

KJLC[®] RFO3 Power Supply Package Major Components Sheet

Corresponding Datasheet: N/A | Date Revised: 7/21/2013



Features

Power Supply : RF

RF Package Includes;

- 300W RF Generator 300W RFAuto Matching Network
- Matching Network Controller
- Connectivity (Comms and Power) Between Units & Cathode

Maximum Output Power: 300 W

Frequency: 13.56 MHz, (Fixed)

Output Impedance: 50 Ohms, ± 5 Ohms Nominal

Pulsing: 0–1KHz, 1-Hz Steps, 50 micro-sec Minimum Pulse

Metering Accuracy: +/- 1% full scale, +/- 3% of reading

Functionality

When sputtering highly insulating oxide films, RF power supplies are preferred as they avoid poisoning (charge build-up), on the sputter target. By operating at a high frequency the build-up of electrical charge insulating targets that would otherwise happen with a DC output type supply can be avoided. RF supplies can also sputter metals, though rates suffer when compared with DC power supplies.

Each power supply “package” includes an RF generator, automatic matching network, and network controller. The R301 package has four control modes to regulate power output; DC Voltage, RF Voltage, forward power leveling and load power leveling. The microprocessor-controlled, solid state power supply has programmable high speed pulsing with automatic gain control for reliable, repeatable power for and insulating process.

- **Where Used:** PRO Line PVD 75
- **Recommended Applications:** Highly insulating oxide films
- **Non-Compatibility:** Metallic targets will have low deposition rates

Accessories

- KJLC Torus 2” sources
- KJLC Torus 3” sources