

1200V GaN Half Bridge

VM45HB120D

GaN Power Integrated



Description

VisiC's 1200V GaM Half Bridge is based on GaN technology as a System In Package (SIP) Half Bridge module. GaN transistors and isolated gate drivers with over current and over temperature protections are integrated into a single package as an Intelligent Power Module (IPM). The design takes advantage of VisiC's innovative SmartGaN technology. VisiC's power GaN transistors use a patented, high-density lateral layout that results in exceptionally fast switching performance and low $R_{DS(ON)}$.

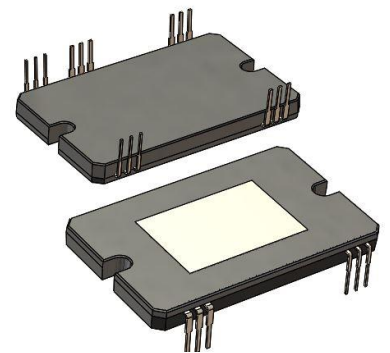
It is very effective in applications requiring high frequency switching and high efficiency. The GaN Half Bridge supports designers with straightforward system integration at high power densities.

Key features

- Lowest Switching Loss
- Internal Isolated Driver
- Internal Protections: Over Current and Over Temperature
- Isolated Package (2.5KV), Top Cooling Mounting
- Zero Recovery Time, Freewheeling Diodes are an Option
- Robust Operation in High EMI Environments
- Factory Pre-Set at Selectable Slew Rates: Fast, Medium, Slow
- Very Low Thermal Resistance Based on AlN Ceramic

Applications

- Three-Phase PFC
- High Voltage AC-DC Power Supply
- Motor drive
- Battery chargers
- UPS, Solar Inverters



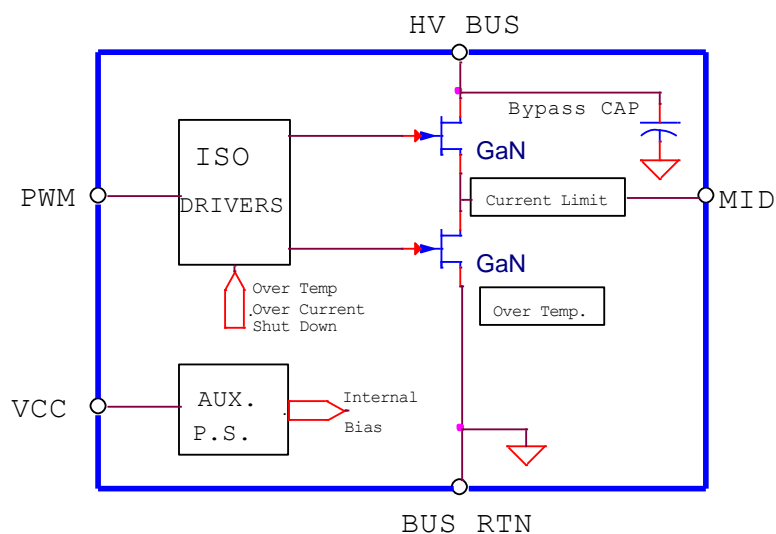
THERMAL BASE PLATE

57x35x6 mm



Key Performance Parameters

Parameter	Value
V_{DS} (V)	1,200
$R_{DS(ON)}$ (m Ω) @25°C	40
E_{OFF} (μ J)	140
C_{OSS} (pf)	120
$I_{D, pulse}$ (A)	180
$I_{D, cont}$ (A)	50



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PRELIMINARY

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