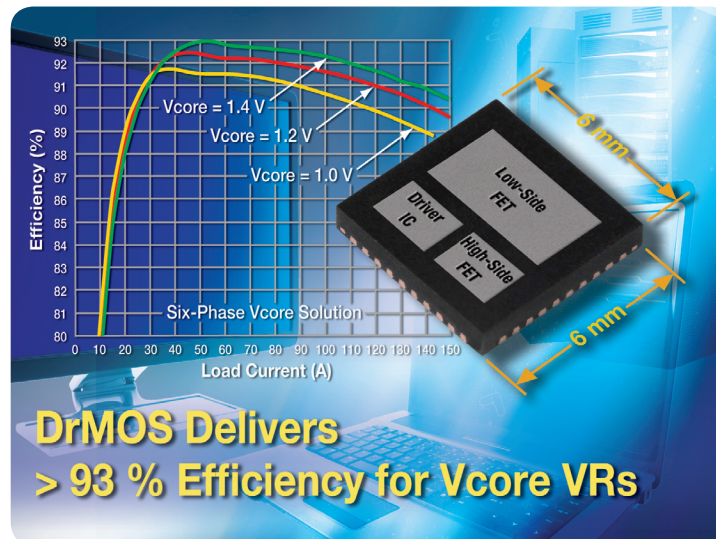


50 A VRPower® Solution (DrMOS)



The SiC780/A is a 50 A VRPower® solution that integrates a high-side and low-side MOSFET and a MOSFET driver optimized for synchronous buck applications. The device complies with the Intel 4.0 DrMOS standard. It delivers up to 50 A continuous output current and can operate from an input voltage range of 4.5 V to 16 V. The SiC780/A is optimized for high switching frequencies of up to 1 MHz and is compatible with tri-state PWM logic (3.3 V for the SiC780A, 5 V for SiC780). The device is optimized for output voltages in the range of 0.8 V to 2 V.

KEY BENEFITS

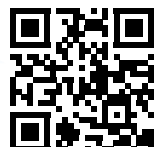
- High efficiency over full load range with SMOD light-load mode
- Better thermal performance
- Integrated Schottky diode
- Increases power density
- Reduced solution footprint, BOM, and solution cost

APPLICATIONS

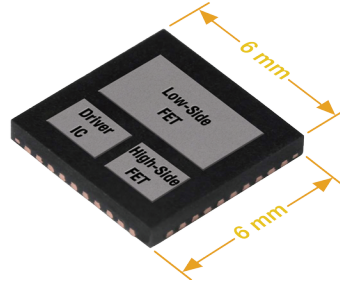
- Servers
- Rack servers
- Storage
- Graphic cards
- High-end desktops
- Game consoles

RESOURCES

- SiC780CD/ACD Datasheet <http://www.vishay.com/doc?63788>
- DrMOS Products: <http://www.vishay.com/power-ics/integrated-drmos/>
- For technical questions, contact PowerICtechsupport@vishay.com



50 A VRPower® SiC780, SiC780A Integrated Power Stage (DrMOS)



PARAMETRIC DATA

Part Number	V _{IN} Max.	PWM Input	Light Load	Max. Current	V _{DRV} and V _{CIN} bias supply	Package
SiC780CD	16 V	5 V	SMOD	50 A	4.5 V to 5.5 V	MLP66-40L
SiC780ACD	16 V	3.3 V	SMOD	50 A	4.5 V to 5.5 V	MLP66-40L

TYPICAL EFFICIENCY CURVES

