# High Sierra MICROWAVE

#### Description.....

The FCD-6MTR-UC is designed to upconvert the 50 to 54 Mhz 6 meter band to an IF of 116 to 120 Mhz, which is within the receiving range of the FUNCube Dongle software defined radio.The design uses a low insertion loss 2 pole <u>input</u> bandpass filter to provide excellent out of band rejection to interfering signals. The use of a high dynamic range MMIC and a passive mixer contribute to the high signal handling capability of the converter, while maintaining a low noise figure.

## Features. . . . . . . . .

- RF input level of -5 dBm before compression.
- Can be powered directly or through appropriate bias tee.
- Operates on +5 Vdc @ 85 mA typical
- Internal voltage regulator with reverse polarity protection.
- Rugged cast aluminum housing.
- Available with RF connector options (consult factory).

# Specifications. . . . . . .

- RF Frequency..... 50 to 54 MHz
- IF Frequency..... 116 to 120 MHz
- LO Frequency...... 66 MHz
- Noise Figure...... 2.5 dB maximum, 1.9 dB typical
- Overall Gain...... 20 dB, minimum
- Impedance..... 50 ohm
- Connectors..... BNC Female
- Shipping Weight..... Less than 1 lb (0.454 Kg)
- Size.....See outline drawing

Note: Specifications subject to change

For price, delivery and to place orders, please contact

High Sierra Microwave 86 Rancho del Sol Camino CA 95709 Phone:(530) 409-9782 www.hsmicrowave.com

# Model FCD-6MTR-UC

50 to 54 MHz Up Converter For use with the FUNCube Dongle





### **Block Diagram**



© 2006-2011 High Sierra Microwave