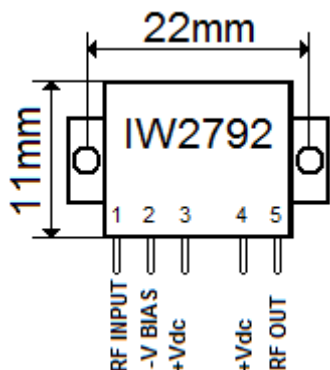
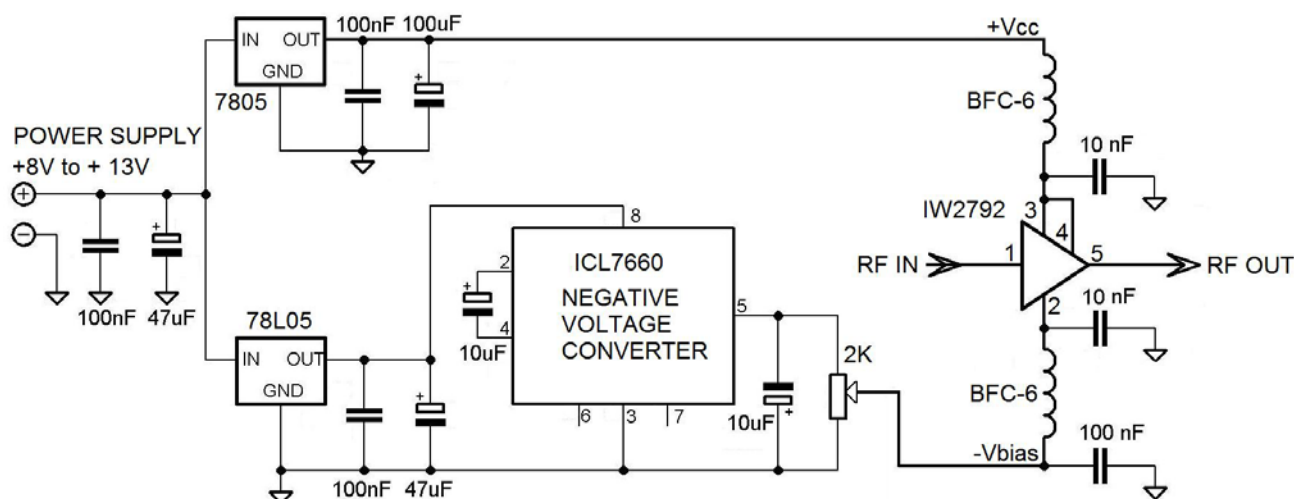


## UHF Power Module



Frequency range	430 - 500 MHz Pout 3W input +10dBm (10mW)	400 - 530 MHz Pout 2.4W input +13dBm (20mW)
	Test : +5V, bias -3.5V	Test : +5V, bias -3.5V
Power supply	+5V current max. 1.3A	
Bias voltage	-3.5V for normal operation and 150mA current -3.2V and 250mA current see note	

### APPLICATION CIRCUIT



IW2792 is a small UHF power module capable of delivery about 3W within the optimal frequency range from 430 to 500 MHz, it can be also suitable from 400 to 530 MHz with a little output power reduction (it has been tested in our laboratory with 2.4 - 2.5W output power).

The power supply is +5V with max current of 1.3A, for the bias it is necessary to adjust the right voltage which is -3.5V with about 150mA of current.

To operate in SSB, AM or pulse it is suggested to increase a little the current to reach about 250mA and -3.2V in order to improve the linearity, the bias circuit is made by a ICL7660 negative voltage converter preceded by a +5V regulator, the current of the negative bias is only 1mA. As a general rule an increase of negative voltage will reduce the bias current and a decrease of negative voltage will increase the bias current.

The schematic diagram is suggested to obtain the optimal operation, the RF circuit is uncritical and without any self-oscillation, no particular matching is necessary for the best result, moreover the dc-block input/output capacitors are already included inside the power module. An appropriate heat sink is necessary for the correct thermal dissipation.