

Model HL-2.5KFX

Explanation on Band Inhibit Circuit

(26.0 ~ 28.0 MHz)

1. RF drive signal from the transceiver is detected by the RF IN detector, T501 in DET AND T/R RELAY board (PC1398B), and is sent to FREQ SAMPLER board, Unit 12.
2. In the Unit 12, the signal is amplified by RF AMP (ERA-5). Then the signal is transferred to CPU board (PCS1679), after the waveform treatment by IC 74HC14.
3. Frequency counting is made by CPU, 18F452 of CPU board. If the signal frequency is within the range of 26.0 to 28.0 MHz, "PROT INHBT-FREQ" is displayed on the LCD panel, and the amp is set in the transmission inhibit mode.
When this inhibit mode works, PROT LED lights and OPER LED goes off. T/R relays of both K501 and K502 become open, and the transmitting signal from the transceiver will bypass the amplifier. Also, DC supplies for VDD and bias voltage are suspended, and the amplifier gets shut down.
4. The shut down can be reset, if the OPER switch is turned off and on.