T-57-11

DC/DC 15 to 25 Watts Single Output B Series



- Ultra wide 4:1 input range
- Efficiency to 85%
- Six-sided continuous shielding
- Regulated output

The new B Series is a family of ultra wide input range, high efficiency, 15 to 30 Watt DC/DC Converters. These economically priced converters offer a 4:1 input range, input filtering to reduce input reflected ripple current protecting the supply bus from unwanted noise, and efficiencies to 85%. Other key features include: overvoltage protection, remote on/off control, external adjustment of output (±10%), and continuous short circuit protection. All packaged in a six-sided metal case measuring only 2.5″ x 3″ x 0.4″ for 15 - 24 Watts and 2.5″ x 3″ x 0.83″ for 25 Watts and up.

Applications

The B Series is ideally suited for portable battery, automotive and other applications demanding small size, high efficiency, where input to output isolation is not required.

Specifications

INPUT	
Voltage Range	9 - 36 Vdc – See Ordering Information
Filtering	LC Type
Reflected Ripple	50 mA p-p (typ.)
OUTPUT	
Voltage Tolerance	± 1%
Ripple and Noise	50 mV p-p (max.)
Overvoltage Protection	All Models
Short Circuit Protection	Current Limit
Temperature Coefficient	0.02%/°C max.
Trim Adjustability	± 10% (typ.)
GENERAL	
Regulation: Line/Load	0.5% / 0.5%
Efficiency	to 85%
I/O Isolation	Not galvanically isolated
Switching Frequency	60 - 65 kHz
Remote On/Off Control	All Models
ENVIRONMENTAL	
Operating Temperature Range	–25 °C to +71 °C - No Derating
Storage Temperature Range	–40 °C to +105 °C
Cooling	Free-air Convection

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All specifications are typical at nominal line and full load at 25 °C unless otherwise noted.

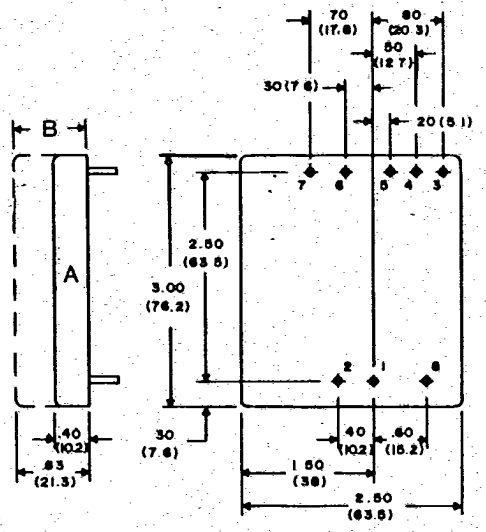
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B Series Ordering Information

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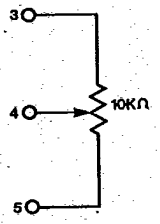
Input Voltage Nominal	Input Voltage Range	Output Voltage	Output Current	Model Number	Case
18 V	9-36 V	5 Vdc	3000 mA	BA11-300-18	A
18 V	9-36 V	5 Vdc	5000 mA	BA11-500-18	B
18 V	16-36 V	12 Vdc	2000 mA	BA12-200-18	A
18 V	18-36 V	15 Vdc	1500 mA	BA13-150-18	B

Dimensions and Connections



PIN CONNECTIONS

PIN 1. + Input
2. – Input
3. Trim Down
4. Output Trim
5. Trim Up
6. + Output
7. – Output
8. TTL Remote Shutdown



External Output Trimming: Output may be externally trimmed (± 10%) with a trimpot as shown.

NOTES:
1. Eight pins 0.040 (1.0) dia. x 0.20 (5.1) Lg Min.

Remote on/off control (pin 8)
Control common referenced to Input minus (pin 2)
Logic compatibility - open collector TTL
On greater than 2.4 Vdc or open circuit
Off less than 1.2 Vdc

*Measured with 3.3 MF 25V tantalum capacitor across each output.
Specifications subject to change without notice.

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