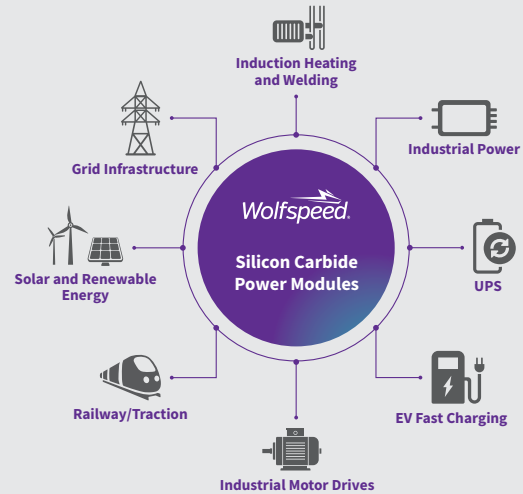




# WOLFSPEED® BM3 SILICON CARBIDE HALF-BRIDGE POWER MODULES

## 62 mm POWER MODULES WITH SCHOTTKY DIODES FOR HIGHER FREQUENCY INDUSTRIAL APPLICATIONS

Wolfspeed's BM3 power module platform provides the system benefits of Silicon Carbide (SiC) while maintaining the robust, industry-standard 62 mm module package. The internal design of Wolfspeed's 62 mm BM3 package enables high speed Silicon Carbide switching benefits and increased system efficiency, due to the low-inductance layout. This platform is a perfect fit for high frequency industrial applications such as induction heating, rail and traction, motor drives, and EV charging infrastructures.



### PRODUCT PORTFOLIO

Product SKU	Blocking Voltage (V)	Nominal Current (A)	R <sub>DS(ON)</sub> at 25°C (mΩ)	Description
CAS175M12BM3	1200	175	8	Half-Bridge, C3M™ MOSFETs + Schottky Diodes
WAS175M12BM3	1200	175	8	Half-Bridge, THB-80 Qualified, C3M MOSFETs + Schottky Diodes
HAS175M12BM3*	1200	175	8	Half-Bridge, Enhanced for Harsh Environment, C3M MOSFETs + Schottky Diodes
WAB300M12BM3	1200	300	4.5	Half-Bridge, THB-80 Qualified, C3M MOSFETs
CAS350M12BM3	1200	350	4	Half-Bridge, C3M MOSFETs + Schottky Diodes
WAS350M12BM3	1200	350	4	Half-Bridge, THB-80 Qualified, C3M MOSFETs + Schottky Diodes
HAS350M12BM3*	1200	350	4	Half-Bridge, Enhanced for Harsh Environment, C3M MOSFETs + Schottky Diodes
WAB400M12BM3	1200	400	3.7	Half-Bridge, THB-80 Qualified, C3M Conduction-Optimized MOSFETs
CAB530M12BM3	1200	530	2.7	Half-Bridge, C3M MOSFETs
CAS530M12BM3	1200	530	2.7	Half-Bridge, C3M MOSFETs + Schottky Diodes
WAS530M12BM3	1200	530	2.7	Half-Bridge, THB-80 Qualified, C3M MOSFETs + Schottky Diodes
HAS530M12BM3*	1200	530	2.7	Half-Bridge, Enhanced for Harsh Environment, C3M MOSFETs + Schottky Diodes
CAS310M17BM3	1700	310	5	Half-Bridge, C3M MOSFETs + Schottky Diodes
HAS310M17BM3*	1700	310	5	Half-Bridge, Enhanced for Harsh Environment, C3M MOSFETs + Schottky Diodes
WAS310M17BM3	1700	310	5	Half-Bridge, THB-80 Qualified, C3M MOSFETs + Schottky Diodes

\*Coming Soon



### FEATURES

- Copper Baseplate, Silicon Nitride and Aluminum Nitride Ceramics
- Lower Inductance Design (10 - 11 nH)
- High Humidity Operation
- THB-80 (HV-H3TRB) in WAS Modules



### BENEFITS

- Improved Thermal Conductivity
- Faster Time to Market
- Reduced Cooling and System Costs
- Low Power Losses and Maximum Voltage Utilization



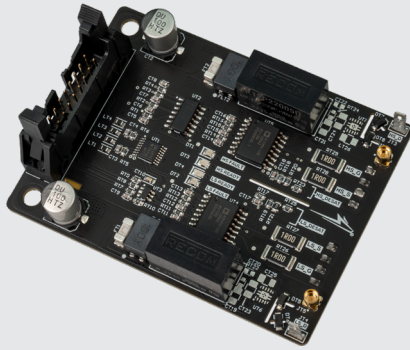
### APPLICATIONS

- Railway Auxiliary & Traction
- Motor Drives
- Renewables
- Induction Heating
- EV Fast Charging
- UPS and SMPS

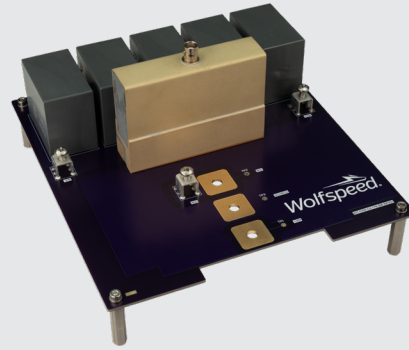
# 62 mm POWER MODULES WITH SCHOTTKY DIODES FOR HIGHER FREQUENCY INDUSTRIAL APPLICATIONS

## 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 1200 V and 1700 V  
62 mm BM3 Module Platform  
[CGD1700HB2P-BM3,  
CGD1200HB2P-BM3]



Dynamic Performance Evaluation  
Board Optimized for the 62 mm 1200 V  
and 1700 V BM3 Module Platform  
[KIT-CRD-CIL17N-BM,  
KIT-CRD-CIL12N-BM]

## 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 200mm 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](http://forum.wolfspeed.com)
- » SpeedFit™ online simulation platform

TO LEARN MORE, VISIT US AT [WOLFSPEED.COM](http://WOLFSPEED.COM)