



氮化矽陶瓷板

Silicon Nitride Ceramic Plate



超越突出的才能

EXTRAORDINARY FEATURES OF Si_3N_4

氮化矽 (Silicon Nitride, Si_3N_4)

具備高硬度、高韌性、高擊穿電壓、低熱膨脹以及耐熱衝擊
適用於超快速充電與各式功率元件。

High hardness, toughness, breakdown voltage, low CTE, and Thermal Shock Resistance.
Suitable for SUPER CHARGING and POWER MODOULE.

真金不怕火煉

Thermo Resistant



絕緣性佳

Good Insulation



散熱良好

Nice Thermal Conductivity



金剛不壞

High Hardness



最可靠的夥伴

High Toughness & Low CTE



未來無極限

Non-Rare Elements



超新技術的超能

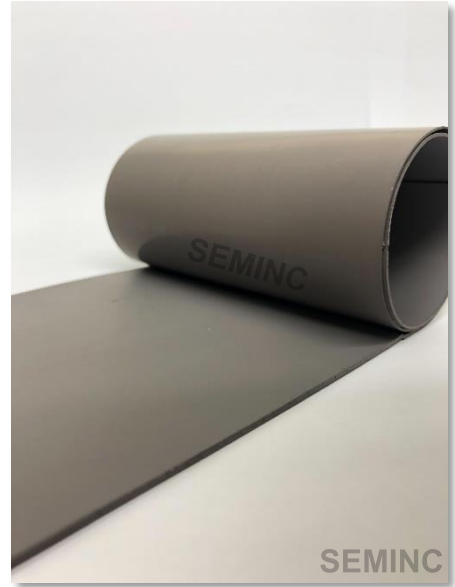
BRAND-NEW FASION OF SEMINC



水基成型最環保
永續發展沒煩惱

Aqueous Tape Casting
SDGs Don't Worry

水基製程符合國際環保趨勢
Water-based = Green process

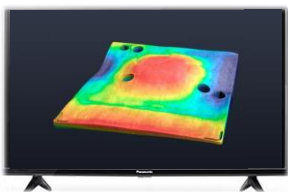


千錘百煉的極致工藝

Shine Bright Like a **DIAMOND**

全臺唯一超高溫高壓燒結技術
TAIWAN Only ONE

HIP Technology



Keyence VR-6000

基板不平何以平天下

So **SMOOTH** that Conquer the World

濕式噴砂表面處理環保又有效

WET BLASTING for
Surface Modification

ECO & Effective

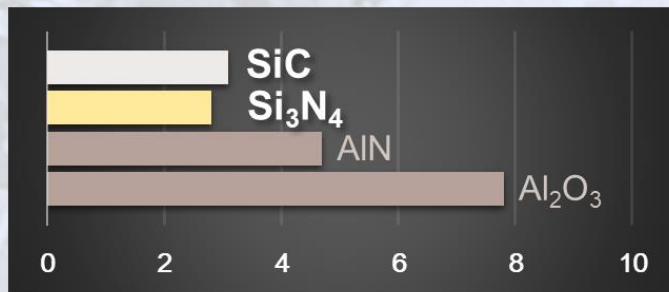
超乎想像的可能

OVER YOUR IMAGINATION

最可靠的選擇

The Most **RELIABLE** Choice

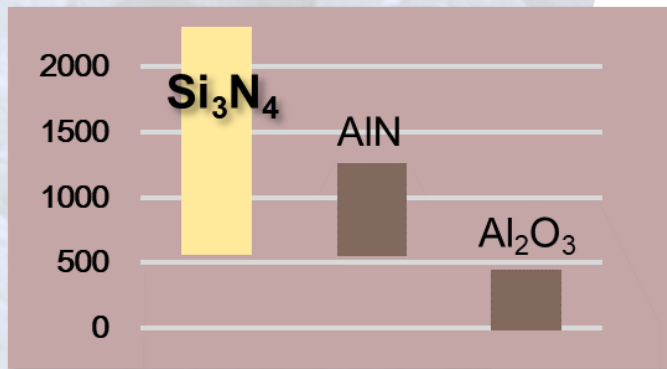
CTE
Unit : $10^{-6}/K$



提升能源效率

Improve Energy **EFFICIENCY**

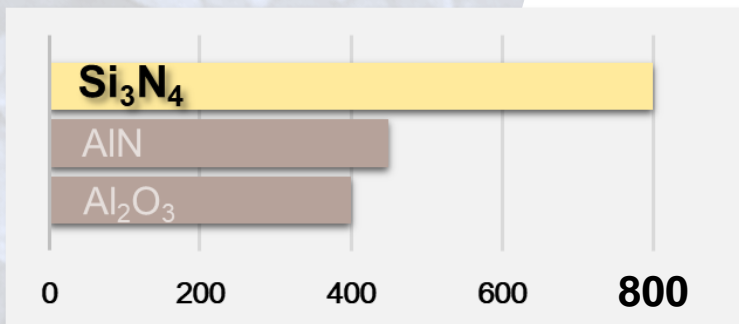
Normal Working Voltage
Unit : 伏特(V)



