

# AMPSS® MICRO REGULATOR

**AA05B Series**  
6W max  
4.5V or 24V or 48V inputs  
Single / Dual output



The AA05B DC-DC converter series is part of Astec's family of advanced modular power supply components. Featuring high reliability and small size, these modules are designed to reduce product development time and enhance system performance. The AA05B offer single and dual outputs in a compact package. These units are ideally suited for tele-communications, industrial, computer and distributed power system applications having a widely varying input voltage.



## Special Features

- 6 watts
- Singles and duals
- 110 KHz frequency (typical)
- Isolated output
- Surface mount internal construction
- Six-sided shielding
- Wide 4:1 input range
- Small size 2.0" x 1.0" x 0.40"
- 5 year warranty

## Environmental

Operating Temperature (ambient)	-25°C to +71°C (no derating)
Storage Temperature	-25°C to +105°C
Cooling Method	Convection

## Electrical Specifications

### Input

Input Range	4.5 to 5.5VDC 9 to 36 VDC 20 to 72 VDC
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Efficiency	80-85% typical
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Input Ripple Current	<100 mA p-p
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### Output

Voltage Tolerance (factory set-point)	±1% max
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Line Regulation	1%
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Load Regulation	5% (20% to full load) 5Vdc output 3% (20% to full load) all others
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Noise/Ripple	50mV p-p, under specified conditions
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Output Voltage Protection	Zener clamp
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Short Circuit	Power cycling, auto-recovery
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### Isolation

Input to Output	1500 VDC
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## Notes

20% minimum load required.

All specifications are typical at nominal input and full load unless otherwise noted.

Specifications subject to change without notice.

Mechanical drawings for reference only.

## Ordering Information

Input Voltage	Output 1 Voltage	Output 2 Voltage	Maximum Power	Model Number
4.5-5.5V	12V @ 0.25A	-12V @ 0.25A	6W	AA05B-005L-120D
4.5-5.5V	15V @ 0.20A	-15V @ 0.20A	6W	AA05B-005L-150D
9-36V	5V @ 1A		5.0W	AA05B-024L-050S
9-36V	12V @ 0.50A		6W	AA05B-024L-120S
9-36V	15V @ 0.40A		6W	AA05B-024L-150S
9-36V	12V @ 0.25A	-12V @ 0.25A	6W	AA05B-024L-120D
9-36V	15V @ 0.20A	-15V @ 0.20A	6W	AA05B-024L-150D
20-72V	5V @ 1A		5W	AA05B-048L-050S
20-72V	12V @ 0.50A		6W	AA05B-048L-120S
20-72V	15V @ 0.40A		6W	AA05B-048L-150S
20-72V	12V @ 0.25A	-12V @ 0.25A	6W	AA05B-048L-120D
20-72V	15V @ 0.20A	-15V @ 0.20A	6W	AA05B-048L-150D

Please contact Astec for information on other output voltages, power ranges and configurations.

## Pin Assignments

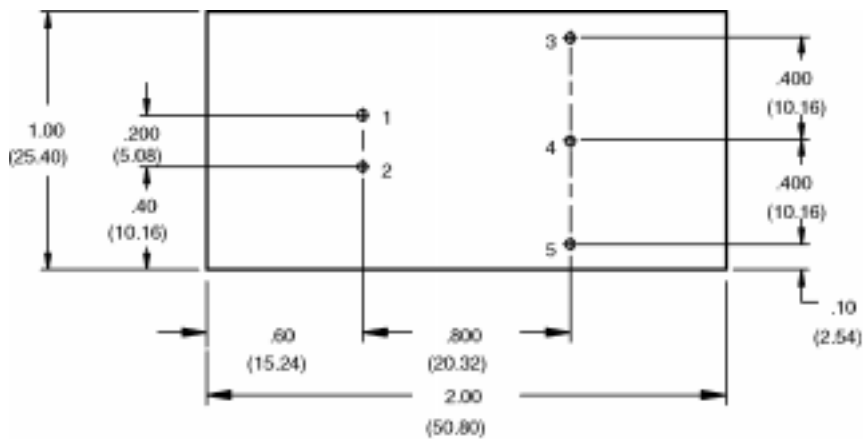
### Single Output

1. +Vin
2. -Vin
3. +Vout
4. No pin
5. -Vout

### Dual Output

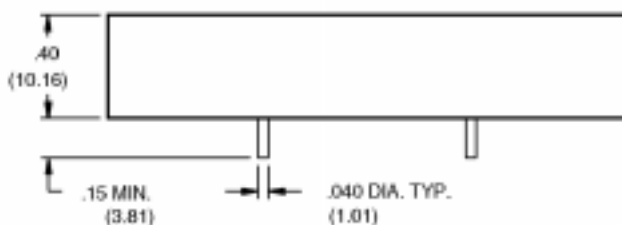
1. +Vin
2. -Vin
3. +Vout
4. COM (O/P Common)
5. -Vout

## Dimensions



BOTTOM VIEW

ALL DIMENSIONS ARE IN INCHES (mm)



AMPSS® AA05B 6W max  
AMR