

世界初*SiC MOSFET内蔵 AC/DC

The World First AC/DC with Built-in SiC MOSFET *May, 2019 ROHM survey

NEW

ROHM
SEMICONDUCTOR

1,700V高耐圧 AC/DCコンバータIC

1,700V AC/DC Converter IC

BM2SCQ12xT-LBZ

Features

- 世界初*1,700V/4A SiC MOSFET内蔵
高効率、小型化を実現

The world's first AC/DC controller with built-in 1,700V/4A SiC MOSFET achieves high efficiency in a compact form factor

- SiC MOSFETの性能を引出し、劇的な省電力化を実現
Maximizes SiC MOSFET performance to achieve dramatically improved power savings

- 工数・リスクを減らすとともに、保護機能も搭載し、劇的な高信頼化を実現
Reduces man-hours and risk while multiple integrated protection functions ensure superior reliability

*May, 2019 ROHM survey

Applications

- インバータ
Inverters
- サーボ
Servos
- 他、産業機器電源
Power supplies for industrial equipment and more

Power supplies for industrial equipment and more

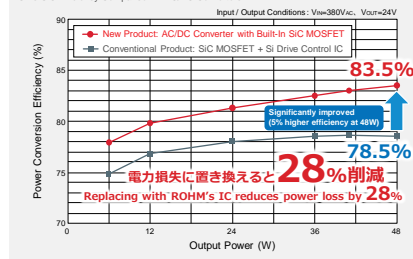
本記事内容は、2020年4月8日時点のものです。

SiC MOSFET駆動による高効率化

SiC MOSFET Drive Improves Efficiency

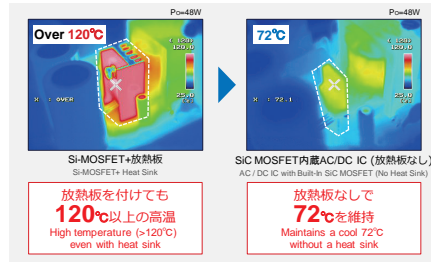
AC/DCコンバータにおけるSi対SiC効率比較

Si vs SiC Efficiency Comparison in AC/DC Converters



Si対SiC 熱効率比較

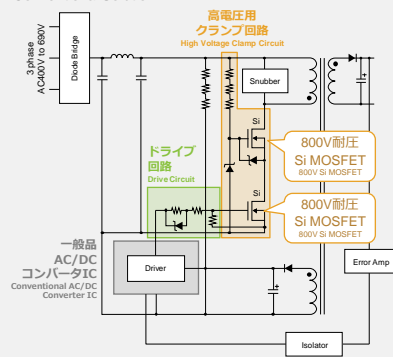
Thermal Efficiency Comparison : Si vs SiC



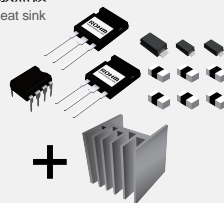
産業機器の小型化を実現

Contributes to Simpler, Smaller Designs

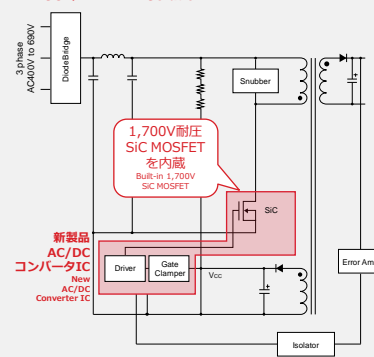
Conventional Solution



12製品+放熱板
12 parts + heat sink



BM2SCQ12xT-LBZ Solution



1パッケージ化
Monolithic design



部品点数を大幅に削減
故障リスク低減&保護機能内蔵で、
高信頼化を実現

Requires fewer parts and reduces the risk of failure while multiple built-in protection functions ensure greater reliability