Silicon Carbide (SiC) Diodes

WHERE TO HUNT

Target Customers:

- Automotive BMS and OBC: Tesla, GM, Ford, Borg Warner
- Power supply OEM / ODM, AI server IT company: Nvidia, Supermicro, Monolithic Power Supply
- Industrial power: Eaton, Emerson, Generac, Tesla Energy

Door Opener Questions:

- What is the efficiency needed for your system?
- What are the topologies of your PFC and DC/DC stages?
- Are you using SiC MOSFETs or GaN transistors in your design? If so, are you using SiC diodes as the bootstrap diode?
- On the secondary side of your DC/DC, are you implementing MOSFETs for synchronous rectifiers, or are you using diodes?

Automotive: BMS, OBC

AI: power supply units, battery backup unit, UPS, 800 V HVDC

Industrial: DC fast chargers, energy storage, PV inverters, solid-state transformers

Consumer / AMS / medical: appliances, HVAC, satellites

HOW TO SELL: Sell the Solution, not the component

"Vishay introduces industry-first SiC diodes with very low profiles and compact packages, eliminating high speed switching design challenges and accelerating time to market."

- **SiC diodes in SlimSMA HV and SMPC HV packages** – ideal for bootstrap diodes and antiparallel diode applications
- **SiC diodes in DFN8080A, SlimDPAK, and SMPD packages** – optimized for PFC diodes and boost diodes
- **SiC diodes in TO-220, TO-247, and D^2APK packages** – Designed for high power, high efficiency applications

HOW TO CLOSE: Advancing the opportunity

"We don't just supply components — we partner with engineers to design the right thermal and protection solutions the first time."

- Pull in support early: engage FAEs / regional technical support
- Enable the customer: provide models, simulations, tools / calculators, quick-turn sampling
- Reinforce with resources: infographics, white papers, application notes, toolkits, videos, tailored follow-ups

VISHAY

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