

# (RDT004) Operational Guidelines for Rapid Thermal Annealing (RTA) Furnace

1. Currently, only **Si, Ge** substrates are allowed. **Substrates must undergo front-end cleaning processes before entering.** For special substrates, please consult the equipment manager.
2. The following materials are currently not permitted: those containing **metals, polymers, III-V group, volatile compounds, those subjected to back-end processing,** and **HfO<sub>2</sub>** films not deposited by our facility.
3. The maximum temperature of this equipment is 1050°C.
4. For processes **above 900°C**, the heating time should not exceed **60 seconds**. When the process temperature is **equal to or lower than 899°C**, the steady process time setting must be lower than **300 seconds**.
5. For standard Si substrate ion implantation activation, it is recommended to use 900°C for 10 seconds.
6. Do not change the gas flow rate of **H<sub>2</sub>/N<sub>2</sub>**. The flow rate is currently limited to **5 SLPM**.
7. Do not raise the temperature above **850°C** when the tube cavity is exposed to pure **oxygen environment**.