Nidec
All for dreams

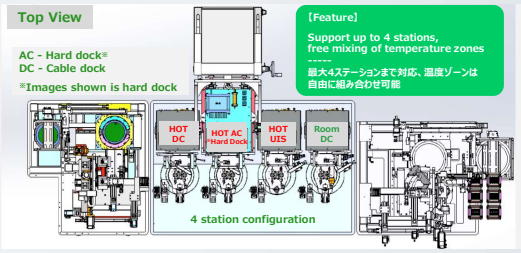
NATS Series

NATS®-1304

实现碳化硅功率器件晶圆级高可靠性测试

Enabling High-Reliability Die-Level Testing of SiC Power Devices

NEW



超低寄生电感
Optimized design achieves minimal stray inductance for accurate KGD AC and short-circuit testing of SiC MOSFETs.

超速防护
Microsecond-level fault detection protects sockets and pins, reducing damage and downtime..

原位探头清洁功能
Automated cleaning keeps contact resistance low and improves yield without halting testing.

支持混合处理器
Supports both wafer and die handling to maximize UPH through hybrid automation.

新一代碳化硅MOSFET晶圆级测试解决方案，支持直流至交流测试、短路鲁棒性及高温运行。其核心优势在于能通过交流测试和UIS测试等动态应力测试手段，有效筛查碳化硅器件中常见的堆垛层错缺陷。

Next-generation KGD test solution for SiC MOSFETs, supporting DC to AC testing, short-circuit robustness, and high-temperature operation.

One of the key strengths is the ability to screen for stacking faults commonly found in SiC devices through dynamic stress testing such as AC and UIS tests.

主要技术规格

项目	DC Station	AC Station (DPT+SCT)	UIS Station
测试项目	IGSS, VGS(th), IDSS, V(BR)DSS, RDS(ON), VSD(VF)	Tdon, Tdoff, Tr, Tf, Eon, Eoff, didton, didtoff, dvdton, dvdtoff, Irrm, Vrm, Trr, Qrr, Vscm, Isc	IAS, VDS, EAS
测试精度	【Accuracy】 IGSS: ±(0.1% + 100 pA) (@10 nA) VGS(th):±(0.1% + 1 mV) (@20 mV) IDSS: ±(0.2% + 50 pA) (@10 nA) V(BR)DSS: ±(0.05% + 2 V) (@3000V) RDS(ON) : ±(0.01% + 10 μΩ) (@20V/500A) VSD(VF) : 0.2% ± 10 mV (0～20V)	【DPT Accuracy】 Vds: ± 2%, Ids: ± 2%, Vgs: ± 2% Lload: 300uH	【Accuracy】 IAS: ± 2% VDS: ±2% EAS: ±4%
性能范围	3000V, 500A	1500V, 1000A(DPT) /2000A(Short-circuit)	3000V, 200A, 2J
温度范围	RT to 175℃	RT to 175℃	RT to 175℃

※ 输入 / 输出：
- 6英寸与8英寸或8英寸与12英寸晶圆，可选用金属环或塑料环承载
- 卷盘式包装规格涵盖8毫米至104毫米
- 提供2英寸、3英寸或4英寸华夫盘封装选项
- 支持卷盘与托盘在单一进料口混合上料

※ Input / Output :
- 6" & 8" or 8" & 12" wafers on metal or plastic rings
- 8 mm to 104 mm reel form
- 2", 3", or 4" waffle packs
- Reels and trays can be combined at a single input site

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