



NEXT GENERATION SOLUTION FOR HIGH STRESS ROBUSTNESS

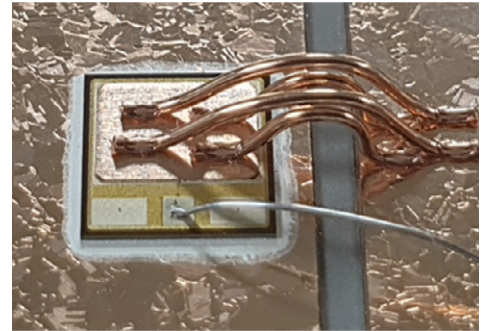
A DEMONSTRATION OF WOLFSPEED'S NEW GEN 3+ DIE WITH A DIE TOP SYSTEM FROM HERAEUS

Wolfspeed's new Automotive Gen 3+ Silicon Carbide (SiC) technology brings a 15% reduction in $R_{DS(on)}$ when compared to Gen 3 technology. This decrease allows higher current densities for the same die size.

Further improvement to the die technology also includes high temperature capability. Die reliability tests demonstrate the ability of the newer technology to endure HTRB and HTGB stresses at 200°C.

Heraeus' Die Top System provides a scalable packaging solution which can enable more packaging opportunities including copper wire bonding.

The combination of Wolfspeed's Gen 3+ die and Heraeus' Die Top System provides a complete solution which can withstand high stress conditions including humidity and high voltage as shown by HV – H3TRB tests. The samples also show high robustness under power cycling stresses, even at highly elevated temperature levels of 200°C.



FEATURES

- Reduced $R_{DS(on)}$
- High temperature capability
- High Robustness
- Packaging flexibility



BENEFITS

- Higher current densities from both die technology and package
- Scalable packaging solution



APPLICATIONS

- Automotive drivetrain
- Motor drives

JOIN US FOR THE FULL PRESENTATION ON **THURSDAY, 12 MAY 2022 AT 10:10**

Why Wolfspeed Silicon Carbide?

Wolfspeed invented the Silicon Carbide MOSFET
30+ years of Silicon Carbide power with 7+ trillion installed field hours

Wolfspeed is investing for the Future
#1 market share in Silicon Carbide technology, 30x capacity by 2024

17+ Years of Diode and MOSFET Production
Thousands of customers with millions of MOSFETs, Diodes and Modules

Focused Development and Customer Support
ALL resources dedicated to developing Silicon Carbide capacity, devices, packages, and to providing superior applications support

We Provide Silicon Carbide Solutions

- » Silicon Carbide power devices
- » Silicon Carbide expertise—this is all we do
- » Application reference designs
- » Expert systems engineering support
- » Online simulation platform

TO LEARN MORE, VISIT US AT [WOLFSPEED.COM/POWER](https://www.wolfspeed.com/power)

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