

# 氮化鎵快速熱退火處理設備

## Technical Information

- ✧ Wafer sizes: Small pieces, 2", 3", 4", 5", 6", 8" wafer capability.
- ✧ Recommended ramp up rate: Programmable, 10°C to 120°C per second.
- ✧ Recommended steady state duration: 0-300 seconds per step.
- ✧ Ramp down rate: Non-programmable, 10°C to 200°C per second..
- ✧ Recommended steady state temperature range: 150°C - 1000°C.
- ✧ ERP Pyrometer 450°C to 1000°C with  $\pm 1^\circ\text{C}$  accuracy when calibrated against an instrumented thermocouple wafer.
- ✧ Thermocouple 100-800°C with  $\pm 0.5^\circ\text{C}$  accuracy & rapid response.
- ✧ Temperature repeatability:  $\pm 0.5^\circ\text{C}$  or better at 1000°C wafer-to-wafer.
- ✧ Temperature uniformity:  $\pm 8^\circ\text{C}$  across an 8"(200mm) wafer at 1000°C. (This is a one sigma deviation 100 angstrom oxide.)  
For a titanium silicide process, no more than 6% increase in

non-uniformity during the first anneal at 650°C to 700°C.