# **BCM Series**

### 210-300W DC/DC BUS CONVERTER MODULE

#### **Features**

- Fixed ratio bus converter.
- Output power: Up to 300W.
- Available in 48, 352 and 384 V inputs.
- Small footprint: 1.1in<sup>2</sup> (7.1cm<sup>2</sup>).
- High density up to 1,095 W/in<sup>3</sup>.
- 125°C operation.
- Efficiency up to 97%.
- >3.5 million hours MTBF.
- No output filtering required.
- Pick & Place / SMD compatible.

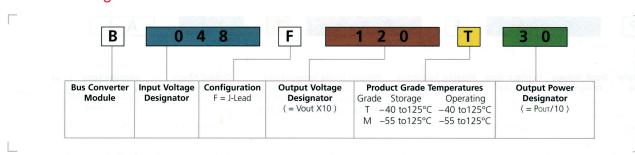


# Bus Converter Module (BCM) PRODUCT DESCRIPTION

The Bus Converter Module (BCM) is a member of the new family of V•I Chips. It provides an isolated intermediated bus voltage to power non-isolated POL converters from a narrow range DC input or can be used as an independent DC source. The BCM offers superior performance and lower cost than conventional bus converters. BCMs are available in standard 48V telecom as well as high-voltage offline input ranges.

Due to the fast response time and low noise of the BCM, the need for limited life aluminium electrolytic or tantalum capacitors at the load us reduced - or eliminated - resulting in savings of board area, materials and total system cost.

## Part Numbering



| Input Voltage | K Factor | Vout     |                   | Max Power   | BCM Model No.   |
|---------------|----------|----------|-------------------|-------------|-----------------|
|               | K Factor | @ 48 Vin | Range             | iviax rower | beign model no. |
| 38 – 55 Vdc   | 1/16     | 3.0 Vdc  | 2.38 - 3.43 Vdc   | 210 W       | B048F030T21     |
|               | 1/12     | 4.0 Vdc  | 3.17 – 4.58 Vdc   | 200 W       | B048F040T20     |
|               | 1/8      | 6.0 Vdc  | 4.75 – 6.87 Vdc   | 240 W       | B048F060T24     |
|               | 1/6      | 8.0 Vdc  | 6.33 – 9.16 Vdc   | 240 W       | B048F080T24     |
|               | 1/5      | 9.6 Vdc  | 7.60 – 11.00 Vdc  | 240 W       | B048F096T24     |
|               | 1/4      | 12.0 Vdc | 9.50 – 13.80 Vdc  | 300 W       | B048F120T30     |
|               | 1/3      | 16.0 Vdc | 12.70 – 18.30 Vdc | 240 W       | B048F160T24     |
|               | 1/2      | 24.0 Vdc | 19.00 – 27.50 Vdc | 300 W       | B048F240T30     |
|               | 2/3      | 32.0 Vdc | 25.30 – 36.70 Vdc | 300 W       | B048F320T30     |
|               | 1        | 48.0 Vdc | 38.00 – 55.00 Vdc | 300 W       | B048F480T30     |

| Input Voltage | K Factor | Vout       |                  | Max Power   | BCM Model No.     |
|---------------|----------|------------|------------------|-------------|-------------------|
|               |          | @ Nom. Vin | Range            | iviax rower | bcivi iviodel No. |
| 330 – 365 Vdc | 1/32     | 11.0 Vdc   | 10.30 – 11.4 Vdc | 240 W       | B352F110T24       |
| 360 – 400 Vdc | 1/32     | 12.0 Vdc   | 11.25 – 12.5 Vdc | 300 W       | B384F120T30       |