

Development, Application and Challenge of Solid-state RF/Microwave Generator in RF Energy Field

Larry Li, Ji Hao

Wattsine

Abstract

By a brief introduction of solid-state devices of generations and the technology schematic of one solid-state generator developed by Wattsine, keys to build an upgradable solid-state generator system are presented, followed by a pros-cons comparison between solid-state solution and magnetron. Then several cases in Industrial (i.e. MPCVD processing), Scientific (i.e. Linear accelerator) and Medical (i.e. Tumor ablation) applications (in China) are introduced and commented to demonstrate the capability of solid-state generator in pursuits of higher precision, better stability or linearity, etc.

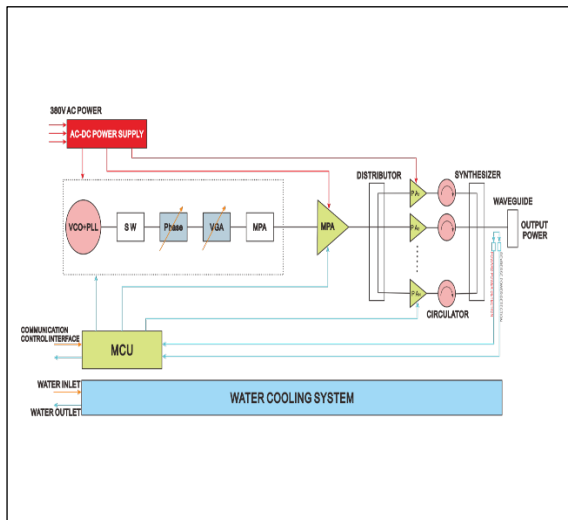


Fig. A1: Schematic Diagram



Fig. A2: Components of a typical solid-state generator