reduce key-up feedthru, add a PNP switch that turns off the 1st gain stage voltage.



Key-up feedthru can also be reduced by using a Class C output stage that is over-driven by 1-2 dB and verified to produce output when the input is also lowered by 1-2 dB from nominal.

TV Pin Diode RF Switch

WA3JUF 1981



D1: MPN3401, MPN3404, MBD101, BA182