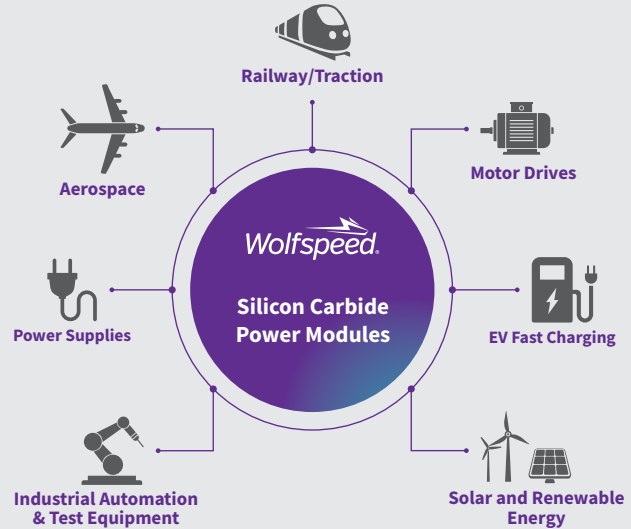
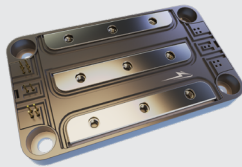




WOLFSPEED® HM3 SILICON CARBIDE HALF-BRIDGE POWER MODULES

HM3 HALF-BRIDGE POWER MODULES FOR ULTRA-HIGH POWER DENSITY

Wolfspeed’s HM3 power module platform provides the system benefits of Silicon Carbide (SiC) in power density sensitive applications, while maintaining the baseplate compatibility of a 62 mm module. The optimized packaging enables 175° continuous junction operation, with a high-reliability Silicon Nitride (Si₃N₄) power substrate to ensure mechanical robustness under extreme conditions and a lightweight AlSiC baseplate. This platform is a perfect fit for demanding applications such as railway, traction, and motor drives, medical power supplies, aerospace and renewable energy systems.



PRODUCT PORTFOLIO

Product SKU	Blocking Voltage (V)	Nominal Current (A)	R _{DS(ON)} at 25°C (mΩ)	Description
CAS480M12HM3	1200	480	2.29	Half-Bridge, C3M™ MOSFETs + Schottky Diodes
CAR600M12HN6	1200	600	N/A	Half-Bridge Rectifier, Gen 6 Schottky Diodes
CAB760M12HM3	1200	760	1.33	Half-Bridge, C3M MOSFETs
CAB760M12HM3R	1200	760	1.33	Half-Bridge, Right Signal Pins for Paralleling, C3M MOSFETs
CAS380M17HM3	1700	380	3.3	Half-Bridge, C3M MOSFETs + Schottky Diodes
CAB500M17HM3	1700	500	2.5	Half-Bridge, C3M MOSFETs
CAR600M17HN6	1700	600	N/A	Half-Bridge Rectifier, Gen 6 Schottky Diodes
CAB650M17HM3	1700	650	1.67	Half-Bridge, C3M MOSFETs



FEATURES

- Low Inductance, Low Profile 62 mm Footprint
- High Junction Temperature (175°C) Operation
- Light Weight AlSiC Baseplate
- High Reliability Silicon Nitride Insulator



BENEFITS

- Lightweight, Compact Form Factor with 62 mm Compatible Baseplate Enable System Retrofit
- Increased System Efficiency, Due to Low Switching & Conduction Losses of Silicon Carbide
- High Reliability Material Selection



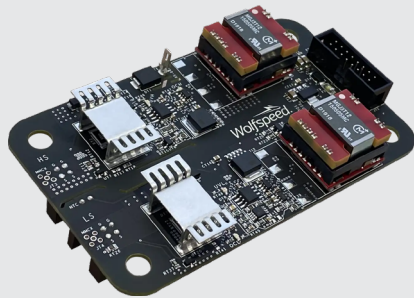
APPLICATIONS

- Railway Auxiliary & Traction
- Solar
- EV Fast Charging
- On-Board Charging
- Industrial Automation & Testing
- Medical Power
- Aerospace

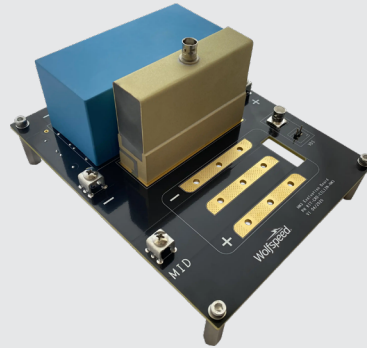
HM3 HALF-BRIDGE POWER MODULES FOR ULTRA-HIGH POWER DENSITY

FEATURED DESIGN TOOLS

Wolfspeed offers time saving design support tools for its Silicon Carbide products to help you get up and running quickly. These evaluation tools help you learn best practices and give you a starting point for working with Wolfspeed's Silicon Carbide. All design files available are complimentary, so that you can quickly understand and implement our designs into your end-system and modify as-needed to fit your specific design requirements.



Evaluation Gate Driver Board Optimized for the 62 mm HM Module Platform [CGD1700HB3P-HM3]



Dynamic Performance Evaluation Board Optimized for the High Performance 62 mm HM Module Platform [KIT-CRD-CIL12N-HM3, KIT-CRD-CIL17N-HM3]

Why Wolfspeed Silicon Carbide?

Wolfspeed invented the Silicon Carbide MOSFET

35+ years of Silicon Carbide power with 7+ trillion installed field hours

Wolfspeed is investing for the Future

#1 market share in Silicon Carbide technology, with the world's first, largest, and only 200 mm Silicon Carbide fabrication facility

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
 - » Visit forum.wolfspeed.com
- » SpeedFit™ online simulation platform

TO LEARN MORE, VISIT US AT WOLFSPEED.COM