

**DESCRIPTION**

1. Transmitter Technical Characteristics--Pursuant 2.983(d)
  - A. R.F. Power Output: Variable range 0.00001 mW to 0.250 Watts (controlled by the Cell site via Closed Loop Power Control). The power out varies depending on the mobile's data rate. Transmit duty cycle is 100% in 14400 bps, 50% in 7200 bps, 25% in 3600 bps, and 12.5% in 1800 bps.
  - B. Frequency Range: 1850.000 to 1909.950 MHz (Tuning Range)  
1851.250 to 1908.750 MHz (Operating Range)
  - C. Frequency Stability:  $\pm 0.00025\%$  (2.5PPM) (Open Loop)  
 $\pm 0.00005\%$  (Closed Loop)  
In normal operation, the mobile is locked to the base station via an over-the-air AFC loop. This loop locks the mobile's transmitter frequency to within  $\pm 150$  Hz of the base station frequency.
  - D. Emissions: 1M25F9W
  - E. D.C. Voltage into the Final R.F. Amplifier: 3.6 Volts DC  
D.C. Current into the Final R.F. Amplifier: 0.590 Amps  
(Average Current in CDMA Mode in 100% transmit duty cycle)
2. Transmitter Application
  - A. Power Supply Available  
  
The transmitter is normally operated by means of a 3.6 Volt (nominal) battery with battery cut-off voltage no lower than 2.9 volts. Performance is also guaranteed up to 5.4 volts. (Refer to Exhibit 9F)
  - B. Antenna Available  
  
The transmitter is designed to be used with an integral quarter wave helical antenna which incorporates an extendible half wave whip portion that may be operated in an extended or retracted position.
  - C. Maximum Transmit Channel Capability  
  
CDMA Mode - Per 2.1.1.1 of J-STD-008