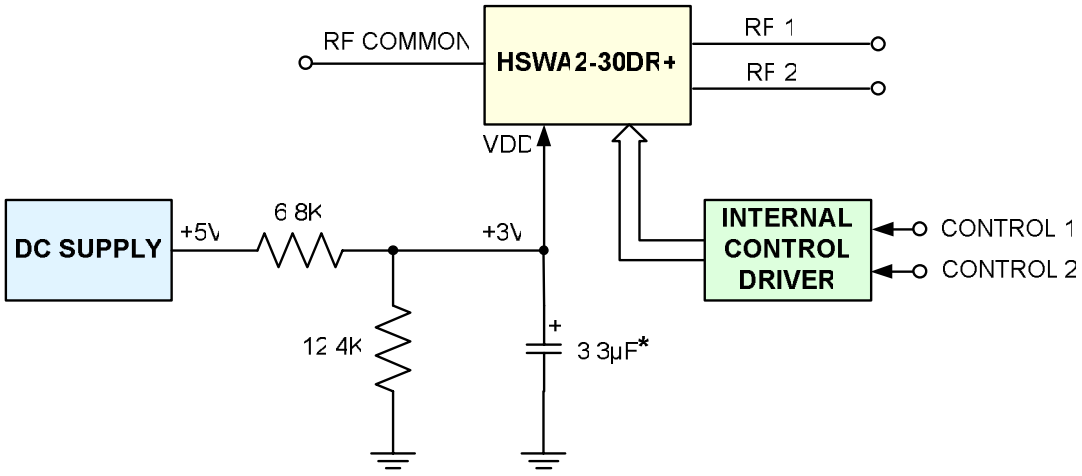
BIASING OF HSWA2-30DR+ SPDT SWITCH WITH A 5V SUPPLY VOLTAGE
(AN-80-006)

The HSWA2-30DR+ switch uses a patented CMOS technology and operates with single positive supply voltage from 2.7V to 3.3V. This model has a patent pending low noise negative voltage generator which produces internally the negative supply voltage required for CMOS logic.

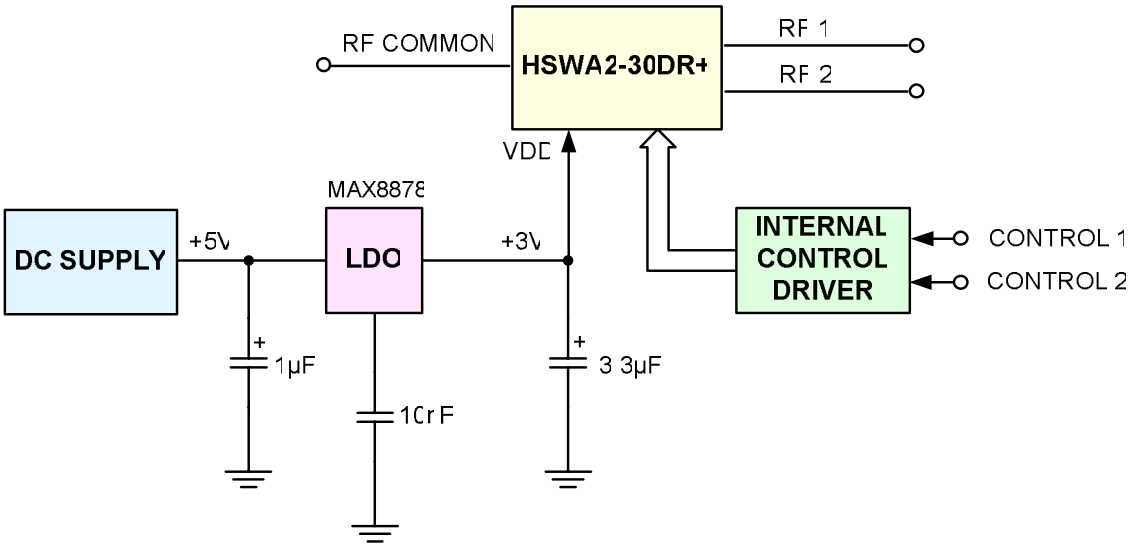
For applications where the system voltage is +5V instead of +3V specified for CMOS switches, a resistive voltage divider should be used to reduce the voltage from +5V to +3V as shown below in ***Figure 1***. For low noise applications it is preferable to use a low noise LDO (Low Drop-Out) voltage regulator such as MAX8878 (preset to 3V), as shown in ***Figure 2***.

Figure 1: HSWA2-30DR+ powered from a Voltage Divider



*3.3µF capacitor should be placed close as possible to the Switch.

Figure 2: HSWA2-30DR+ powered from a Low Drop–Out Voltage Regulator



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