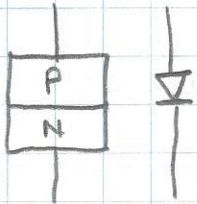


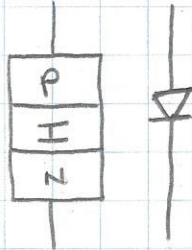
WZAEW

BASICS OF PIN DIODES

PN JUNCTION



PIN DIODE



- AT DC & LOW FREQUENCIES - SAME



- THE INTRINSIC REGION STORES CHARGE (CARRIERS)

* THE DIODE DOESN'T TURN OFF UNTIL THE STORED CHARGE IS REMOVED!

- AT HIGH FREQUENCIES, THERE ISN'T ENOUGH TIME TO REMOVE THE STORED CHARGE

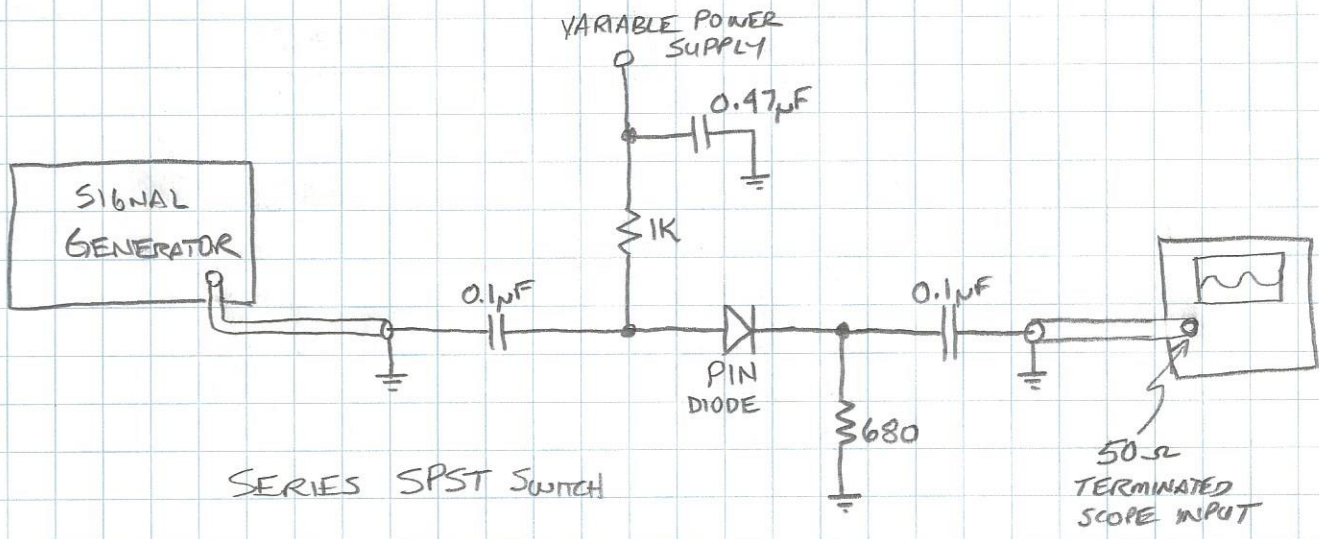
* THE PIN DIODE LOOK LIKE A CURRENT-CONTROLLED RESISTOR!

- WITH ZERO OR REVERSE BIAS - VERY SMALL CAPACITANCE. (INTRINSIC REGION MAKES THE DEPLETION REGION WIDE)

- RF APPLICATIONS INCLUDE:

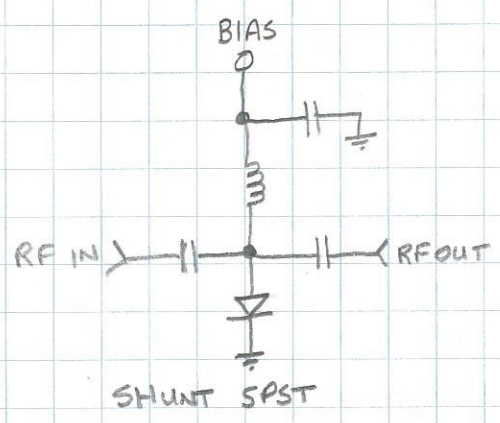
- SWITCHES
- VARIABLE ATTENUATORS
- MODULATOR
- PHASE SHIFTER

W2AEW

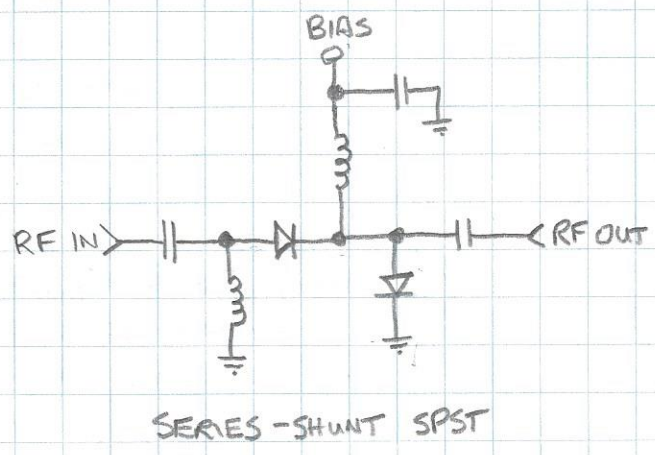


SERIES SPST Switch

OTHER PIN DIODE SWITCH CONFIGURATIONS



SHUNT SPST



SERIES-SHUNT SPST

EXAMPLE T/R SWITCH

