

Non-Isolated DC-DC Converters Buck-Boost Type, 1/16th Brick

KOLT

Part Number & Ordering Information*

Family	Input Voltage	Power	Output Voltage	Package	Baseplate	Options
KMNB02	DC28E: 9-40 V	P100: 100 W P200: 200 W P300: 300 W	DC12: 12 V DC15: 15 V DC24: 24 V DC28: 28 V	SB: Sixteenth Brick	F: Flanged H: Half Threaded	PM: PMBUS

* Full part numbering and options are available in the data sheet. "-" sign shall be placed in between all fields.

Features & Benefits

- Non-isolated DC-DC 1/16th Brick Module
- Delivers power up to 300 W
- Rated for 60 A output current
- Input UVLO and OVLO protections
- Output over voltage protection
- Output overcurrent protection
- Output short-circuit protection
- Thermal Shutdown
- ON/OFF control
- Trim range +20%, -20%
- PMBUS pins are only present in PMBUS option



Size: 36.5 x 26.3 x 12.9 mm

Product Description

KMNB02 is a high power density product that solves your power regulation problems in applications where the lightweight and the small size are the most critical. This sixteenth brick DC-DC converter module performs regulation in BUCK-BOOST mode and delivers up to 300 W and 60 A continuous current. It operates over a wide range of input from 9 V to 40 V. The advanced thermal management of the brick engineered by KOLT allows operation of the converter in hot environment.

Designed to Meet

*with EMI filter module

- MIL-STD-461 (D, E, F, G)
- MIL-STD-704 (A-F)
- MIL-STD-1275 (D, E)
- MIL-STD-810

Absolute Maximum Ratings

The absolute maximum ratings below are stress ratings only. Operation at or beyond these maximum ratings may cause permanent to the device.

Parameter	Value
Operating Temperature	-40 to +100 °C
Storage Temperature	-55 to +125 °C

Screening

- Full LOT traceability
- Burn-in at 100 °C baseplate temperature
- Temperature cycling
- Available with different screening grades
- Final visual inspection