

# AA15B

## 15 WATTS

### AA15B Series

Total Power	15 Watts
Input Voltages	24V or 48V
# of Outputs	Single, Dual



### SPECIAL FEATURES

- UL 1950
- Isolated output
- Surface mount internal construction
- Six-sided shielding
- Wide 4:1 input range
- Small size 2.0" x 1.6" x 0.40"

### ENVIRONMENTAL

Operating ambient temperature range:  
-25°C to +60°C derating to zero power  
@ 105°C

Baseplate: 105°C max

Storage Temperature: -40°C to +105°C

Humidity (non condensing): 5% to 95%

EMI/RFI: Six-Sided Continuous Shield  
For input filter recommendations to meet FCC,  
VDE, EIC specs, consult factory.

MTBF: 384,000 hours (MIL HDBK-217)

### SAFETY

**UL** UL 1950 File # E169640  
Recognized

### ELECTRICAL SPECIFICATIONS

#### Input

Input Range ..... 20 to 72 VDC  
Input Capacitance ..... 2.5 mf typical  
Efficiency ..... 80 - 85% typical

#### Output

Voltage Tolerance ..... ±1% max (factory set-point)  
Line Regulation ..... 0.5%  
Load Regulation ..... 2% (25% L to FL)  
Noise/Ripple ..... 50mV pk-pk; bandwidth 20MHz  
Short Circuit Protection ..... power cycling  
Transient Response ..... 500 msec 50% Step Load Change  
Switching Frequency ..... 110 kHz typical  
Trim Range ..... +10%, -4% max  
Temperature Coefficient ..... + .02%/°C max

#### Isolation

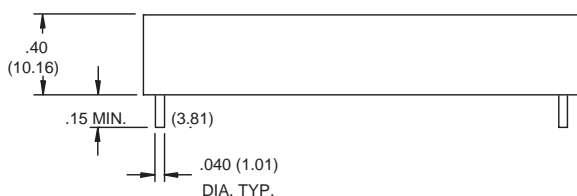
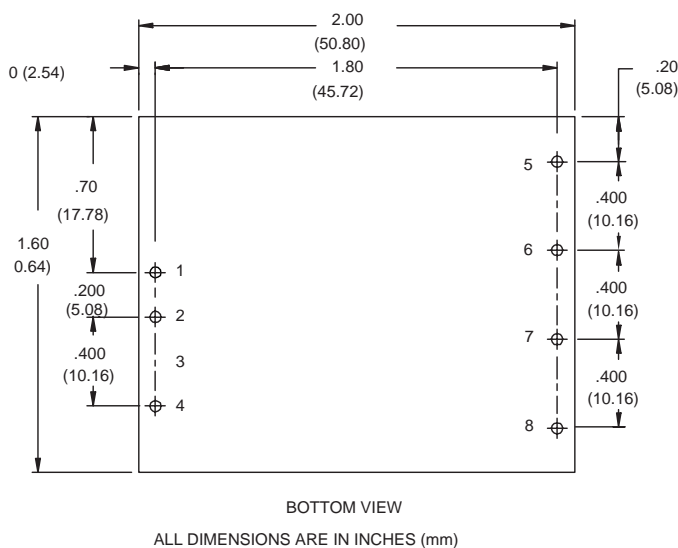
I/O Isolation ..... 500VDC

## ORDERING INFORMATION

Input Voltage	Output 1 Voltage	Output 2 Voltage	Maximum Power	Model Number
20-72V	5V @ 3A		15W	AA15B-048L-050S
20-72V	12V @ 1.250A		15W	AA15B-048L-120S
20-72V	15V @ 1A		15W	AA15B-048L-150S
20-72V	12V @ 0.625A	-12V @ 0.625A	15W	AA15B-048L-120D
20-72V	15V @ 0.500A	-15V @ 0.500A	15W	AA15B-048L-150D

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

## DIMENSIONS

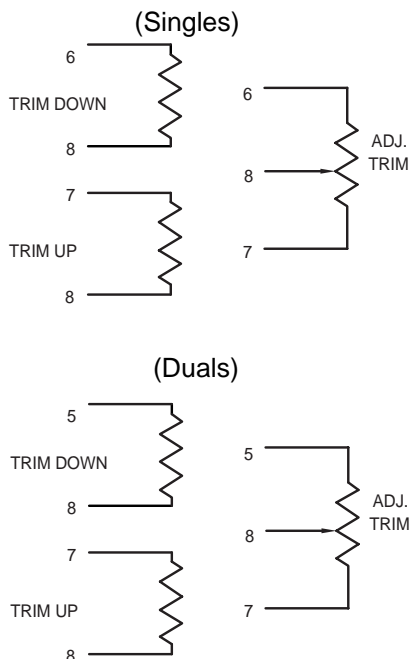


Note: Pins 0.040 in Dia x 0.15 in min

## NOTES

- An external 4.7 mf ceramic capacitor (Marcon TDC series) is recommended to be placed from the +V out to the -V out.
- All specifications are typical at nominal line, full load, and 25°C unless otherwise noted.
- Specifications subject to change without notice.
- Mechanical drawings for reference only.
- Requires 2.2mf 100V film capacitor (ITW/Paktron part # 225K100RA4 or equiv.) on input.

## TRIM METHOD



## PIN ASSIGNMENTS

### Single Output

- +Vin
- Vin
- No pin
- Control (Enable)
- No pin
- +V out
- V out
- Trim

### Dual Output

- +Vin
- Vin
- No pin
- Control (Enable)
- +V out
- COMM out
- V out
- Trim