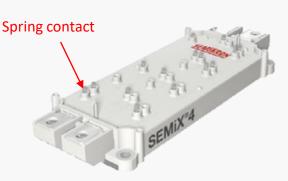


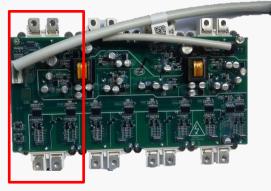


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SEMIKRON SEMiX604GB12T4s IGBT POWER MODULE STRUCTURE ANALYSIS REPORT – Product used in BYD's SONG EV500





Power module

Power module after resin removal

Product outline

- The Model Song EV500 SUV has a mileage range od 400km/charge
- <u>Basic features</u>
- SEMIKRON's IGBT module is used in the motor control inverter
- Spring contact control terminals create solder-free connection
- The maximum rated voltage is 1,200V and the maximum collector current is 916A
- <u>Report contents</u>
- In the module analysis cross-section and EDX analysis of the spring contacts, die attach, and key components are performed.
- Plane and cross-section analysis of the cell area and die edge were performed in order to determine what type of IGBT technology is used by the Chinese manufacturer. The device was analyzed to determine how it was optimized to support the breakdown voltage specification.
- The thermal resistance is estimated from the dimensions of the module and the results of material analysis.

Note: The report price may change over time. For current price contact info@ltecusa.com.

19G-0023-3



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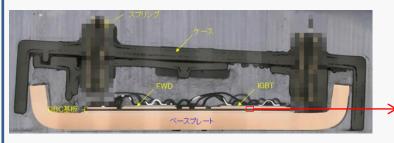
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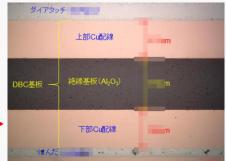


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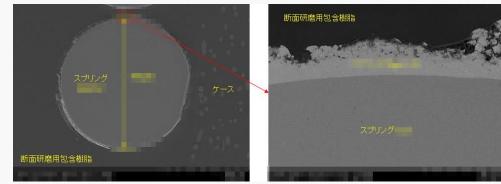
Excerpts from the analysis report

Module cross section





Spring contact cross section



Thermal analysis

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		Mass density, d	[g/gm3]		材料装件 0		Mass density, ð	[g/gm3]		材料特件	
•		Number of Transistors						Number of Transistors			
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		Size, X	[mm]		LTECHI			Size, Y	ſmml		LTECHI
		Size, Y	[mm]		LTECHI			Die size, X•Y	[mm2]	a second	LTECHIO
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