

**NEW**

# AA05E

5 Watts

## AA05E Series

<b>Total Power</b>	<b>5 Watts</b>
<b>Input Voltages</b>	<b>12V, 24V or 48V</b>
<b># of Outputs</b>	<b>Single, Dual</b>



## SPECIAL FEATURES

- 2:1 Input range
- 1.25 x 0.80 x 0.40 Case size
- 1500Vdc Isolation

## ENVIRONMENTAL

Operating ambient temperature:  
-40°C to +85°C (Full load, no derating)

Baseplate: 100°C max

Storage Temperature: -40°C to +125°C

Humidity: 5% to 95%(Non Condensing)

Cooling method: Convection

MTBF: >1,000,000 hours (MIL-HDBK-217F)

Conducted EMI: EN55022, Class B

## ELECTRICAL SPECIFICATIONS

### Input

Input Range ..... 9 - 18 Vdc; 18 - 36 Vdc; 36 - 72 Vdc

Input Capacitance ..... 2.5  $\mu$ F (typ)

Input reverse voltage  
protection ..... Fuse recommended

Input Filter ..... Pi

Efficiency ..... 85% typ

### Output

Voltage Tolerance ..... Output 1 and 2 -  $\pm$ 1%

Line Regulation ..... Output 1 and 2 -  $\pm$  0.5%

Load Regulation .....  $\pm$ 1%

Noise/Ripple ..... 1 % mV P-P (see note 1)

Short Circuit Protection ..... Continuous Current Limit

Overvoltage Protection ..... Zener Clamp

Transient Response ..... 500  $\mu$ sec max  
(50% step load change to within 1%V<sub>o</sub>)

Switching Frequency ..... 200kHz

Temperature Coefficient .....  $\pm$  0.02%/° C

### General

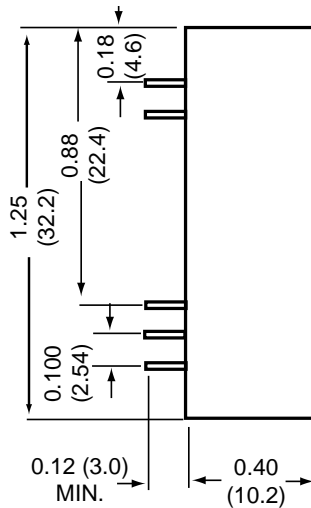
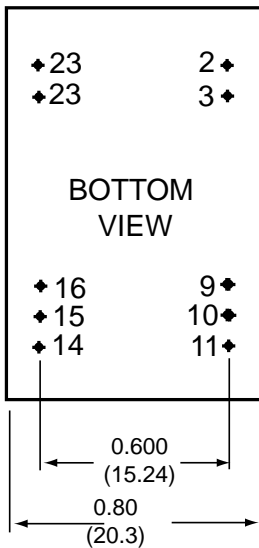
I/O isolation ..... 1500Vdc

Isolation resistance ..... 1 x 10<sup>9</sup> ohms

## ORDERING INFORMATION

Input Voltage	Output 1 Voltage	Output 2 Voltage	Maximum Power	Model Number
9-18VDC	3.3V @ 1.0A		3.3W	AA05E-012L-033S
9-18VDC	5V @ 1.0A		5W	AA05E-012L-050S
9-18VDC	12V @ 0.41A		5W	AA05E-012L-120S
9-18VDC	15V @ 0.33A		5W	AA05E-012L-150S
9-18VDC	+12V @ 0.20A	-12V @ 0.20A	4.8W	AA05E-012L-120D
9-18VDC	+15V @ 0.16A	-15V @ 0.16A	4.8W	AA05E-012L-150D
18-36VDC	3.3V @ 1.0A		3.3W	AA05E-024L-033S
18-36VDC	5V @ 1.0A		5W	AA05E-024L-050S
18-36VDC	12V @ 0.41A		5W	AA05E-024L-120S
18-36VDC	15V @ 0.33A		5W	AA05E-024L-150S
18-36VDC	+12V @ 0.20A	-12V @ 0.20A	4.8W	AA05E-024L-120D
18-36VDC	+15V @ 0.16A	-15V @ 0.16A	4.8W	AA05E-024L-150D
36-72VDC	3.3V @ 1.0A		3.3W	AA05E-048L-033S
36-72VDC	5V @ 1.0A		5W	AA05E-048L-050S
36-72VDC	12V @ 0.41A		5W	AA05E-048L-120S
36-72VDC	15V @ 0.33A		5W	AA05E-048L-150S
36-72VDC	+12V @ 0.20A	-12V @ 0.20A	4.8W	AA05E-048L-120D
36-72VDC	+15V @ 0.16A	-15V @ 0.16A	4.8W	AA05E-048L-150D

## DRAWINGS



## PIN ASSIGNMENT

### Single Output

2 & 3: -Vin  
22 & 23: +Vin  
14: +Vout  
16: Comm  
Remaining Pins NC

### Dual Output

2 & 3: -Vin  
22 & 23: +Vin  
14: Output 1  
9 & 16: Comm  
11: Output 2  
Remaining Pins NC

## NOTES:

- 20 MHz bandwidth. An external 0.1uf ceramic capacitor is recommended to be placed from Vout to Comm.
- All specifications are typical at nominal line, full load, and 25° C unless otherwise noted.
- All specifications subject to change without notice.
- Mechanical drawings are for reference only.

Case Material: Metal (5 sides)  
Weight: 0.5Oz/15Grms