TRAC PAC II TAG
FCC ID: NBI-MTAG216A1
TEST PARAMETERS with TEST NOTES

NOTE: The Trac Pac II micro-controller must be programmed before test

- ☐ Test supply voltage ..... 7.5 VDC
- (Set before test, turn power off when installing or removing PWB from test fixture)

- ☐ Measure 3.3 V Regulator output ..... Min 3.17 VDC, Max 3.43 Volts
  (Measure at the + end of C11)

RF Frequency and Power, tuning and adjustment NOTES:
Tune the variable capacitor C5 to maximize the output power. Tune L3, L6, L7, L8 and C5 to peak the RF power output at the center frequency. All of these interact with each other, C5, L3, and L6 have the greatest effect, L7 and L8 have little effect and usually don't have to be adjusted. After peaking, the output power and current will be too high. Tune variable capacitor C5 to set the oscillator frequency where it has the most power within the + or – 1Khz frequency limit.
Use L6 and L5 if necessary to reduce power and current to meet the parameters listed below:

- ☐ RF frequency ..... Center frequency (+ or -) 1 kHz

- ☐ RF power (minimum and maximum power limits) :
- Maximum Peak Power = 100 milli-Watts (+ 20 dBm) at 9.0 VDC supply voltage
- Minimum Peak Power = 50 milli-Watts (+ 17 dBm) at 7.5 VDC supply voltage

NOTE: (Spectrum analyzer span must be 100 KHz or greater to measure power)

- ☐ RF harmonics and spurious outputs..... 33 dB below peak carrier
  (Set analyzer to 400 MHz span – Check for non-harmonic spurious oscillation)

- ☐ Supply current @ 7.5 VDC ..... Less than 25 mA

- ☐ Check the ability to start up and stabilize when power is turned off and then on

- ☐ Check Modulation Parameters:
  - Modulation depth ..... Minimum 8 dB, Maximum 13 dB
  - 90 Hz frequency ..... 90 Hz (+ or -) 1 Hz
  - Unique ID. ..... (Verify with Trac Pac Monitor Receiver)
  - Gas gauge ..... (Verify with Trac Pac Monitor Receiver)