能「曲」能伸

Too **RESILIENT**
to be Broken

Bending Strength
Unit : Mpa



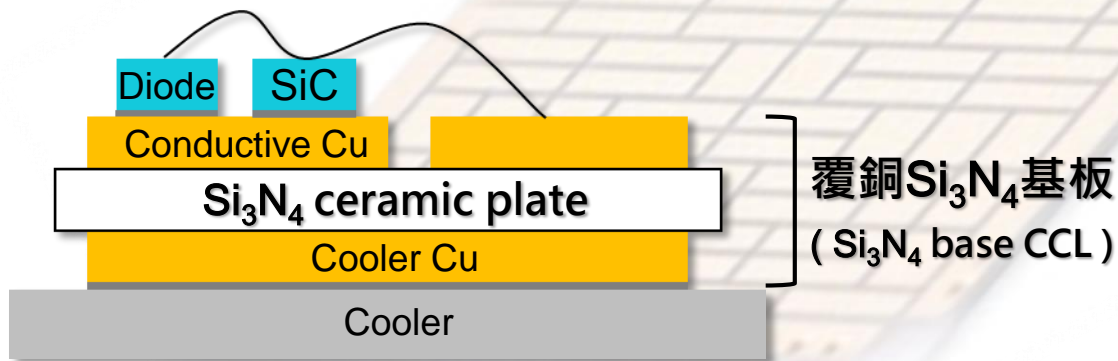
「薄」刃有餘

Thinner Components
= **More** Space



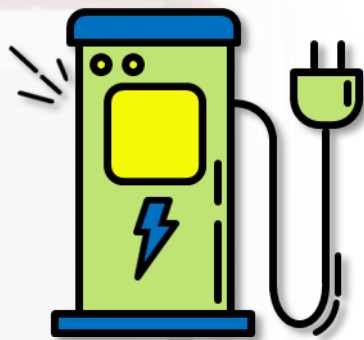
超高規格的效能

ULTRA PERFORMANCE



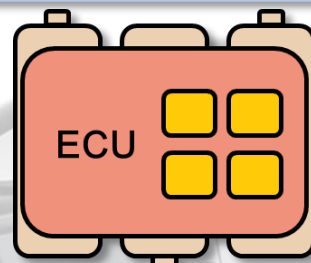
超級充電樁

Super Charging Pole



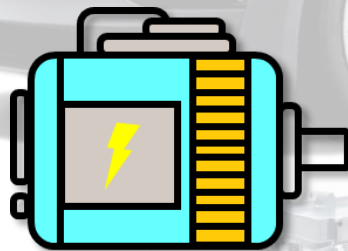
電控模組

Electronic Control System



動力模組

Power Module

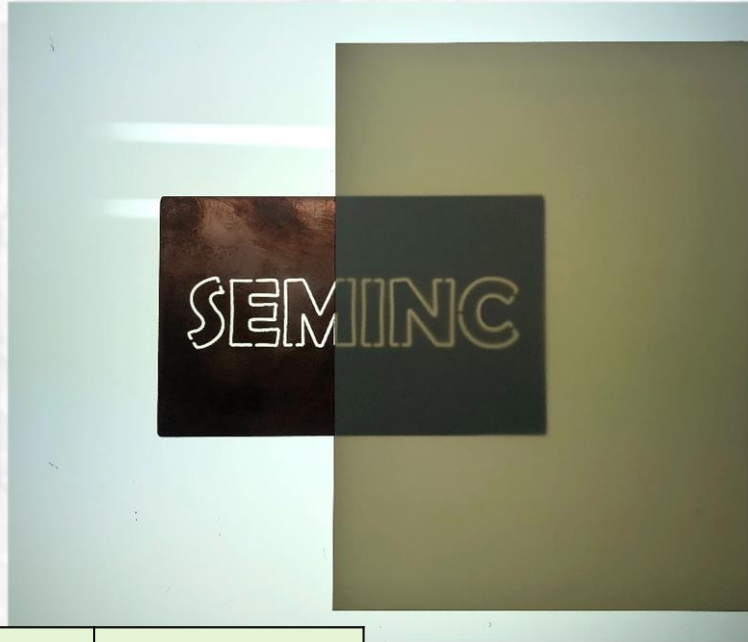
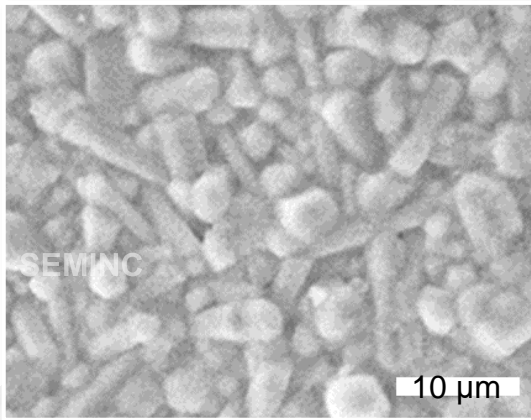


SUPER ENERGY MATERIALS make the future REAL

超能
實現所有可能

超能氮化矽陶瓷板的規格

SPECIFICATION OF Si_3N_4 CERAMIC PLATE



ITEM	UNIT	SPECIFICATION
Density 密度	g/cm ³	3.2 (±3%)
Bending Strength 抗折強度	MPa	> 600
Thermal Conductivity 熱傳導率	W/(m·K)	80 (±5)
Coefficient of Thermal Expansion 熱膨脹係數	RT-400°C	2.1x 10 ⁻⁶ /K (±5%)
Dielectric Constant 介電常數	1MHz	8 (±3%)
Dielectric strength 擊穿電壓	kV/mm	>15
Outer Dimensions 外形尺寸	Inch	4.5 x 4.5 / 5.5 x 5.5 7.5 x 5.5
	Tolerance	±1%
Thickness 板厚度	mm	0.15 / 0.25 / 0.32
	Tolerance	±10%
Surface Roughness Ra 表面粗糙度	μm	0.5 (±0.1)
TTV 厚薄差	μm	≤30
Warpage 翹曲	mm	≤0.7

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